# MILPITAS CITY COUNCIL
# REGULAR MEETING
# AGENDA

**TUESDAY, MAY 5, 2015**

**455 EAST CALAVERAS BOULEVARD, MILPITAS, CA**

**5:30 P.M. CLOSED SESSION**
**6:00 P.M. STUDY SESSION**
**7:00 P.M. PUBLIC BUSINESS**

**SUMMARY OF CONTENTS**

**I. CALL TO ORDER/ROLL CALL by the Mayor**

**II. ADJOURN TO CLOSED SESSION** (5:30 p.m.)

**CONFERENCE WITH LEGAL COUNSEL, ANTICIPATED LITIGATION**
Pursuant to California Government Code Section 54956.9 - City as Defendant

**CONFERENCE WITH LEGAL COUNSEL, EXISTING LITIGATION**
Pursuant to California Government Code Section 54956.9
SCS Development Co. et al. v. City of Milpitas, et al.
Santa Clara County Superior Court case no. 115CV277803

**III. CLOSED SESSION ANNOUNCEMENT:** Report on action taken in Closed Session, if required pursuant to Government Code Section 54957.1, including the vote or abstention of each member present

**IV. STUDY SESSION: CAPITAL IMPROVEMENT PROGRAM FY 2015-2020** (6:00 p.m.)

1. **Review the Draft 2015-2020 Capital Improvement Program (CIP) Report and Provide Staff with Direction and Comments (Staff Contact: Steven Machida, 408-586-3355)**

**V. PLEDGE OF ALLEGIANCE** (7:00 p.m.)

**VI. INVOCATION** (Councilmember Grilli)

**VII. APPROVAL OF COUNCIL MEETING MINUTES** April 21, 2015

**VIII. SCHEDULE OF MEETINGS – COUNCIL CALENDAR** May 2015

**IX. PRESENTATIONS**

- Proclaim May 2015 as National Foster Care/Resource Parent Awareness Month
- Proclaim May 2015 as Older Americans Month
- Proclaim May 2015 as Building Safety Month
- Commend Milpitas High Football Player Jason Scrempos

**X. PUBLIC FORUM**

Members of the audience are invited to address the Council on any subject not on tonight's agenda. Speakers must come to the podium, state their name and city of residence for the Clerk's record, and limit their remarks to three minutes. As an item not listed on the agenda, no response is required from City staff or the Council and no action can be taken. However, the Council may instruct the City Manager to place the item on a future meeting agenda.

**XI. ANNOUNCEMENTS**

**XII. ANNOUNCEMENT OF CONFLICT OF INTEREST AND CAMPAIGN CONTRIBUTIONS**

**XIII. APPROVAL OF AGENDA**

**XIV. CONSENT CALENDAR** (Items with asterisks*)

Consent calendar items are considered to be routine and will be considered for adoption by one motion. There will be no separate discussion of these items unless a member of the City Council, member of the audience, or staff requests the Council to remove an item from or be added to the consent calendar. Any person desiring to speak on any item on the consent calendar should ask to have that item removed from the consent calendar. If removed, this item will be discussed in the order in which it appears on the agenda.

**XV. PUBLIC HEARING**

**2. <u>Continued from April 21, 2015</u>: Conduct a Public Hearing and Adopt a Resolution to Approve Vesting Tentative Map, Conditional Use Permit and Site Development Permit for a 489 Unit Development on 10.47 Acres in Two Structures Subject to Conditions of Approval at 450 Montague Expressway (Staff Contact: Darryl Boyd, 408-586-3287)**

**XVI. UNFINISHED BUSINESS**

**3. Waive Second Reading and Adopt Ordinance No. 38.821 Relating to Public Art Requirements for Private Development Projects (Staff Contact: Adam Petersen, 408-586-3274)**

**4. Receive Update of the Odor Control Report (Staff Contact: Steven Machida, 408-586-3355)**

**XVII. REPORT OF MAYOR**

*** 5. Consider Mayor's Recommendation for Appointment to the Sister Cities Commission (Contact: Mayor Esteves, 408-586-3029)**

**XVIII. NEW BUSINESS**

**6. Provide Direction Regarding the Policies Governing, and the Content of, the Solid Waste Request for Proposal (Staff Contact: Steven Machida, 408-586-3355)**

**7. Receive Report on Water Supply Augmentation and Continue with Work Plan Tasks (Staff Contact: Steven Machida, 408-586-3355)**

*** 8. Consider Request from American Cancer Society to Waive Fees for Annual Relay for Life Fundraiser at Milpitas Sports Center to be Held June 20-21, 2015 (Staff Contact: Mary Lavelle, 408-586-3001)**

*** 9. Approve New City Street Light Pole Banner Designs (Staff Contacts: Renee Lorentzen, 408-586-3409, Edesa Bitbadal, 408-586-3052 and Leslie Stobbe, 408-586-3352)**

***10. Receive City of Milpitas Investment Portfolio Status Report for the Quarter Ended March 31, 2015 (Staff Contact: Emma Karlen, 408-586-3145)**

*** 11. Receive Financial Status Report for the Nine Months Ended March 31, 2014 (Staff Contact: Emma Karlen, 408-586-3145)**

*** 12. Receive a Report Regarding International Park in Milpitas, and Direct Staff to Conduct Outreach and Prepare Feasibility Study (Staff Contact: Tim Wong, 408-586-3286)**

## XIX. ORDINANCE

*** 13. Waive the Second Reading and Adopt Ordinance No. 38.822 Permitting Transitional and Supportive Housing in the MXD Zone and Manufactured Housing in the R2 Zone (Staff Contact: Tim Wong, 408-586-3286)**

## XX. RESOLUTIONS

*** 14. Adopt a Resolution Authorizing the Purchase of One Unmarked Patrol Vehicle from the National Auto Fleet Group for the Not-To-Exceed Amount of $24,843.73 through a Cooperative Procurement Contract (Staff Contact: Chris Schroeder, 408-586-3161)**

*** 15. Adopt a Resolution Approving a Temporary Street Closure on Piedmont Road, Calaveras Road, and Associated Side Streets for the May 12, 2015 Amgen Bicycle Tour of California Event (Staff Contact: Tracy Tam, 408-586-3276)**

*** 16. Adopt a Resolution Initiating Proceedings for the Annual Levy and Collection of Assessments and Ordering the Preparation of the Annual Engineer's Report for Landscaping and Lighting Maintenance Assessment District No. 95-1, McCarthy Ranch, Project No. 9492 (Staff Contact: Steve Machida, 408-586-3345)**

*** 17. Adopt a Resolution Initiating Proceedings for the Annual Levy and Collection of Assessments and Ordering the Preparation of the Annual Engineer's Report for Landscaping and Lighting Maintenance Assessment District No. 98-1, Sinclair Horizon, Project No. 9493 (Staff Contact: Steve Machida, 408-586-3345)**

*** 18. Adopt Resolutions Summarily Vacating a Portion of Old Capitol Avenue (known as White Hole) and Annexing Real Property into Community Facilities District No. 2008-1; Approve Purchase and Sale Agreement, Subdivision Improvement Agreement, Final Map and Improvement Plans for 1315 McCandless for the District 1 Building 1 Development, Project No. 1134 (Staff Contact: Steven Machida, 408-586-3355)**

## XXI. DEMANDS

*** 19. Authorize the Purchase of Ammunition for the Police Department from San Diego Police Supply for Not-To-Exceed $45,154.09 (Staff Contact: Chris Schroeder, 408-586-3161)**

*** 20. Authorize the Purchase and Installation of 90 Uninterrupted Power Supply Batteries from Stationary Power Systems for the Not-To-Exceed Amount of $25,693.63 (Staff Contact: Chris Schroeder, 408-586-3161)**

*** 21. Authorize Budget Appropriation and Subsequent Payments to Burton Fire and Sutphen Corp. of $31,017.10 for Fire Ladder Truck Repair (Staff Contact: Steven Machida, 408-586-3355)**

## XXII. ADJOURNMENT

**NEXT REGULARLY SCHEDULED COUNCIL MEETING**
**TUESDAY, MAY 19, 2015**

**KNOW YOUR RIGHTS UNDER THE OPEN GOVERNMENT ORDINANCE**

Government's duty is to serve the public, reaching its decisions in full view of the public. Commissions and other agencies of the City exist to conduct the people's business. This ordinance assures that deliberations are conducted before the people and the City operations are open to the people's review. For more information on your rights under the Open Government Ordinance or to report a violation, contact the City Attorney's office at Milpitas City Hall, 455 E. Calaveras Blvd., Milpitas, CA 95035 e-mail: mogaz@ci.milpitas.ca.gov / Phone: 408-586-3040

*The Open Government Ordinance is codified in the Milpitas Municipal Code as Title I Chapter 310 and is available online at the City's website www.ci.milpitas.ca.gov by selecting the Milpitas Municipal Code link.*

Materials related to an item on this agenda submitted to the City Council after initial distribution of the agenda packet are available for public inspection at the City Clerk's office at Milpitas City Hall, 3rd floor 455 E. Calaveras Blvd., Milpitas and on the City website.

All City Council agendas and related materials can be viewed online here: www.ci.milpitas.ca.gov/government/council/agenda_minutes.asp (select meeting date)

**APPLY TO SERVE ON A CITY COMMISSION**

Current vacancies on:
Community Advisory Commission
Economic Development Commission (retail)
Sister Cities Commission
Veterans Commission

Commission application forms are available online at www.ci.milpitas.ca.gov or at Milpitas City Hall. Contact the City Clerk's office at 408-586-3003 for more information.

*If you need assistance, per the Americans with Disabilities Act, for any City of Milpitas public meeting, call the City Clerk at (408) 586-3001 or send an e-mail to mlavelle@ci.milpitas.ca.gov prior to the meeting. You may request a larger font agenda or arrange for mobility assistance. For hearing assistance, headsets are available in the City Council Chambers for all meetings.*

## AGENDA REPORTS

**IV. STUDY SESSION: CAPITAL IMPROVEMENT PROGRAM FY 2015-20** (6:00 p.m.)

**1. Review the Draft 2015-2020 Capital Improvement Program (CIP) Report and Provide Staff with Direction and Comments (Staff Contact: Steven Machida, 408-586-3355)**

**Background**: The Draft 2015-2020 Capital Improvement Program (CIP) document was prepared by staff and distributed to the City Council. Projects are arranged into six main categories: Community Improvements, Parks, Streets, Water, Sewer, and Storm Drain. The document includes a summary by categories, and individual proposed project descriptions. Previously funded projects are also summarized. The value of capital projects proposed to be budgeted in fiscal year 2015-16 is $22,421,960.

The Parks, Recreation and Cultural Resources Commission reviewed the Parks projects on March 2, 2015 and recommend those projects for approval by Council. The City Council Finance Subcommittee reviewed the Draft 2015-2020 CIP on March 18 and 25, 2015 and recommended the Council approve it. On April 8, 2015, the Planning Commission reviewed the Draft 2015-2020 CIP document and found it in conformance with the General Plan.

A staff presentation of Draft CIP highlights will be provided at the Council meeting. Based upon Council direction, the Draft CIP will be revised and prepared as the Preliminary CIP document, which will then be presented to Council at the budget hearing in May for approval.

NOTE: in the City Council's agenda packet, there is a memo from the Assistant City Manager responding to several requests for information made at the previous Budget Study Session held on April 7, 2015.

**Recommendations:**

1. Review the Draft 2015-2020 Capital Improvement Program and provide staff with direction and comments.
2. Provide direction to analyze an increase in sales tax and/or Transient Occupancy Tax ("TOT") as a funding mechanism that would include hiring a consultant to survey voters and conduct public outreach.

**XV. PUBLIC HEARING**

**2. Continued from April 21, 2015: Conduct a Public Hearing and Adopt a Resolution to Approve Vesting Tentative Map, Conditional Use Permit and Site Development Permit for a 489 Unit Development on 10.47 Acres in Two Structures Subject to Conditions of Approval at 450 Montague Expressway (Staff Contact: Darryl Boyd, 408-586-3287)**

**Background:** The public hearing for the proposed new residential development at 450 Montague Expressway in the Transit Area was continued from the Council meeting of April 21, 2015. A new memo from the Planning staff was prepared to respond to questions from the City Council at the last meeting. The memo is included in the agenda packet.

**Attachments**

Memos from Staff + from Lennar responding to questions from 4/21/15 Council meeting
A. Planning Commission Staff Report, March 25, 2015
B. Adopted Planning Commission Resolution 15-003
C. Planning Commission Meeting Minutes, March 25, 2015
D. Initial Study and Categorical Exemption
E. Plan Set
F. Parks, Recreation and Cultural Resources Commission material 02/02/15
G. Parks, Recreation and Cultural Resources Commission material 03/02/15

H. Three layout design figures
I. Draft City Council Resolution
J. 3 letters of support for project
K. Correspondence recommending one park name

**Recommendations:**
1. Receive remainder of the developer's presentation.
2. Open public hearing to receive comments.
3. Move to close the public hearing, following any speakers.
4. Select two park names, from among four recommended by the Parks, Recreation and Cultural Resources Commission.
5. Per the Planning Commission recommendation, adopt a resolution approving the Vesting Tentative Map No. MT14-0002, Site Development Permit No. SD14-0014, and Conditional Use Permit No. UP14-0023 and Exception to Urgency Ordinance 240.2 for a 489 dwelling unit project located at 450 Montague Expressway and approve two park names.

## XVI. UNFINISHED BUSINESS

**3. Waive the Second Reading and Adopt Ordinance No. 38.821 Relating to Public Art Requirements for Private Development Projects (Staff Contact: Adam Petersen, 408-586-3274)**

**Background:** On April 7, 2015, the City Council introduced Ordinance No. 38.821 to amend the City's zoning regulations to require public art for private development projects. Council directed that the Ordinance be amended to incorporate three changes:

1) If the 1% requirement for installing the art work on the project site cannot be fully satisfied because of the size, location and scale of the art work in relation to the project site, the developer may satisfy the 1% requirement by combination of installing artwork on the project site and contributing the difference between the cost of the installed art work and the remaining one percent amount into the art in lieu fund;
2) Residential projects with a minimum of 20% of their units as affordable units as defined in Section XI-10-54.15.D of the Municipal Code are exempt from the public art requirements; and
3) Verify the cost accuracy of the proposed art on-site.

With these changes incorporated, Ordinance No.38.821 is ready for second reading and adoption.

**Alternatives:** a. Adopt the ordinance as proposed
b. Deny the ordinance; or
c. Amend the proposed ordinance.

**Fiscal Impact:** The ordinance will generate funding for the City's Art In-Lieu Fund. This creates a positive fiscal impact that improves the aesthetic environment for the City.

**Recommendations:**
1. Waive the second reading of Ordinance No. 38.821.
2. Adopt Ordinance No. 38.821 amending the Milpitas Municipal Code to include provisions relating to public art in private development projects.

**4. Receive Update of the Odor Control Report (Staff Contact: Steven Machida, 408-586-3355)**

**Background:** From March 21 through April 12, 2015, the Bay Area Air Quality Management District (BAAQMD) forwarded 91 complaints originating in Milpitas: 44 identified a garbage odor, 5 identified a sewage odor, 40 did not identify an odor source, and 2 identified a mixed

odor source. As of the last Council update, the City's odor reporting website received 40 reported complaints.

**Recommendation:** Receive the update of the odor control report.

## XVII. REPORT OF MAYOR

*** 5. Consider Mayor's Recommendation for Appointment to the Sister Cities Commission (Contact: Mayor Esteves, 408-586-3029)**

**Background**: Mayor Esteves recommends the following:

Move Alternate No. 1 Peter Chang up to a voting, regular seat on the Commission that will expire in September 2015.
Newly appoint Mary Llamas as new Alternate No. 1 to a term that will expire in September 2016.

**Recommendation**: Move up Peter Chang and appoint Mary Llamas on the Sister Cities Commission.

## XVIII. NEW BUSINESS

**6. Provide Direction Regarding the Policies Governing, and the Content of, the Solid Waste Request for Proposal (Staff Contact: Steven Machida, 408-586-3355)**

**Background**: The City Engineering department staff is developing a Request for Proposals (RFP) for city-wide solid waste services beginning in September of 2017. The RFP will be structured to include a description of base and optional alternate services. At the City Council meeting, the City's consultant, HF&H Consultants, LLC will present options for, and request decisions regarding, key issues for the RFP and the RFP process including defining service goals, contract structure, key business points, and policies governing the RFP process. A verbal presentation will be given at the Council meeting.

**Alternative**: One alternative is to delay direction to the consultant and negatively impact the schedule. Another alternative is to provide no direction to the consultant, again negatively impacting the schedule.

**Fiscal Impact:** None.

**Recommendation:** Receive a report from staff and consultant HF&H, and then provide direction regarding the policies governing and the content of the solid waste services Request for Proposals.

**7. Receive Report on Water Supply Augmentation and Continue with Work Plan Tasks (Staff Contact: Steven Machida, 408-586-3355)**

**Background**: In response to the California water supply shortage, on August 5, 2014 City Council approved a consultant agreement with Water Solutions, Inc. to perform a feasibility study regarding alternative water supplies. Water Solutions completed the feasibility study of water supply augmentation in these related areas: conservation, recycled water, surface water detention, groundwater wells, water rights acquisition, desalination, water storage capacity, and funding. Findings are discussed briefly in this report. Staff will present a powerpoint presentation at the Council meeting.

Conservation: Water consumption is typically measured in two ways: residential per capita use and gross per capita use. The Milpitas residential population uses 65.6 gallons per day per capita

(meaning person) (gpdpc), which is below the Bay Area average of 79 gpdpc. In addition, it has dropped to 50 gpdpc in recent months due to the conservation efforts of our customers, reflecting our community has responded to the simple and effective conservation measures. The second consumption measurement is a comparison of the City-wide usage divided by the population. City-wide usage includes industrial and irrigation uses. The Milpitas value is 137.6 gpdpc, which is higher than the Bay Area average of 127.1 gpdpc. This indicates a higher percentage of industrial and/or irrigation use than the average community. Similarly, it has dropped to 100 gpdpc in recent months. Additional measures that could be implemented include: replacing "thirsty" plants with drought-tolerant plants/vegetation, encourage use of native landscape called "xeriscape", weather-based smart irrigation controllers, continued use of rebates for switching to high efficiency appliances, on-site water audits, and increased leak monitoring. However, the implementation costs climb quickly for each incremental conservation effort. Conservation relies on customer behavior to achieve savings and each permanent measure establishes a lower baseline. At some point there is no more ability to reduce demand (demand hardening). Staff notes that the community has responded well to the available conservation programs. The recommendation is to continue ongoing conservation efforts and proceed with the smart meter installation as stated in the Capital Improvement Program.

Recycled Water: Expansion of the recycled water system frees up potable water for human consumption by converting landscape and cooling towers to recycled water. New development within the Transit Area Specific Plan (TASP) is expected to install about 25,000 linear feet of recycled water pipelines for irrigation. Another 70,000 linear feet of recycled water pipelines could be installed to serve industrial cooling towers and common-area landscapes outside of the TASP area. On a regional level, Santa Clara Valley Water District and South Bay Water Recycling (San Jose) recently completed a Master Plan to address reliability and expansion. The future use of recycled water is focused on indirect potable reuse (injection well into the groundwater basin) and direct potable reuse as acceptance by public is realized.

The City recently established recycled water fill stations and implemented recycled water construction meters for dust control and compaction at construction sites. In addition, the City's first dual-plumb site is undergoing plan check with the Building Department and will be submitted for California Department of Public Health approval. Staff recommends an effort to convert existing irrigation systems and cooling towers adjacent to existing recycled water pipelines to use recycled water and to proceed with expansion of the recycled water system.

Surface Water Detention: The construction of basins to capture rain water or creek flow is subject to lengthy regulations and costly right of way/land costs for potable water. However, implementation of smaller basin for non-potable is feasible. Staff recommends only small scale basins for non-potable use as a later phase.

Groundwater Wells: The south western and south central areas of the City overlays a good groundwater aquifer. The Pinewood Well is located in the prime area for groundwater aquifers within the City of Milpitas. The Curtis Well is also located in a promising area; however to date, preliminary tests have indicated it is not as good as Pinewood Well. Groundwater contains minerals and is harder than the surface water supply that the Milpitas community is accustomed to. Changes in taste and odor are expected to generate complaints. Blending groundwater with surface water can improve the hardness; however ozone treatment is recommended to improve taste and odor. Staff recommends further investigation of this water supply alternative.

Water Rights Acquisition: Water rights are a complicated process with high unknown costs requiring a long time for implementation. Staff recommends water rights acquisition be left to large water suppliers; however a future turnout with Alameda County Water District may be possible.

Desalination: Desalination also has high costs for land and improvements requiring a long time. However, due to Milpitas proximity to the Bay, partnership with a regional water supplier may be evaluated at a later phase.

Additional Storage: Additional storage tanks do not increase water supply and are therefore not recommended as a water supply option.

Funding: The report identifies several possible projects totaling about $70 million. Funding options include: pay as you go, grants, loans, and bonds.

**Discussion**: A decision matrix assigns importance factors to criteria such as available water volume, needed infrastructure, issues, operational considerations, effectiveness, reliability, cost, benefits, life cycle, and ease of implementation. This method allows for comparison of alternatives in order to establish priorities. A work plan assigns conceptual costs and provides a schedule for the various projects. Staff recommends continuing with the Smart Meter Installation Project already included in the Capital Improvement Program. In addition, staff recommends proceeding with new projects totaling approximately $15 million as shown in the table.

| Project | Cost |
|---|---|
| Smart Meter Installation | Capital Improvement Program |
| Operate existing Pinewood Well and develop Curtis Well | $4 million |
| Recycled water extension, segment 1: From Los Coches to Kennedy and Edsel for Cardoza and Foothill Parks | $6 million |
| New well | $3 million |
| Alameda County Water District water | $0.1 million |
| System wide improvements-aging infrastructure field investigation, pressure reducing valves, etc. | $2 million |

The City Council Finance Subcommittee reviewed the report findings at its February 26, 2015 and April 15, 2015 meetings and recommended presentation to the City Council.

**California Environmental Quality Act**: The study is exempt from CEQA as there will be no physical change to the environment. Additionally, this study is exempt under CEQA Guidelines Section 15262 (Feasibility and Planning Studies).

**Alternative**: If the City Council does not accept the report, or does not authorize continuation with next steps, the City is unable to pursue additional water supply options.

**Fiscal Impact**: None, the study is already funded. Staff will pursue grants for project implementation. Council may also consider issuing bonds in conjunction with the water and sewer rate adoption.

**Recommendation**: Receive a staff report on Water Supply Augmentation, and continue with work plan tasks for conservation, recycled water, and ground water wells.

*** 8. Consider Request from American Cancer Society to Waive Fees for Annual Relay for Life Fundraiser at Milpitas Sports Center to be Held June 20-21, 2015 (Staff Contact: Mary Lavelle, 408-586-3001)**

**Background:** On April 13, 2015, the City Clerk received a "Donation or Fee Waiver/Reduction Request Application Form" from American Cancer Society. The request is for the City Council to waive certain City fees for the upcoming annual "Relay for Life" fundraising walkathon to be held on the grounds of the sports playing field at the Milpitas Sports Center in June. The location has been reserved and deposit fees paid toward the costs for site rental. Costs requested to be

waived are $1,200 for 30 hours rental of the football field plus $250 for a City Special Event Permit.

**Fiscal Impact:** $20,000 was approved and included in the FY 2014-15 City budget for City Council's Unallocated Community Promotions. If the current fee waiver is approved, then $13,540.25 would be the remaining balance.

**Recommendation:** Waive $1,450 in fees for specified City costs related to the annual American Cancer Society's Relay for Life walkathon event at Milpitas Sports Center on June 20-21, 2015.

*** 9. Approve New City Street Light Pole Banner Designs (Staff Contacts: Renee Lorentzen, 408-586-3409, Edesa Bitbadal, 408-586-3052 and Leslie Stobbe, 408-586-3352)**

**Background**: The City funded and installed promotional or recognition banners along major arterials to celebrate specific City events and programs for the past 17 years. Public banners were first installed around the Civic Center to celebrate the December holiday season in 1998.

The City now has 157 street light poles with hardware to accommodate banner installations located along Calaveras Boulevard from Park Victoria to I-880 and on Main Street from Carlo Street to Curtis Avenue. Currently the City's 60th Anniversary banners are installed. The City's old banners had been on display for seven years when the 60th Anniversary banners were installed in January 2014. When removed, the old banners were faded and torn as the life expectancy of a street banner is approximately four years.

Staff worked with a graphic designer to create a series of five new banners that will continue to celebrate Milpitas' residential, business, recreational and service amenities. This series includes the following themes: Live - Play - Shop - Work – Give. Banners will be used together, creating a vibrant color and message flow for vehicular and pedestrian travelers throughout Milpitas.

**Fiscal Impact**: None.

**Recommendation**: Approve new designs for banners to be placed on City streetlight poles.

***10. Receive City of Milpitas Investment Portfolio Status Report for the Quarter Ended March 31, 2015 (Staff Contact: Emma Karlen, 408-586-3145)**

**Background:** In compliance with the State of California Government Code and the City's Investment policy, the City of Milpitas Investment Report for the quarter ended March 31, 2015 is submitted for Council's review and acceptance.

The Portfolio Summary Report included in the Council's packet provides a summary of the City's investments by type. It lists the par value, market value, book value, percentage of portfolio, term, days to maturity and the equivalent yields for each type of investment. The Portfolio Details Report provides the same information for each individual investment in the City's portfolio as of March 31, 2015.

As of March 31, 2015, the principal cost and market value of the City's investment portfolio was $162,155,260 and $162,631,657 respectively. When market interest rates increase after an investment is purchased, the market value of that investment decreases. Conversely, when market interest rates decline after an investment is purchased, the market value of that investment increases. If the investments are not sold prior to the maturity date, there is no market risk. Therefore, in accordance with the City's investment policy, all investments are held until maturity to ensure the return of all invested principal.

The City's effective rate of return for the period ended March 31, 2015 was 0.66%. The comparative benchmarks for the same period were 0.27% for LAIF (Local Agency Investment

Fund) and 0.52% for the 12-month average yield of the 2-year Treasury Note. The weighted average maturity of the portfolio was 510 days.

The investment portfolio is in compliance with the City's investment policy. A combination of securities maturing, new revenues, and tax receipts will adequately cover the anticipated cash flow needs for the next six months. Cash flow requirements are continually monitored and are considered paramount in the selection of maturity dates of securities.

The market values of the securities were provided by BNY Mellon, the safekeeping bank of the City's securities. All the securities owned by the City are held in the trust department of BNY Mellon under the terms of a custody agreement.

Three charts are included with the agenda packet that show investment by maturity levels, comparison of the City's portfolio yields to other benchmark yields as well as a trend of the type of securities in the City's portfolio, weighted average maturity and average yield.

**Fiscal Impact:** None.

**Recommendation:** Receive the investment report for the quarter ended March 31, 2015.

*** 11. Receive Financial Status Report for the Nine Months Ended March 31, 2014 (Staff Contact: Emma Karlen, 408-586-3145)**

**Background**: In FY 2014-15, staff projected the total General Fund revenue to be $67.5 million. Based on the revenues received to date, new information and revenue trend analysis, staff revised the General Fund revenue to be approximately $2.64 million above the original budget projection. The total revised revenue is estimated to be $70.14 million. The primary reasons for the increase are improved property tax revenue, Transient Occupancy Tax (TOT) revenue, building permit and inspection fees and higher than expected residual property tax distributions from the Redevelopment Property Tax Trust Fund (RPTTF).

Property tax revenue, excluding the redevelopment property tax distributions, is projected to be 6.6% or $1.2 million more than budget, reflecting housing market recovery and enrollment of some of the newly constructed properties on the tax roll. The residual property tax distributions from the RPTTF increases $609,000 more than budget due to improved assessed valuation in the former Redevelopment Agency (RDA) Project Area thus increasing property tax revenue distributions to the taxing entities.

TOT is projected to be $705,000 above budget. The increase in TOT revenue indicates improvement in both the high-tech and construction industries that contribute to increased hotel occupancy in the area. Permit and inspection revenue generated by the Building department is projected to be about $301,000 above budget due to increased residential developments citywide, specifically in the Transit Area.

The only revenue that did not meet budget expectation was sales tax revenue. The primary reason for the decrease was due to relocation of a major sales tax generator to another city. Additionally, the purchase of equipment for use that generated use tax revenue by the high-tech industry tends to be volatile. Sales tax revenue has been revised downward by $940,000.

The General Fund expenditures at the end of March were at 69.6% of the budget appropriations and are below budget. Staff projected that there would be savings from both personnel costs and non-personnel costs that amount to approximately $2.3 million for the fiscal year.

The City Council adopted a fiscal policy to allocate any General Fund revenue not required to balance the General Fund expenditures to a Capital Improvement Project Fund to address funding deficiency of the Five Year Capital Improvement Plan. As of March 31, 2015, staff

expected $2.9 million of the General Fund revenue will be available for such purposes. The amount may change or increase by year end. Staff will closely monitor the General Fund budget and report the amount transferred to the General Government Capital Improvement Project Fund to the City Council at year end.

The sewer revenues are on target with budget and no revision is necessary. Water revenues are below budget due to water conservation efforts by the utility customers that impact the amount of water consumption. Staff revised water revenues to be below budget by $926,000.

**Fiscal Impact**: None.

**Recommendation**: Receive the financial status report for the City of Milpitas for the nine months ended March 31, 2014.

*** 12. Receive a Report Regarding International Park in Milpitas, and Direct Staff to Conduct Outreach and Prepare Feasibility Study (Staff Contact: Tim Wong, 408-586-3286)**

**Background**: On August 19, 2014, the City Council received a report outlining the request by several cultural organizations representing different countries to develop an international park. Organizations evincing interest in a park include a Filipino group, the Indian community, the Korean Language & Culture Foundation, and the Vietnam Neighborhood Association of Milpitas and Berryessa. Staff met with representatives of these organizations and based on these discussions, identified a possible site location. Tom Evatt Park, due to its central and accessible midtown location, was recommended for initial consideration. The City Council directed staff to meet with various City Commissions for review and input, and return to City Council with recommendations.

Based upon City Council direction, staff prepared an International Park concept plan. The conceptual plan identifies equally sized public spaces to accommodate an educational non-political theme of culture, arts, history, architecture, geography, and native plants for each participating international group within the portion of the Tom Evatt Park, east of Main Street. The concept could be expanded to the west side of Main Street dependent on other organizations' participation and interest. The park, east of Main Street, is approximately 0.37 acres, while the portion of the park between Main Street and South Abel Street is approximately 0.93 acres. The park west of Abel Street is 3.118 acres.

On March 2, 2015, staff met with the Parks, Recreation and Cultural Resources Commission (PRCRC) to review the conceptual plan. PRCRC comments were positive regarding repurposing the park for an international theme. Specific comments identified the need to address parking demand for associated international events, and to provide equally sized space for group participation.

On March 26, 2015, staff met with the Sister Cities Commission to review the conceptual plan. Sister City Commission comments were similarly positive to the PRCRC. Their comments also recommended the need to address parking for associated international events and to provide equally sized space for group participation.

Further specific recommendations included:

- Sister City should provide the initial overview review of all proposals, particularly for appropriateness. Commission will serve as a resource, and opportunity to review and recommend to PRCRC.
- PRCRC should have the primary review and recommendation responsibility.
- City Council should be the final decider, especially for non-political appropriateness.
- Should apply universal "Sister City" identification at the site. Add prestige to Sister City
- Overall project concept will help activate Main Street.

- Parking is an issue. Accessibility concern due to parking constraints. Parking opportunity on west side of Main Street using wider areas closer to Abel Street.
- Identify gathering areas within the park.
- Flag Poles per our Flag Ordinance (When representatives are in town).
- South Main Street pedestrian crossing, traffic calming, convertible street, pedestrian beacon.
- On April 1, 2015, staff met with the Community Advisory Commission to review the conceptual plan. Community Advisory Commission comments were similarly positive to the other commissions in repurposing the park for an international theme.

Specific comments received included:

- Concentrate on public outreach program.
- Provide clear steps to the process of participant plans and responsibilities.
- Utilize census data and consider population size for group representation
- Provide playground area for children.
- Include monuments, icons, small replicas, flags, small structures.
- Consider shared common area that everyone can use together rather than boundary areas or delineated areas. This makes it easier for new groups to be added later.
- Provide restroom facilities
- Provide picnic area.

Staff recommends that the City Council receive the Commission input and direct staff to further refine the concept of an International Park. Staff will collaborate with these interested groups to prepare a feasibility study and preliminary plan. Work product will include administrative policies and procedures for the park and specifications for size of designated international group areas within the park.

**Alternatives:**

- Not to repurpose Tom Evatt Park and have the park continue with its existing use.
- Direct staff to identify alternative park locations.
- Take no further action regarding development of an International Park.

**Fiscal Impact**: Up to $50,000 to be reimbursed by participating organizations.

**Recommendation**: Direct staff to further refine the International Park concept with additional public participation and prepare a feasibility study and a preliminary plan.

## XIX. ORDINANCE

*** 13. Waive the Second Reading and Adopt Ordinance No. 38.822 Permitting Transitional and Supportive Housing in the MXD Zone and Manufactured Housing in the R2 Zone (Staff Contact: Tim Wong, 408-586-3286)**

**Background:** On April 28, 2015, the City Council introduced Ordinance No. 38.822 to amend the City's Zoning regulations to permit transitional and supportive housing in the Mixed Use (MXD) Zoning District. The Ordinance would also permit manufactured housing in the Residential2 (R2) Zoning District. Ordinance No. 38.820 is ready for a second reading and adoption.

**Recommendation:** Waive the second reading and adopt Ordinance No. 38.822 amending the Mixed Use zone to permit transitional and supportive housing and the Residential 2 zone to permit manufactured housing.

## XX. RESOLUTIONS

*** 14. Adopt a Resolution Authorizing the Purchase of One Unmarked Patrol Vehicle from the National Auto Fleet Group for the Not-To-Exceed Amount of $24,843.73 through a Cooperative Procurement Contract (Staff Contact: Chris Schroeder, 408-586-3161)**

**Background**: This purchase will replace an Unmarked Police Vehicle (U12-2010) totaled in an accident. The City of Milpitas received $24,845.58 in insurance reimbursement from the Association of Bay Area Governments (ABAG) to replace the vehicle. This is a cooperative purchase through the National Joint Powers Alliance (NJPA). Cooperative purchasing through NJPA is specifically authorized pursuant to Municipal Code Section I-2-3.08 "Cooperative Procurement." The Purchasing Agent reviewed all of the documentation from the National Joint Powers Alliance Request for Proposal #102811 entitled "Passenger Cars, Light Duty, Medium Duty, and Heavy Duty Trucks with Related Accessories" and determined that the underlying purchase was made using competitive bidding procedures at least as restrictive as the City of Milpitas. The price for the vehicles is the same as that offered in the original agreement.

**Fiscal Impact**: None. Sufficient funding has been allocated through an insurance reimbursement from ABAG.

**Recommendation**: Adopt a resolution authorizing the purchase of One Unmarked Police Vehicle from the National Auto Fleet Group for the not-to-exceed amount of $24,843.73 through a cooperative procurement contract in accordance with Milpitas Municipal Code.

*** 15. Adopt a Resolution Approving a Temporary Street Closure on Piedmont Road, Calaveras Road, and Associated Side Streets for the May 12, 2015 Amgen Bicycle Tour of California Event (Staff Contact: Tracy Tam, 408-586-3276)**

**Background:** Amgen Tour of California is requesting to hold a professional-style bicycle race on Tuesday, May 12, 2015, between the hours of 10:49am and 10:57am on Piedmont Road and Calaveras Road. The promoters anticipate approximately 190 participants. The bike race is programmed to start at approximately 10:45am at the Berryessa Community Center in San Jose and arrive at the Milpitas/San Jose border at 10:49am. The event is leaving the City border at approximately 10:57am. The roads would be closed by Public Works staff and the Milpitas Police Department one hour prior to the race arrival. Public Works staff will provide barricades and the California Highway Patrol (CHP) in conjunction with the Milpitas Police Department will ensure that the barricades will not be breached during the duration of the event. The proposed street closures will be on the following streets: Piedmont Road, Calaveras Road, Landess Avenue, Greenrock Road, Glenview Drive, Seacliff Drive, Shiloh Avenue, Mesa Verde Drive, Bliss Avenue, Petersburg Drive, Yosemite Drive, Uridias Ranch Road, Alviso Adobe Court, and Downing Road. Staff has identified 253 homes that will be inaccessible for approximately one hour during the race. In the event of an emergency, public health and safety will take precedence and the bike race will cease, allowing the emergency service vehicles to pass through. Emergency services will be able to access the closed areas. Conditions will be placed on the special event permit to ensure traffic and pedestrian safety.

**Event Security:** The applicant proposes a moving traffic control team to lead and follow the race participants as the race is occurring. As attachment D details, CHP officers and Motor Marshals will lead the race and station themselves at the closed intersections while the race participants follow behind. The race doctor, team cars, and cleanup crew will follow the race participants with CHP officers at the end opening the streets after the race has passed through. The traffic control team takes approximately 20 minutes to pass through an intersection.

**Outreach:** In an effort to provide adequate public notification, the applicant has sent out notices of the event to all affected residents, and they will post notices along the race route prior to the bike race day. Staff has also mailed out public notices informing the affected property owners of a community meeting, which was scheduled on April 30, 2015 from 6:00 to 7:00 PM.

**Conclusion:** The race will benefit the City by publicizing it as a place to hold special events. The proposed road closures are temporary, and emergency vehicle access is accommodated. Adequate notice has been provided by City staff and the applicant. If the City Council authorizes the street closures, the applicant shall be responsible for the implementation of the Traffic Control Plan and associated City services.

**Alternatives:**
1. Adopt the Resolution as recommended,
2. Adopt the Resolution as recommended with additional changes directed by the City Council.
3. Deny the temporary street closure request.

**Fiscal Impact:** None. All associated costs will be paid by the applicant.

**Recommendation:** Adopt a resolution approving the request from AEG Cycling authorizing temporary street closure of the following streets on Tuesday, May 12, 2015 from 9:49 am to 10:57 am for the Amgen Tour of California bicycle event: Piedmont Road, Calaveras Road, Landess Avenue, Greenrock Road, Glenview Drive, Seacliff Drive, Shiloh Avenue, Mesa Verde Drive, Bliss Avenue, Petersburg Drive, Yosemite Drive, Uridias Ranch Road, Alviso Adobe Court, and Downing Road.

*** 16. Adopt a Resolution Initiating Proceedings for the Annual Levy and Collection of Assessments and Ordering the Preparation of the Annual Engineer's Report for Landscaping and Lighting Maintenance Assessment District No. 95-1, McCarthy Ranch, Project No. 9492 (Staff Contact: Steve Machida, 408-586-3345)**

**Background**: Landscaping and Lighting Maintenance Assessment District No. 95-1 (LLMD 95-1) was created in 1995. It provides for the improvement and maintenance of public landscaping, irrigation, and pedestrian lighting along portions of North McCarthy Boulevard and the Ranch Drive gateway between State Route 237 and Dixon Landing Road. In addition, the draft 2015-2020 Capital Improvement Program includes a project for the renovation and upgrade of portions of the District's landscaping and irrigation systems.

The Landscaping and Lighting Act of 1972 requires adoption of a resolution directing preparation of the annual engineer's report evaluating the LLM District maintenance and improvement costs. At subsequent meetings, the City Council will be asked to approve the completed engineer's report and schedule a public hearing for the proposed assessment on June 2, 2015. Upon Council's approval, the assessment for the maintenance and improvement work will be added to the 2015-16 property tax bills of property owners within the boundaries of the District.

**Fiscal Impact**: None.

**Recommendation**: Adopt a resolution directing the preparation of the Annual Engineer's Report for LLMD No. 95-1 at McCarthy Ranch.

*** 17. Adopt a Resolution Initiating Proceedings for the Annual Levy and Collection of Assessments and Ordering the Preparation of the Annual Engineer's Report for Landscaping and Lighting Maintenance Assessment District No. 98-1, Sinclair Horizon, Project No. 9493 (Staff Contact: Steve Machida, 408-586-3345)**

**Background**: Landscaping and Lighting Maintenance Assessment District No. 98-1 (LLMD 98-1) was created in 1998. It provides for the improvement and maintenance of public landscaping, irrigation, and additional lighting along Sinclair Frontage Road, Los Coches Creek and Berryessa Creek abutting the Sinclair Horizon residential subdivision.

The Landscaping and Lighting Act of 1972 requires Council adoption of the proposed resolution directing preparation of an annual engineer's report evaluating the LLM District's maintenance and improvement costs. At subsequent meetings, Council will be asked to approve the completed engineer's report and schedule a public hearing for the proposed assessment on June 2, 2015. Upon Council's approval, the assessment for the maintenance and improvement work will be added to the 2015-16 property tax bills of the property owners within the boundaries of the District.

**Fiscal Impact**: None.

**Recommendation**: Adopt a resolution directing the preparation of the Annual Engineer's Report for LLMD No. 98-1 at Sinclair Horizon.

*** 18. Adopt Resolutions Summarily Vacating a Portion of Old Capitol Avenue (known as White Hole) and Annexing Real Property into Community Facilities District No. 2008-1; Approve Purchase and Sale Agreement, Subdivision Improvement Agreement, Final Map and Improvement Plans for 1315 McCandless for the District 1 Building 1 Development, Project No. 1134 (Staff Contact: Steven Machida, 408-586-3355)**

**Background:** On September 7, 2010, the City Council approved a tentative map and conditional use permit for the construction of 2 mixed use buildings including a grocery store and six residential buildings, by Integral Communities, LLC on 23 acres located at 1315-1600 McCandless Drive from Great Mall Parkway to East Penitencia Creek ("District 1" and "District 2" Projects). On March 20, 2012, the City Council subsequently approved a Major Tentative Map, Site Development Permit, and Conditional Use Permit (Resolution No. 8165) to amend the original entitlements and allow the construction of 4 mixed use buildings (934 dwelling units and 87,023 square feet commercial including a grocery store) on 13 acres (called "District 1") and 200 residential townhome units on 10 acres (called "District 2") located at 1315-1600 McCandless with ancillary lots for private streets and public streets. The project is being constructed in multiple phases.

The first phase of the project was the District 2 site consisting of 200 townhomes along with street and trail improvements. Integral Communities, LLC sold the District 2 site to Taylor Morrison. The District 2 phase is under construction and is almost completed.

The next phase of the project is the mixed use building with a grocery store consisting of 371 residential units and 44,943 square feet of commercial space on 5.71 acres located at 1315 McCandless Drive ("District 1, Building 1"). Integral Communities, LLC sold the District 1, Building 1 site to Milpitas – District 1 Associates, LLC, a subsidiary of Lyons Communities that completed the Apex project in the Midtown area of the City. In order to commence with construction for the next phase, the developer needs City Council approval of a final map for District 1 Building 1, approval of a Subdivision Improvement Agreement for construction of the public improvements, and purchase of the White Hole area for retail parking – all as further described below.

Milpitas – District 1 Associates, LLC ("District 1 Associates") submitted a final tract map for the next phase of development in substantial conformance with the approved tentative map and with required supporting documents.

District 1 Associates will construct 371 residential units and 44,943 sf of commercial space on 5.71 acres located at 1315 McCandless Drive (District 1, Building 1). The development has on-site private utilities (potable water, sanitary sewer, storm drain, recycled water, etc.). The public improvements consist of frontage improvements along McCandless Drive and Great Mall Parkway (curbs, gutters, sidewalk, asphalt concrete street section, utility mainlines, utility connections, street lights, landscaping, irrigation, and signal modification at McCandless Drive and Great Mall Parkway, and improvements to the Penitencia Creek Multi Use Trail.

In addition to the final map, the developer also submitted public improvement plans for McCandless Drive and Great Mall Parkway (2-1192) and has executed a subdivision improvement agreement for the project. Staff reviewed the documents and finds that they satisfy the City's requirements for this project. The public improvement plans and final map are available for review in the office of the City Engineer.

District 1 Associates requires the use of a portion of old Capitol Avenue right of way known as the "White Hole" located at the southeast corner of South Main Street at Great Mall Parkway east of Union Pacific Railroad for the fulfillment of certain development parking requirements. The City does not require the use of the "White Hole" area for public right of way and circulation and has not used the White Hole area for more than ten years since the realignment of Capitol Avenue. District 1 Associates has executed a Purchase Sale Agreement for the "White Hole" area for a valuable consideration. In order to transfer the White Hole area, that portion of the right of way must be vacated by the City under State law. An appraisal was completed by the Fillmore Group dated February 18, 2015 on behalf of the developer and the fair market value of the White Hole area (.698 acres) was appraised at $150,000. The parties have not agreed upon a fair market value at this time. The proposed Purchase and Sale Agreement states that the fair market value of the White Hole will be determined later prior to issuance of any certificate of occupancy (temporary or final). This will allow the construction of the grocery store building to proceed and for the parties to determine the fair market value at a later agreed date. The Purchase Price shall be established by mutually agreed upon appraised value of the property as approved by the City Manager on behalf of the City.

On November 13, 2013, the Milpitas Planning Commission adopted Resolution No. 13-035 finding that the Summary Vacation and Disposition of a portion of Old Capitol Avenue Right-Of-Way (known as "White Hole") is in conformance with the Transit Area Specific Plan and General Plan as required under State law.

District 1 Associates is required to annex the subject property into Community Facilities District 2008-1 (CFD 2008-1) as a condition of the tentative maps approved by the City Council on October 21, 2008 and on October 5, 2010. Council adopted Resolution No. 7816 on January 6, 2009 forming the CFD 2008-1, authorizing the City to annex properties to CFD 2008-1, which will be assessed only for eligible public services, without further public hearing or formal election upon receipt of written consent from the owners. District 1 Associates gave written consent and approval that this property be annexed to CFD 2008-1. District 1 Associates has also agreed that such consent and approval constitutes election to annex to CFD 2008-1 and approval of the authorization for the levy of the special tax on the subject properties.

A Certified Environmental Impact Report for the TASP was previously adopted by the City Council on June 3, 2008 and a Mitigated Negative Declaration for the project was adopted by the City Council on August 3, 2010. Pursuant to Sections 15168 of the CEQA Guidelines, the project was found to be exempt from further CEQA documentation by the City Council on March 20, 2012 because the project is consistent with the certified EIR for the TASP and the Mitigated Negative Declaration for the project. All previous mitigation measures and monitoring and reporting program adopted for the project are still applicable and no new conditions exist that invalidate the previous environmental determination or will not create a significant environment impact that require further analysis under CEQA.

**Fiscal Impact:** None.

**Recommendations:**

1. Adopt a resolution for the Summary Vacation of a portion of Old Capitol Avenue ("White Hole")
2. Approve the Purchase and Sale Agreement for "White Hole" property.

3. Adopt a resolution annexing real properties located within Final Tract Map No. 10140 into Community Facility District 2008-1.
4. Approve Subdivision Improvement Agreement between the City of Milpitas and Milpitas – District 1 Associates, LLC for public improvements associated with Final Tract Map No. 10140 (District 1, Building 1).
5. Approve Final Tract Map No. 10140 (District 1, Building 1) and Public Improvement Plans 2-1192 (construction documents for the associated public improvements).

## XXI. DEMANDS

*** 19. Authorize the Purchase of Ammunition for the Police Department from San Diego Police Supply for Not-To-Exceed $45,154.09 (Staff Contact: Chris Schroeder, 408-586-3161)**

**Background:** The City's Purchasing Agent worked with Police Department staff to develop an Invitation For Bid 2089 for Police Ammunition. On March 27, 2015 the IFB was advertised in a local newspaper, on the City website and through the Public Purchase website. The bid specified a variety of calibers and quantities for Federal brand ammunition. The bid was released nation wide on Public Purchase. Thirteen companies downloaded the bid but only one submitted a bid; San Diego Police Supply for $45,154.09. After posting the Notice of Intent to Award (Pending Bid Results), no protest was filed.

**Fiscal Impact:** None. $45,154.09 in funds for this purchase are available in the FY 2014-15 Police Department operating budget.

**Recommendation:** Authorize the purchase of ammunition for the Police Department for the not-to-exceed amount of $45,154.09 from San Diego Police Supply.

*** 20. Authorize the Purchase and Installation of 90 Uninterrupted Power Supply Batteries from Stationary Power Systems for the Not-To-Exceed Amount of $25,693.63 (Staff Contact: Chris Schroeder, 408-586-3161)**

**Background**: The City's Purchasing Agent worked with Facilities Maintenance staff to develop Invitation For Bid 2095 for purchase and installation of 90 uninterrupted power supply batteries for the Public Works/Police Building. On March 13, 2015, the IFB was advertised in a local newspaper, on the City website and through the Public Purchase website. The bid specified Datasafe batteries model #12HX505-FR or equal. The base bid specified removal and certified disposal of the old batteries and installation of the new batteries. The base bid was for a three-year full replacement warranty. Alternate One added a two year extended warranty. Alternate Two added full not pro-rated replacement plus removal and certified disposal of any failed battery and installation of a new battery at no cost to the City through the end of the five year warranty period. Based on the City's requirements staff, chose Alternate Two for which there were only three responsive bidders, as listed:

| Bidder | Amount |
|---|---|
| **Stationary Power Systems** | **$25,693.63** |
| **Millenium UPS** | **$32,631.66** |
| **Power 4 U Inc.** | **$31,346.28** |

Stationary Power Systems was the lowest responsive and responsible bidder. After posting the Notice of Intent to Award (Pending Bid Results), no protest was filed.

**Fiscal Impact:** None. $25,693.63 in funds for this purchase are available in the FY 2014-15 Public Works Operating Budget.

**Recommendation:** Authorize the purchase and installation of 90 uninterrupted power supply batteries in the total amount of $25,693.63 from Stationary Power Systems.

*** 21. Authorize Budget Appropriation and Subsequent Payments to Burton Fire and Sutphen Corp. of $31,017.10 for Fire Ladder Truck Repair (Staff Contact: Steven Machida, 408-586-3355)**

**Background**: During annual inspection of Ladder Truck TK86, it was determined that the yoke supporting the ladder was leaning causing the firefighter in the basket to be unsafe. The City received the following quotes to repair the damage to the yoke. Both companies are required to be involved in the repair since different segments of the truck and ladder are involved.

| | |
|---|---|
| Burton Fire | $11,053.43 |
| Sutphen Corporation | $19,963.67 |
| Total | $31,017.10 |

**Alternative**: If replacement of the yoke on Ladder Truck TK86 is not completed, the firefighter using the ladder will be exposed to a fall. The truck must be placed out of commission and cannot respond to calls.

**Fiscal Impact**: As this repair was not budgeted, a budget appropriation from the Equipment Replacement Fund is requested to pay the costs to replace the yoke on the ladder truck.

**Recommendations:**

1) Authorize a budget appropriation from the Equipment Replacement Fund into the Public Works Fleet Maintenance budget.
2) Authorize payment of invoices to two vendors: Burton Fire and Sutphen Corporation, totaling $31,017.10 for Fire Department's Ladder Truck TK86 repairs.

## XXII. ADJOURNMENT

**NEXT REGULARLY SCHEDULED COUNCIL MEETING**
**TUESDAY, MAY 5, 2015**

| April 2015 | | | | | | |
|---|---|---|---|---|---|---|
| S | M | T | W | T | F | S |
| | | | 1 | 2 | 3 | 4 |
| 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| 12 | 13 | 14 | 15 | 16 | 17 | 18 |
| 19 | 20 | 21 | 22 | 23 | 24 | 25 |
| 26 | 27 | 28 | 29 | 30 | | |

| June 2015 | | | | | | |
|---|---|---|---|---|---|---|
| S | M | T | W | T | F | S |
| | 1 | 2 | 3 | 4 | 5 | 6 |
| 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| 21 | 22 | 23 | 24 | 25 | 26 | 27 |
| 28 | 29 | 30 | | | | |

# MILPITAS CITY COUNCIL CALENDAR

## May 2015

| Sunday | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday |
|---|---|---|---|---|---|---|
| | | | | | **1**<br>**8:30 AM**-Santa Clara VTA Board of Directors Workshop (JE) | **2** |
| **3** | **4**<br>**10:00 AM**-VTA Silicon Valley Rapid Transit Program Working Committee (JE)<br>**7:00 PM**-Parks, Recreation & Cultural Resources Comm. (GB) | **5**<br>**5:30 PM**-Closed Session<br>**6:00 PM**-CIP Study Session<br>**7:00 PM**-City Council | **6**<br>**7:30 AM**-Santa Clara VTA Northeast Group (JE)<br>**7:00 PM**-Community Advisory Commission (CM) | **7**<br>**5:30 PM**-Santa Clara VTA Board of Directors (JE)<br>**7:00 PM**-Bicycle Pedestrian Advisory Commission (CM) | **8** | **9** |
| **10** | **11**<br>**6:00 PM**-Economic Development Commission (CM) | **12**<br>**2:00 PM** Milpitas Oversight Board | **13**<br>**7:00 PM**-Planning Commission | **14**<br>**4:00 PM**-VTA Policy Advisory Committee (CM)<br>**4:30 PM**-Treatment Plant Advisory Committee (JE) (San Jose)<br>**7:00 PM**-Cities Assoc of SCC (JE)<br>**7:00 PM**-Youth Advisory Commission (DG) | **15** | **16** |
| **17** | **18**<br>**6:00 PM**-Campaign Finance Reform Committee<br>**7:00 PM**-Telecommunications Commission (GB)<br>**7:00 PM**-Library Advisory Commission (CM) | **19**<br>**6:00 PM**-Study Session<br>**7:00 PM**-City Council | **20** | **21**<br>**10:00 PM**-Santa Clara VTA Congestion Management Program & Planning Committee (JE)<br>**7:00 PM**-Emergency Preparedness Commission (MG)<br>**7:00 PM**-Bay Area Water Supply Consv. Agency (Foster City) | **22** | **23** |
| **24** | **25**<br>**CITY HOLIDAY**<br>memorial DAY<br>**9:00 AM Memorial Day Ceremony (Veterans Plaza)** | **26** | **27**<br>**7:00 PM**-Planning Commission | **28**<br>**1:30 PM**-SCCounty Operational Area Council (Emerg Services) (MG)<br>**5:30 PM**-Milpitas Chamber of Commerce Board (DG)<br>**6:00 PM**-Sister Cities Commission (MG) | **29** | **30** |

Updated April 28, 2015

# *Draft* MEETING MINUTES
# CITY OF MILPITAS

| | |
|---|---|
| **Minutes of:** | **Regular Meeting of Milpitas City** |
| **Date:** | **Tuesday, April 21, 2015** |
| **Time:** | **5:30 PM Closed Session**<br>**7:00 PM Regular Business** |
| **Location:** | **Council Chambers, Milpitas City Hall,**<br>**455 East Calaveras Blvd., Milpitas** |

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**CALL TO ORDER**

Mayor Esteves called the meeting to order at 5:30 PM. The City Clerk noted the roll.

**PRESENT:** Mayor Esteves, Vice Mayor Montano, Councilmembers Barbadillo, Giordano and Grilli

**ABSENT**: None

**CLOSED SESSION**

City Council convened in Closed Session to discuss two items on the agenda.

**ANNOUNCEMENT**

None, out of Closed Session.

City Council then convened in Open Session at 7:00 PM.

**STUDY SESSION**

A Study Session on the FY 2015-20 Capital Improvement Program was scheduled for 6:00 PM but it was not held. This matter was continued to May 5, 2015.

**PLEDGE**

Boy Scouts Troop No. 92 presented the flags and led the pledge of allegiance.

**INVOCATION**

Councilmember Barbadillo quoted from a speech and offered a brief prayer.

**MEETING MINUTES**

Motion: to approve minutes of April 7(2) and 9, 2015 City Council meetings

Mayor Esteves noted that the City Clerk had earlier distributed revised draft meeting minutes of the regular meeting of April 7, 2015, presented for approval.

Motion/Second: Councilmember Giordano/Vice Mayor Montano

Motion carried by a vote of: AYES: 5
NOES: 0

**SCHEDULE OF MEETINGS**

Motion: to approve Council Calendars/Schedules of Meetings for April and May 2015

City Manager Williams announced that the Planning Commission meeting scheduled the following evening on April 22 was canceled.

Motion/Second: Councilmember Giordano/Vice Mayor Montano

Motion carried by a vote of: AYES: 5
NOES: 0

**PRESENTATION**

Mayor Esteves commended The Milpitas Post upon its 60th year as a local newspaper. The commendation was accepted by the paper's publisher Rob Devincenzi and his staff.

**PUBLIC FORUM**

Robert Means, 1421 Yellowstone resident, showed a video of rapid transit "pods" at Heathrow Airport in London.

Karen Kolander, Milpitas resident, noted that the following day was Earth Day, April 22. It was important to recognize all the earth-friendly efforts, including recycling in schools.

Don Litchfield, Republic staff at Newby Island landfill, thanked the Mayor for coming to visit his company's facility in Milpitas. There was a public meeting scheduled on Thursday evening, hosted by the Bay Area Air Quality Management District at City Hall. Also, there would be a stakeholders group meeting next week, with good progress being made. He encouraged the City Council with an open invitation to visit Newby Island.

Robert Marini, Milpitas resident, attended the recent City Council Finance Subcommittee meeting and afterwards, had questions about how rates based on per household numbers were calculated. He displayed some informatin provided by the State of California.

Voltaire Montemayor, Milpitas resident, congratulated the Milpitas Post. Regarding water, if the City could find more water sources and build bigger tanks. that would help and find more sources of water, like an aquifer or aqeduct somewhere.

At the City Manager's request, Recreation Services Manager Renee Lorentzen announced the phone line **408-586-2666** as the new City of Milpitas Water Hotline for reporting water wasters and to gain information on water saving devices during this time of drought.

**ANNOUNCEMENTS**

City Manager Williams introduced and welcomed Bill Ekern as the City's new interim Planning & Neighborhood Services Director, who arrived in Milpitas with most his recent management experience with the cities of Redwood City and San Jose.

City Manager Williams then went to the podium to present City Councilmembers with a plaque to recognize Money Magazine's naming the City of Milpitas as 29th best city in America to live in.

Mayor Esteves reported that the first City Attorney in Milpitas, Mr. Haskell "Jack" Goodman had died recently, and he would adjourn the meeting in Mr. Goodman's memory.

**ANNOUNCEMENT OF CONFLICT OF INTEREST AND CAMPAIGN CONTRIBUTIONS**

City Attorney Ogaz asked the Mayor and Councilmembers if they had any personal conflicts of interest or reportable campaign contributions. No conflicts or contributions were reported.

**APPROVAL OF AGENDA**

Motion: to approve the agenda as amended

City Manager Tom Williams asked the Council to hear agenda item no. 12 (Housing Element Progress Report) following Public Hearing item no. 4 (approve new Housing Element).

Mayor Esteves asked to have Item No. 5 (450 Montague project) heard after Item No. 2 (CDBG).

Motion/Second: Councilmember Giordano/Councilmember Grilli

Motion carried by a vote of: AYES: 5
NOES: 0

**CONSENT CALENDAR**

Motion: to approve the Consent Calendar items (noted by *asterisk)

The City Manager asked to remove No. 12 from consent to hear a report from staff and remove No. 13 (Public Art ordinance) from consent based on a letter received from a project applicant.

Motion/Second: Councilmember Giordano/Vice Mayor Montano

Motion carried by a vote of: AYES: 5
NOES: 0

| | |
|---|---|
| * 9. Resolution - Newby Island as Public Nuisance | Adopted Resolution No. 8463 finding public nuisance and negative environmental effect from operations at Newby Island landfill. |
| *10. Commission Appointment | To the Economic Development Commission:<br>Newly appointed Ms. Teri Owens of Embassy Suites Hotel as the hotel representative, regular voting member, on the Commission to a term that will expire in April 2018.<br>Re-appointed Ms. Charlene Tsao and Mr. Minh Nguyen as regular voting members to terms that will expire in April 2018.<br>Re-appointed Ms. Melanie Holthaus as Alternate No. 1 to a term to expire in April 2017. |
| 12. Housing Element update | This matter was removed from consent calendar, but was not heard. |
| 13. Public Art Ordinance | This matter was removed from consent calendar, but was not heard. |
| *14. Resolution | Adopted Resolution No. 8464 approving a communication and integrity policy for the solid waste Request for Proposals process. |
| *15. Animal Services Agreement | Approved an agreement with the City of San Jose for Animal Services for Fiscal Years 2015-2018 in the amount of $1,109,297 ($358,891 in FY 2015-16; $369,658 in FY 2016-17; and $380,748 in FY 2017-18). |
| *16. Soundwall Renovations Project | Approved the plans and specifications for Soundwall Renovations, Project No. 4267 and authorized advertisement for bid proposals. |
| *17. Sports Center Pool Repair Project | Authorized the Director of Engineering to issue a bidder pre-qualification package for the Milpitas Sports Center Pool Repair, Project No. 3408. |

**PUBLIC HEARING**

**2.** CDBG annual grant funding to Non-Profit Groups

Principal Planner Felix Reliford explained the breakdown of $393,490 in total Community Development Block Grant (CDBG) funds for the City of Milpitas into three areas: Public Services, Non-Public Services and Administration categories. Seventeen requests for funding from non-profit groups were received, while the total funds requested far outstripped the amount that could be awarded. The Community Advisory Commission met on March 4 and recommended that City Council fund 13 agencies.

Mr. Reliford reviewed funding specifically for Project Sentinel where some of the funds came form Administration funds and previously some from the Housing Authority). He also mentioned that this year, the Catholic Charities Long Term Care Ombudsman Program was not recommended for funding this time.

Councilmember Barbadillo asked if the funding priorities established in December of 2014 were considered in the recommendations, and staff replied yes. Mr. Barbadillo wanted to know how City staff monitored the spending of these funds. Mr. Reliford explained quarterly reporting requirements of the non-profits awarded CDBG funding.

Vice Mayor Montano highlighted Habitat for Humanity, and its services for helping folks to stay in their homes. She sought more information on the City's Street Resurfacing project and if that was the norm to fund from CDBG funds. Staff explained this would fund curb cuts and access to buildings for accessibility per Americans with Disabilities helping seniors and disabled persons. The Vice Mayor urged Terrace Gardens Senior Housing to set a minimum resident age of 65, which Councilmember Giordano – a Terrace Gardens Board member – agreed to bring to the next Board meeting.

Councilmember Giordano noted the Milpitas Food Pantry had recently received reduced rent for its facility from the City. She asked staff if that was figured into recommendation for CDBG funds and Mr. Reliford replied, yes.

Next, Mayor Esteves opened the public hearing and invited speakers to the podium.

1) Karen Kolander, Milpitas Food Pantry, noted that the 4,000 people served were unduplicated. She was very grateful for the CDBG funds. Her view was that the rent reduction was from completely different funds in the City budget.

2) Wanda Hale, program manager of the Long Term Care Ombudsman Program of Catholic Charities, would like her organization to be funded again, in the future, if not this year since there was a long history of funding from Milpitas. It was an unduplicated safety-net program to protect needy elderly out there.

Mayor Esteves asked how many Milpitas seniors were assisted last year and Ms. Hale mentioned 77 beds in senior care facilities were available in this City.

Councilmember Grilli asked about licensing and possible duplicative service. Ms. Hale explained long term care (Residential Care) licensing and skilled nursing facilities (nursing homes) that had different requirements for licensing.

3) Michelle Schroeder of Senior Adults Legal Assistance (SALA) described free legal services for senior citizens that the group provided at the Barbara Lee Senior Center in Milpitas twice monthly. Mayor Esteves questioned her about costs, hours and amount of legal services provided to specific number of seniors.

4) Theresa Johnson, Director of the Meals on Wheels program, served many residents in Milpitas with a hot meal, welfare check and follow-up for referrals that may be needed, such as to SALA. She expected to serve at least 20 clients in Milpitas next year.

5) Molly Current, Fair Housing Director of Project Sentinel and Milpitas resident, thanked the City Council for support for her organization over many years. There was a housing crisis in the Bay Area, making services more important than ever. Her fair-housing non-profit agency helped people stay in their homes, not become homeless and served low- and extremely-low income residents.

6) Brian Eggers and Randy Perry, of the new Fresh Life for Youth ("FLY") organization, with its headquarters in Milpitas were first-time applicants for CDBG funding and CAC had not recommended funds this year. Specifically, FLY had reached out to partner with Calaveras Hills High School to offer legal education to young persons and help keep them out of the justice system.

Mayor Esteves, Councilmember Grilli, Vice Mayor Montano, and Councilmember Barbadillo all commented on this new organization, its value to young people, and to keep FLY in mind for any other possible funding opportunities to help them succeed.

7) Bev Jackson of Rebuilding Together, helped homeowners in need, to keep housing stock repaired and keep homeowners in their homes, with many emergency repairs.

8) Colleen Hudgen of Live Oak Adult Day Services, represented the licensed adult day care center for senior adults who need all day care for those with many disabilities. She noted that funding for senior services was going down across the South Bay lately.

9) Robert Marini, Milpitas resident, mentioned $60,000 for public works resurfacing. He would like some of that to be used at N. Abel Street at Calaveras (going north) because one could not walk straight up, and crossing in the same direction was difficult. The shrubbery needed to be removed and trees caused sidewalks buckling, a hazard.

10) Voltaire Montemayor, Milpitas resident, referred to the budget for CDBG funds and all the groups justified their funding requests while doing good for the community.

(1) Motion: to close the public hearing following ten speakers

Motion/Second: Councilmember Giordano/Vice Mayor Montano

Motion carried by a vote of: AYES: 5
NOES: 0

Mayor Esteves asked Mr. Reliford to review the adopted priorities for CDBG funding. Those were Seniors, Youth and Homeless. Mr. Reliford also identified those groups not recommended for funding this year. Mayor Esteves said he wanted to focus on seniors, so he sought funds for the Ombudsman Program at a minimum level.

Councilmember Barbadillo asked staff to explain how the $78,698 in Administration funds were spent. He liked what he heard about the FLY program for youth.

Responding to Council remarks, the City Manager offered to meet with the two non-profits not recommended for funding (FLY and Catholic Charities Ombudsman Program), to research possible funding, and to come back to the City Council at budget time to consider, for example, money from the City Council's Community Promotions budget.

Vice Mayor Montano reiterated to the FLY program staff to contact the Milpitas Unified School District to seek funds via LCAP for their group.

(2) Motion: to approve additional CDBG funds of $169,303 for Rehabilitation Revolving Loan Fund for FY 2015-16; to approve CDBG funding for FY 2015-16, as recommended by the Community Advisory Commission; and direct staff to meet with FLY and the Ombudsman Program non-profits to consider potentially other City funding

Motion/Second: Councilmember Grilli/Vice Mayor Montano

Motion carried by a vote of: AYES:
NOES: 0

Councilmember Grilli then noted that regarding the CalPERS presentation by Ron Lind on the agenda (item no. 6) would need to be re-scheduled because Mr. Lind left the meeting. He will work with the Human Resources Director Carmen Valdez to reschedule.

**3.** Transitional and Supportive Housing

This public hearing was not held.

**4.** General Plan Housing Element certification

This public hearing was not held.

**5.** 450 Montague Expressway development project

Contract Planner Darryl Boyd introduced the development proposed for 450 Montague Expressway at East Capitol Ave, near the new BART station under construction in the Transit Area. He reviewed the major actions requested of the Council for the project's approval: Site Development Permit and Conditional Use Permit (for minor deviations from Transit Area Specific Plan and from Zoning Code) related to the Lennar project. He listed some of the Public Benefits offered on site.

Mayor Esteves wanted quantitative assessment specifically of the Public Benefits offered and asked staff to provide those numbers, which Mr. Boyd did not have at his fingertips.

Vice Mayor Montano asked about "shelf life" of the construction drawings for the vehicular bridge at Milpitas Blvd extension. She did not want funding for the bridge to be overlooked, with drawings sitting on the shelf and not ever built.

There was a great deal of discussion of actions needed for parking, a Conditional Use Permit for tandem parking, for open space, and other needs.

Vice Mayor Montano asked for explanation on the location of one of the two parks at the project, at the "back" of the site. Discussion on the two proposed park locations and design was held, with the linear park and creek trail design reviewed.

Councilmember Barbadillo asked if there was a qualification or definition for a "public benefit." Staff asked if he meant criteria and reply was yes. Staff could look it up and report back. Mr. Barbadillo asked about if the park would be designed and built as presented to the Parks, Recreation and Cultural Resources Commission, which had concerns based on a past project. He wanted to know why the change in road design was made and more about the gas and water pipe lines.

Mayor Esteves next invited the applicant to the podium. Alex Waterberry from Lennar Homes spoke to the City Council, after two and one half years working on this project with many potential site plans. He referenced approximately $2 million in value of public benefits, he reported to the Mayor.

Kevin Mong, also of Lennar, with his design team, worked with City staff for one and a half years on this site. A recycled water line would be extended for use at this site. He highlighted a "paseo" linear path through the project to connect the linear park to the one in the center of the development.

While Mr. Mong was addressing the City Council, technical difficulty ensued at the podium and dais with a lack of any sound from microphones at 10:28 PM. This caused a halt to the discussion, and ultimately to the public hearing being continued to the next scheduled City Council meeting date of May 5, 2015.

**UNFINISHED BUSINESS**

**6.** Overview of PERS — Councilmember Grilli announced that PERS Board member Ron Lind needed to leave the meeting prior to this item, so the Mayor agreed to continue this item to a future meeting.

**7.** City Website Design — This matter was not heard.

**8.** Amend Contract with PERS — This matter was not heard.

**NEW BUSINESS**

**11.** Citrus Pest Prevention — This matter was not heard.

**RESOLUTIONS** — Two resolutions were adopted on the consent calendar.

**AGREEMENTS** — Three items were approved on the consent calendar.

**ADJOURNMENT** — Technical difficulties regarding the microphones occurred near 10:30 PM while the City Council was discussing the 450 Montague project. Without use of the sound system, the Council agreed the meeting should be adjourned.

So Mayor Esteves adjourned the meeting at 10:35 PM. Councilmember Giordano then departed the Council Chambers.

However, the Mayor noted that a vote was necessary to continue the scheduled and noticed public hearing items, so he re-opened the meeting.

Vice Mayor Montano moved, seconded by Councilmember Grilli, to schedule a special City Council meeting the following Tuesday, April 28, 2015 at 7:00 PM in Council Chambers to continue all public hearings (450 Montague project and two housing matters) on the agenda this evening. The motion was approved on a vote of four in favor with one absent (Councilmember Giordano).

Mayor Esteves then adjourned the meeting again at 10:37 PM.

*Meeting minutes drafted and respectfully submitted by*
*Mary Lavelle, City Clerk*

# Capital Improvement Program 2015-2020

# Draft Report

Pinewood Park Improvements

# City of Milpitas

## CALIFORNIA

Version: April 14, 2015

# 2015-2020 CAPITAL IMPROVEMENT PROGRAM

**Jose Esteves,** Mayor
**Carmen Montano,** Vice-Mayor
**Debbie Indihar Giordano,** Councilmember
**Garry Barbadillo,** Councilmember
**Marsha Grilli,** Councilmember

Submitted By: MNB

**Thomas C. Williams**, City Manager

Prepared By: **Engineering Division**

# CITY OF MILPITAS

455 East Calaveras Boulevard, Milpitas, California 95035-5479 www.ci.milpitas.ca.gov (408) 586-3000


April 2015

Honorable Mayor, Members of the City Council:

**INTRODUCTION**

Transmitted herewith is the Proposed 2015-2020 Five-Year Capital Improvement Program (CIP).

The CIP is a comprehensive five-year plan of Capital Improvement Projects for the City of Milpitas. Capital Improvement Projects include construction of capital assets including streets, park development or upgrades, the acquisition of land, construction and repair/rehabilitation of City infrastructure and facilities, and specialized high cost purchases. The CIP reflects Council's priorities and policies to ensure that the needs of the community are met.

This document arranges the projects in the following six fund groups: Community Improvements, Parks, Streets, Water, Sewer, and Storm Drain and includes:

- A Table of Contents with numerical and alphabetical listings of all projects.
- Summaries of the 2015-2020 CIP showing fund group expenses, finance sources, and projects.
- Detailed CIP project descriptions by fund groups.
- Appendices that provide the estimate level descriptions, abbreviations, prioritization description, previously funded projects closed by June 30, 2015.

**ACCOMPLISHMENTS IN 2014-2015**

The following is a partial list of Capital Improvement Projects that have been successfully completed in the last year:

- Pinewood Park Renovation
- Park Renovation Project 2013
- Milpitas Sports Center Locker Room Improvements
- Cathodic Protection Improvements
- Street Resurfacing Project
- Cape Seal Resurfacing Project
- Public Works/Police Building Improvements
- LED Street Light Conversion, Phase I

**2015-2020 CAPITAL BUDGET**

Funding for projects programmed in the first Fiscal Year 2015-2016 is recommended for approval at this time. Funding for the projects in subsequent years of the CIP is shown for planning purposes and funding does not become available until it is appropriated in future CIP documents. The 2015-2016 Capital Budget, totaling approximately $22,421,960 million is summarized below:

| PROJECT CATEGORY | FY 15-16 | Projected % OF TOTAL |
|---|---|---|
| Community Improvement Projects | 685,000 | 3.1% |
| Park Projects | 5,875,000 | 26.2% |
| Street Projects | 3,596,960 | 16.0% |
| Water Projects | 4,000,000 | 17.8% |
| Sewer Projects | 6,315,000 | 28.2% |
| Storm Drain Projects | 1,950,000 | 8.7% |
| **TOTAL** | **$22,421,960** | **100.0%** |

Projects recommended for funding during 2015-2020 are shown in the CIP summaries at the beginning of each section. The Planning Commission reviewed this document on April 8th and found it in conformance with the General Plan.

**FINAL 2015-2020 FIVE-YEAR CAPITAL IMPROVEMENT PROGRAM**

The Proposed five-year Capital Improvement Program totals approximately $167.2 million. The Proposed 2015-2020 CIP program is compared with last year's program below. The Proposed CIP shows an increase of approximately $27.4 million in the five-year program.

| | 2014-2019 PROGRAM | | 2015-2020 PROGRAM | |
|---|---|---|---|---|
| FUND GROUP | Cost | % of Total | Cost | % of Total |
| Community Improvement Projects | 7,125,000 | 5.1% | 10,960,000 | 6.6% |
| Parks Projects | 30,200,000 | 21.6% | 34,775,000 | 20.8% |
| Streets Projects | 28,490,280 | 20.4% | 24,849,960 | 14.9% |
| Water Projects | 26,900,000 | 19.3% | 47,375,000 | 28.3% |
| Sewer Projects | 33,460,000 | 23.9% | 33,945,000 | 20.3% |
| Storm Drain Projects | 13,560,000 | 9.7% | 15,280,000 | 9.1% |
| **TOTAL** | **$139,735,280** | **100.0%** | **$167,184,960** | **100.0%** |

**FUND GROUP FINANCING**

*COMMUNITY IMPROVEMENTS*

This fund group includes projects such as the City Facilities Improvements, Fire Station Improvements, Finance System Upgrades, MSC Master Plan Update and PD Communications. Community Improvements projects are funded by Equipment Replacement Fund, General Government CIP Fund, Transient Occupancy Tax, and other sources.

*PARKS*

Park Dedication Fees are the primary source of revenue for this fund group. Additional revenue sources include Transit Area Specific Plan (TASP) Fees, County, State and Federal Grants. Staff continues to pursue outside funding sources in order to fund additional projects.

*STREETS*

The streets revenues are obtained from State gas taxes, Vehicle Registration Fees, Transient Occupancy Tax, Traffic Impact Fees, and other grants and fees.

*WATER*

Revenues for this fund group are derived from the water user rate structure (Water Fund) as well as developer hookup fees (Water Line Extension).

*SEWER*

Revenues for this fund group are derived from the sewer user rate structure (Sewer Fund) and developer hookup fees (Sewer Treatment Plant) fees.

STORM DRAIN

Storm Drain projects are funded from a combination of the Storm Drain Fund, General Government CIP Fund, and Developer Contributions based on eligibility for these respective funding sources. The Storm Master Plan update identifies several more projects for the Capital Improvement Program. Staff will seek additional funding sources at the local, state and federal levels and may propose a storm drain fee to fund these infrastructure projects.

**FIVE-YEAR PROGRAM REVISIONS**

20 new projects have been added to the Draft 2015-2020 Capital Improvement Program. The projects were added on a need and affordability basis. New projects recommended for funding are listed in ***bold italics*** in the summaries at the beginning of each section. The summaries identify the projects within each fund group, project costs, funding sources, and the year funding is proposed.

**ESTIMATES**

The accuracy of estimated project costs throughout this document varies depending on the degree of detail given to project proposals. Estimates range from conceptual estimates to detailed design estimates for projects ready to go out to bid. Staff used three categories of "estimate levels" in determining project cost estimates for the projects in the annually revised CIP. The estimate level for each project is identified in the upper right hand corner of the individual projects pages and further described in Appendix A.

**CONCLUSION**

This Capital Improvement Program was developed in order to protect and enhance the City's capital assets and infrastructure, so as to preserve and improve the quality of life for Milpitas residents.

I want to thank the members of the City Council for their integrity in directing the financial affairs of the City in a responsible and progressive manner. I also want to thank the Department Heads, Division Managers and Engineering staff involved in the project selection/prioritization process, and for the successful implementation of the CIP program.

Respectfully submitted,

Thomas C. Williams
City Manager

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# 2015-20 CAPITAL IMPROVEMENT PROGRAM
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| 54 | 4266 | Street Light Improvements |
| 55 | 4267 | Soundwall Renovation |
| 56 | 4271 | Bridge Improvements |
| 57 | 4273 | Street Landscape Irrigation Repair 2014 |
| 58 | New | Milpitas Boulevard Plan Line Study |
| 59 | New | Minor Traffic Improvements 2016 |
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| 64 | New | Street Resurfacing Project 2016 |
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| 108 | 6118 | San Jose/Santa Clara Regional Waste Water Facility |
| 109 | 6119 | CCTV Sanitary Sewer |
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| 159 | 4256 | Abel Street Sidewalk Improvements |
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| 200 | 7115 | Cathodic Protection Improvements |
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| 13 | New | City Buildings, Exterior Painting & Repairs |
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| 16 | New | City Parking Lot Improvements |
| 88 | New | Construction Water |
| 32 | New | Creighton Park Renovation Design & Construction |
| 205 | 7122 | Daniel Court Water Service Replacement |
| 128 | 3709 | Dempsey Road Storm Drain Replacement |
| 85 | 7118 | Dempsey Road Water Line Replacement |
| 53 | 4253 | Dixon Landing Road Plan Line |
| 170 | 4276 | Electrical Vehicle Charging Stations |
| 9 | 3403 | Fire Station Improvements |
| 134 | New | Flap Gate Replacement |
| 155 | 3704 | Fuel Tank Improvements |
| 179 | 5097 | Higuera Adobe Park Picnic and Playground Renovation |
| 89 | New | Hillside Pump Station Equip. Replacement |
| 84 | 7110 | Hydrant Replacement |
| 168 | 4274 | I 880 Interchange R/W Closeout |
| 33 | New | International Park |
| 145 | 2001 | Light Rail Median Landscaping |

# City of Milpitas
# 2015-20 CAPITAL IMPROVEMENT PROGRAM
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| | | |
|---|---|---|
| 90 | New | Los Coches Backbone |
| 147 | 2005 | Lower Penitencia Creek Pedestrian Bridge |
| 184 | 6079 | Main Sewer Pump Station Site Improvements |
| 175 | 5092 | Main Street Park |
| 171 | 4277 | Main Street Pavement Reconstruction |
| 183 | 5102 | McCandless Park |
| 51 | 3402 | McCarthy Blvd. Landscape & Lighting Improvements |
| 149 | 3407 | Midtown Parking Garage |
| 58 | New | Milpitas Boulevard Plan Line Study |
| 188 | 6114 | Minor Sewer Projects 2011 |
| 191 | 6120 | Minor Sewer Projects 2015 |
| 111 | New | Minor Sewer Projects 2018 |
| 156 | 3706 | Minor Storm Drain Projects 2011-12 |
| 135 | New | Minor Storm Drain Projects 2016 |
| 136 | New | Minor Storm Drain Projects 2018 |
| 167 | 4272 | Minor Traffic Improvements 2014 |
| 59 | New | Minor Traffic Improvements 2016 |
| 60 | New | Minor Traffic Improvements 2018 |
| 61 | New | Minor Traffic Improvements 2020 |
| 196 | 7111 | Minor Water Projects 2011 |
| 201 | 7116 | Minor Water Projects 2013 |
| 206 | 7123 | Minor Water Projects 2015 |
| 91 | New | Minor Water Projects 2017 |
| 158 | 4179 | Montague Expwy Widening at Great Mall Pkwy |
| 150 | 3408 | MSC Facility Improvements |
| 17 | New | MSC Master Plan Update |
| 34 | New | MSC Pool Rehabilitation |
| 35 | New | Murphy Park Picnic and Playground Renovation |
| 137 | New | Oak Creek Pump Station Upgrade |
| 36 | New | Park Access Improvement and Resurfacing |
| 173 | 5086 | Park Irrigation System Rehabilitation |
| 180 | 5098 | Park Irrigation System Repair & Improvement 2014 |
| 176 | 5093 | Park Master Plan Improvements - Phase I |
| 174 | 5091 | Park Renovation Project 2011 |
| 177 | 5095 | Park Renovation Project 2013 |
| 181 | 5099 | Park Renovation Project 2015 |
| 18 | New | PD Communications |
| 172 | 5080 | Penitencia Creek Trail Feasibility Study |
| 129 | 3710 | Penitencia Pump Station Improvements |
| 178 | 5096 | Pinewood Park Picnic Renovation |
| 19 | New | Police Records Management System |
| 192 | 7070 | Pressure Reducing Valve Replacement |
| 151 | 3410 | Public Works/Police Building Improvements |
| 92 | New | Recycled Water Line Extension |
| 197 | 7112 | Reservoir Cleaning |
| 162 | 4264 | S. Abel Street Resurfacing |
| 62 | New | S. Milpitas Blvd Bike/Ped. Improvements |

# City of Milpitas
# 2015-20 CAPITAL IMPROVEMENT PROGRAM
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| | | |
|---|---|---|
| 146 | 2004 | S. Milpitas Boulevard Extension |
| 108 | 6118 | San Jose/Santa Clara Regional Waste Water Facility |
| 37 | New | Sandalwood Park Renovation |
| 112 | New | Sanitary Sewer Overflow Improvements |
| 93 | New | SCVWD Second Water Supply Turnout |
| 81 | 2002 | Second SCVWD Water Reservoir and Pump Station |
| 113 | New | Sewer Main Replacement Study 2018 |
| 185 | 6106 | Sewer Replacement Study |
| 186 | 6109 | Sewer Seismic Study |
| 187 | 6110 | Sewer System Hydraulic Modeling |
| 189 | 6115 | Sewer System Replacement 11-12 |
| 107 | 6116 | Sewer System Replacement 12-13 |
| 114 | New | Sewer System Replacement 16-17 |
| 115 | New | Sewer System Replacement 17-18 |
| 116 | New | Sewer System Replacement 18-19 |
| 160 | 4257 | Signal Mitigation @ McCarthy & Irvine Entrance |
| 52 | 3411 | Sinclair LMD Improvements |
| 38 | New | Sinnott Park Renovation |
| 148 | 3401 | Solid Waste Master Plan |
| 55 | 4267 | Soundwall Renovation |
| 138 | New | Spence Pump Station Improvements |
| 39 | New | Sports Center Skate Park |
| 182 | 5100 | Sports Center Skate Park & Fields Feasibility Study |
| 40 | New | Sports Center Sports Fields |
| 41 | New | Starlite Park Renovation |
| 154 | 3701 | Storm Drain Master Plan Update |
| 139 | New | Storm Drain Supervisory Control and Data Acquisition |
| 127 | 3700 | Storm Drain System Deficiency Program |
| 140 | New | Storm Drain System Improvements 2018 |
| 157 | 3707 | Storm Pump Station Improvements 2012 |
| 57 | 4273 | Street Landscape Irrigation Repair 2014 |
| 63 | New | Street Landscape Irrigation Repair 2017 |
| 54 | 4266 | Street Light Improvements |
| 164 | 4268 | Street Resurfacing Project 2013 |
| 152 | 3412 | Street Resurfacing Project 2014 |
| 169 | 4275 | Street Resurfacing Project 2015 |
| 64 | New | Street Resurfacing Project 2016 |
| 65 | New | Street Resurfacing Project 2017 |
| 66 | New | Street Resurfacing Project 2018 |
| 67 | New | Street Resurfacing Project 2019 |
| 68 | New | Street Resurfacing Project 2020 |
| 42 | New | Strickroth Park Renovation |
| 203 | 7119 | Sunnyhills Turnout Pressure Reducing Valve |
| 117 | New | Supervisory Control & Data Acquisition (SCADA) |
| 94 | New | Supervisory Control and Data Acquisition (SCADA) |
| 190 | 6117 | TASP Sewer Line Replacement |
| 69 | New | TASP Underground Utility District |

# City of Milpitas
# 2015-20 CAPITAL IMPROVEMENT PROGRAM
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| | | |
|---|---|---|
| 165 | 4269 | Traffic Management Enhancements 2013 |
| 70 | New | Traffic Management Enhancements 2020 |
| 71 | New | Traffic Signal Installation |
| 141 | New | Trash Removal Devices |
| 198 | 7113 | Turnout Improvements |
| 72 | New | Utility Undergrounding 2020 |
| 118 | New | Venus Pump Station Rehabilitation |
| 199 | 7114 | Water Meter Replacement |
| 95 | New | Water O&M Database Management |
| 204 | 7120 | Water Supply Blending Study |
| 207 | 7124 | Water System Air Relief Modifications 2015 |
| 194 | 7108 | Water System Hydraulic Modeling |
| 195 | 7109 | Water System Replacement 08-09 |
| 96 | New | Water System Replacement 18-19 |
| 97 | New | Water System Replacement Study |
| 83 | 7100 | Water System Seismic Improvements |
| 98 | New | Water Valve Replacement |
| 82 | 7076 | Well Upgrade Project |

# City of Milpitas
# 2015-20 CAPITAL IMPROVEMENT PROGRAM
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## Sorted By Project Number


| Page | Proj# | Project Name |
|---|---|---|
| 145 | 2001 | Light Rail Median Landscaping |
| 81 | 2002 | Second SCVWD Water Reservoir and Pump Station |
| 146 | 2004 | S. Milpitas Boulevard Extension |
| 147 | 2005 | Lower Penitencia Creek Pedestrian Bridge |
| 148 | 3401 | Solid Waste Master Plan |
| 51 | 3402 | McCarthy Blvd. Landscape & Lighting Improvements |
| 9 | 3403 | Fire Station Improvements |
| 10 | 3406 | City Building Improvements |
| 149 | 3407 | Midtown Parking Garage |
| 150 | 3408 | MSC Facility Improvements |
| 151 | 3410 | Public Works/Police Building Improvements |
| 52 | 3411 | Sinclair LMD Improvements |
| 152 | 3412 | Street Resurfacing Project 2014 |
| 153 | 3413 | 2015 Finance System Upgrade |
| 127 | 3700 | Storm Drain System Deficiency Program |
| 154 | 3701 | Storm Drain Master Plan Update |
| 155 | 3704 | Fuel Tank Improvements |
| 156 | 3706 | Minor Storm Drain Projects 2011-12 |
| 157 | 3707 | Storm Pump Station Improvements 2012 |
| 128 | 3709 | Dempsey Road Storm Drain Replacement |
| 129 | 3710 | Penitencia Pump Station Improvements |
| 158 | 4179 | Montague Expwy Widening at Great Mall Pkwy |
| 53 | 4253 | Dixon Landing Road Plan Line |
| 159 | 4256 | Abel Street Sidewalk Improvements |
| 160 | 4257 | Signal Mitigation @ McCarthy & Irvine Entrance |
| 161 | 4258 | Calaveras Blvd Widening Project |
| 162 | 4264 | S. Abel Street Resurfacing |
| 163 | 4265 | Bart Extension Coordination and Planning |
| 54 | 4266 | Street Light Improvements |
| 55 | 4267 | Soundwall Renovation |
| 164 | 4268 | Street Resurfacing Project 2013 |
| 165 | 4269 | Traffic Management Enhancements 2013 |
| 166 | 4270 | 2014 Road Rehabilitation |
| 56 | 4271 | Bridge Improvements |
| 167 | 4272 | Minor Traffic Improvements 2014 |
| 57 | 4273 | Street Landscape Irrigation Repair 2014 |
| 168 | 4274 | I 880 Interchange R/W Closeout |
| 169 | 4275 | Street Resurfacing Project 2015 |

# City of Milpitas
# 2015-20 CAPITAL IMPROVEMENT PROGRAM
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| | | |
|---|---|---|
| 170 | 4276 | Electrical Vehicle Charging Stations |
| 171 | 4277 | Main Street Pavement Reconstruction |
| 29 | 5055 | Alviso Adobe Renovation |
| 172 | 5080 | Penitencia Creek Trail Feasibility Study |
| 173 | 5086 | Park Irrigation System Rehabilitation |
| 174 | 5091 | Park Renovation Project 2011 |
| 175 | 5092 | Main Street Park |
| 176 | 5093 | Park Master Plan Improvements - Phase I |
| 177 | 5095 | Park Renovation Project 2013 |
| 178 | 5096 | Pinewood Park Picnic Renovation |
| 179 | 5097 | Higuera Adobe Park Picnic and Playground Renovation |
| 180 | 5098 | Park Irrigation System Repair & Improvement 2014 |
| 181 | 5099 | Park Renovation Project 2015 |
| 182 | 5100 | Sports Center Skate Park & Fields Feasibility Study |
| 183 | 5102 | McCandless Park |
| 184 | 6079 | Main Sewer Pump Station Site Improvements |
| 185 | 6106 | Sewer Replacement Study |
| 186 | 6109 | Sewer Seismic Study |
| 187 | 6110 | Sewer System Hydraulic Modeling |
| 188 | 6114 | Minor Sewer Projects 2011 |
| 189 | 6115 | Sewer System Replacement 11-12 |
| 107 | 6116 | Sewer System Replacement 12-13 |
| 190 | 6117 | TASP Sewer Line Replacement |
| 108 | 6118 | San Jose/Santa Clara Regional Waste Water Facility |
| 109 | 6119 | CCTV Sanitary Sewer |
| 191 | 6120 | Minor Sewer Projects 2015 |
| 192 | 7070 | Pressure Reducing Valve Replacement |
| 82 | 7076 | Well Upgrade Project |
| 83 | 7100 | Water System Seismic Improvements |
| 193 | 7102 | Ayer Reservoir & Pump Station Improvements |
| 194 | 7108 | Water System Hydraulic Modeling |
| 195 | 7109 | Water System Replacement 08-09 |
| 84 | 7110 | Hydrant Replacement |
| 196 | 7111 | Minor Water Projects 2011 |
| 197 | 7112 | Reservoir Cleaning |
| 198 | 7113 | Turnout Improvements |
| 199 | 7114 | Water Meter Replacement |
| 200 | 7115 | Cathodic Protection Improvements |
| 201 | 7116 | Minor Water Projects 2013 |
| 202 | 7117 | Abel Street Pipeline Extension |
| 85 | 7118 | Dempsey Road Water Line Replacement |

# City of Milpitas
# 2015-20 CAPITAL IMPROVEMENT PROGRAM
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| | | |
|---|---|---|
| 203 | 7119 | Sunnyhills Turnout Pressure Reducing Valve |
| 204 | 7120 | Water Supply Blending Study |
| 86 | 7121 | Automated Water Meter Replacement |
| 205 | 7122 | Daniel Court Water Service Replacement |
| 206 | 7123 | Minor Water Projects 2015 |
| 207 | 7124 | Water System Air Relief Modifications 2015 |
| 11 | New | 2018 Finance System Upgrade |
| 130 | New | Abbott Pump Station Controls Replacement |
| 110 | New | BART Project - Sewer Improvements |
| 131 | New | BART Project - Storm Improvements |
| 87 | New | BART Project - Water Improvements |
| 30 | New | Berryessa Creek Trail, Reach 4, 5, 6A |
| 132 | New | California Circle Pump Station |
| 31 | New | Cardoza Park Improvements Phase II |
| 133 | New | Channel and Lagoon Dredging |
| 12 | New | City Building ADA Compliance Review |
| 13 | New | City Buildings, Exterior Painting & Repairs |
| 14 | New | City Buildings, Roofing |
| 15 | New | City Hall Pond & Water Feature Rehabilitation |
| 16 | New | City Parking Lot Improvements |
| 88 | New | Construction Water |
| 32 | New | Creighton Park Renovation Design & Construction |
| 134 | New | Flap Gate Replacement |
| 89 | New | Hillside Pump Station Equip. Replacement |
| 33 | New | International Park |
| 90 | New | Los Coches Backbone |
| 58 | New | Milpitas Boulevard Plan Line Study |
| 111 | New | Minor Sewer Projects 2018 |
| 135 | New | Minor Storm Drain Projects 2016 |
| 136 | New | Minor Storm Drain Projects 2018 |
| 59 | New | Minor Traffic Improvements 2016 |
| 60 | New | Minor Traffic Improvements 2018 |
| 61 | New | Minor Traffic Improvements 2020 |
| 91 | New | Minor Water Projects 2017 |
| 17 | New | MSC Master Plan Update |
| 34 | New | MSC Pool Rehabilitation |
| 35 | New | Murphy Park Picnic and Playground Renovation |
| 137 | New | Oak Creek Pump Station Upgrade |
| 36 | New | Park Access Improvement and Resurfacing |
| 18 | New | PD Communications |
| 19 | New | Police Records Management System |

# City of Milpitas
# 2015-20 CAPITAL IMPROVEMENT PROGRAM
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| | | |
|---|---|---|
| 92 | New | Recycled Water Line Extension |
| 62 | New | S. Milpitas Blvd Bike/Ped. Improvements |
| 37 | New | Sandalwood Park Renovation |
| 112 | New | Sanitary Sewer Overflow Improvements |
| 93 | New | SCVWD Second Water Supply Turnout |
| 113 | New | Sewer Main Replacement Study 2018 |
| 114 | New | Sewer System Replacement 16-17 |
| 115 | New | Sewer System Replacement 17-18 |
| 116 | New | Sewer System Replacement 18-19 |
| 38 | New | Sinnott Park Renovation |
| 138 | New | Spence Pump Station Improvements |
| 39 | New | Sports Center Skate Park |
| 40 | New | Sports Center Sports Fields |
| 41 | New | Starlite Park Renovation |
| 139 | New | Storm Drain Supervisory Control and Data Acquisition |
| 140 | New | Storm Drain System Improvements 2018 |
| 63 | New | Street Landscape Irrigation Repair 2017 |
| 64 | New | Street Resurfacing Project 2016 |
| 65 | New | Street Resurfacing Project 2017 |
| 66 | New | Street Resurfacing Project 2018 |
| 67 | New | Street Resurfacing Project 2019 |
| 68 | New | Street Resurfacing Project 2020 |
| 42 | New | Strickroth Park Renovation |
| 117 | New | Supervisory Control & Data Acquisition (SCADA) |
| 94 | New | Supervisory Control and Data Acquisition (SCADA) |
| 69 | New | TASP Underground Utility District |
| 70 | New | Traffic Management Enhancements 2020 |
| 71 | New | Traffic Signal Installation |
| 141 | New | Trash Removal Devices |
| 72 | New | Utility Undergrounding 2020 |
| 118 | New | Venus Pump Station Rehabilitation |
| 95 | New | Water O&M Database Management |
| 96 | New | Water System Replacement 18-19 |
| 97 | New | Water System Replacement Study |
| 98 | New | Water Valve Replacement |

# City of Milpitas
# 2015-20 CAPITAL IMPROVEMENT PROGRAM
## GRAND SUMMARY

| Project Expenses | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|
| Community Improvement | 685,000 | 3,635,000 | 6,115,000 | 150,000 | 375,000 | **10,960,000** |
| Park Improvement | 5,875,000 | 900,000 | 3,025,000 | 1,550,000 | 23,425,000 | **34,775,000** |
| Streets | 3,596,960 | 5,565,000 | 5,188,000 | 5,275,000 | 5,225,000 | **24,849,960** |
| Water | 4,000,000 | 18,315,000 | 11,820,000 | 4,795,000 | 8,445,000 | **47,375,000** |
| Sewer Improvement | 6,315,000 | 8,865,000 | 6,730,000 | 7,035,000 | 5,000,000 | **33,945,000** |
| Storm Drain Improvement | 1,950,000 | 2,850,000 | 5,130,000 | 2,925,000 | 2,425,000 | **15,280,000** |
| **Total** | **22,421,960** | **40,130,000** | **38,008,000** | **21,730,000** | **44,895,000** | **167,184,960** |

| Finance Sources | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|
| Gas Tax Fund | 2,050,000 | 1,900,000 | 1,900,000 | 1,840,000 | 1,900,000 | **9,590,000** |
| General Government CIP Fund | 1,885,000 | 2,235,000 | 5,335,000 | 1,050,000 | 375,000 | **10,880,000** |
| Grants/Reimbursement/Developer Fe | 0 | 0 | 0 | 160,000 | 0 | **160,000** |
| Midtown Park Fund | 3,560,000 | 300,000 | 900,000 | 300,000 | 1,100,000 | **6,160,000** |
| Park Fund | 2,315,000 | 600,000 | 2,125,000 | 1,250,000 | 900,000 | **7,190,000** |
| Sewer Fund | 4,915,000 | 4,465,000 | 3,330,000 | 3,635,000 | 2,600,000 | **18,945,000** |
| Sewer Infrastructure Fund | 0 | 1,500,000 | 500,000 | 500,000 | 0 | **2,500,000** |
| Sewer Treatment Fund | 1,500,000 | 1,000,000 | 2,500,000 | 2,500,000 | 2,500,000 | **10,000,000** |
| Water Fund | 4,100,000 | 3,345,000 | 5,270,000 | 2,895,000 | 3,720,000 | **19,330,000** |
| Water Line Extension Fund | 0 | 870,000 | 550,000 | 500,000 | 2,325,000 | **4,245,000** |
| Storm Drain Fund | 750,000 | 350,000 | 200,000 | 0 | 0 | **1,300,000** |
| Equipment Replacement Fund | 0 | 0 | 180,000 | 0 | 0 | **180,000** |
| Unidentified Funding | 0 | 15,350,000 | 14,030,000 | 5,425,000 | 22,300,000 | **57,105,000** |
| Traffic Impact Fees | 181,960 | 350,000 | 0 | 0 | 0 | **531,960** |
| Water Infrastructure Fund | 0 | 100,000 | 0 | 0 | 0 | **100,000** |
| TASP Impact Fees | 40,000 | 6,640,000 | 0 | 500,000 | 6,000,000 | **13,180,000** |
| Transient Occupancy Tax (TOT) | 600,000 | 600,000 | 600,000 | 600,000 | 600,000 | **3,000,000** |
| LLMD | 75,000 | 75,000 | 88,000 | 75,000 | 75,000 | **388,000** |
| Vehicle Registration Fee | 450,000 | 450,000 | 500,000 | 500,000 | 500,000 | **2,400,000** |
| **Total** | **22,421,960** | **40,130,000** | **38,008,000** | **21,730,000** | **44,895,000** | **167,184,960** |

**NOTES**

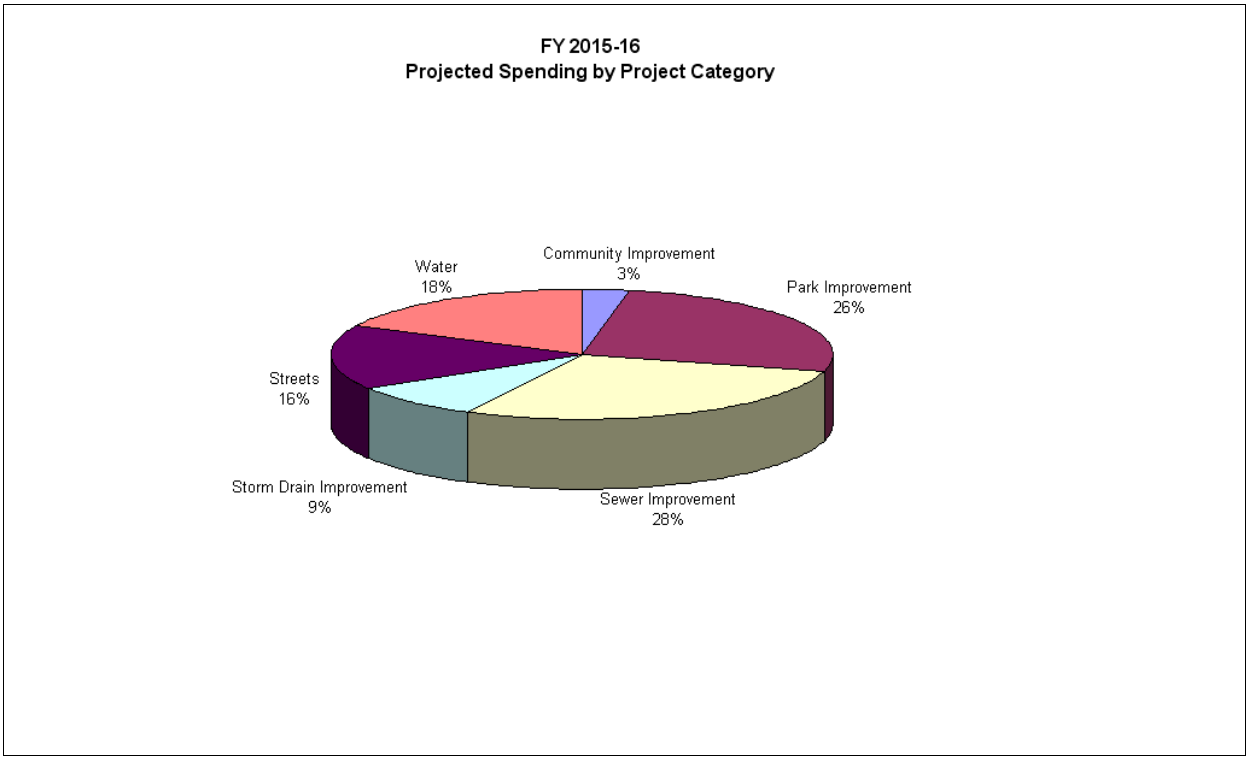
(a) This year's CIP includes $5.0M for the City's portion of improvements to the SJ/SC wastewater treatment plant.

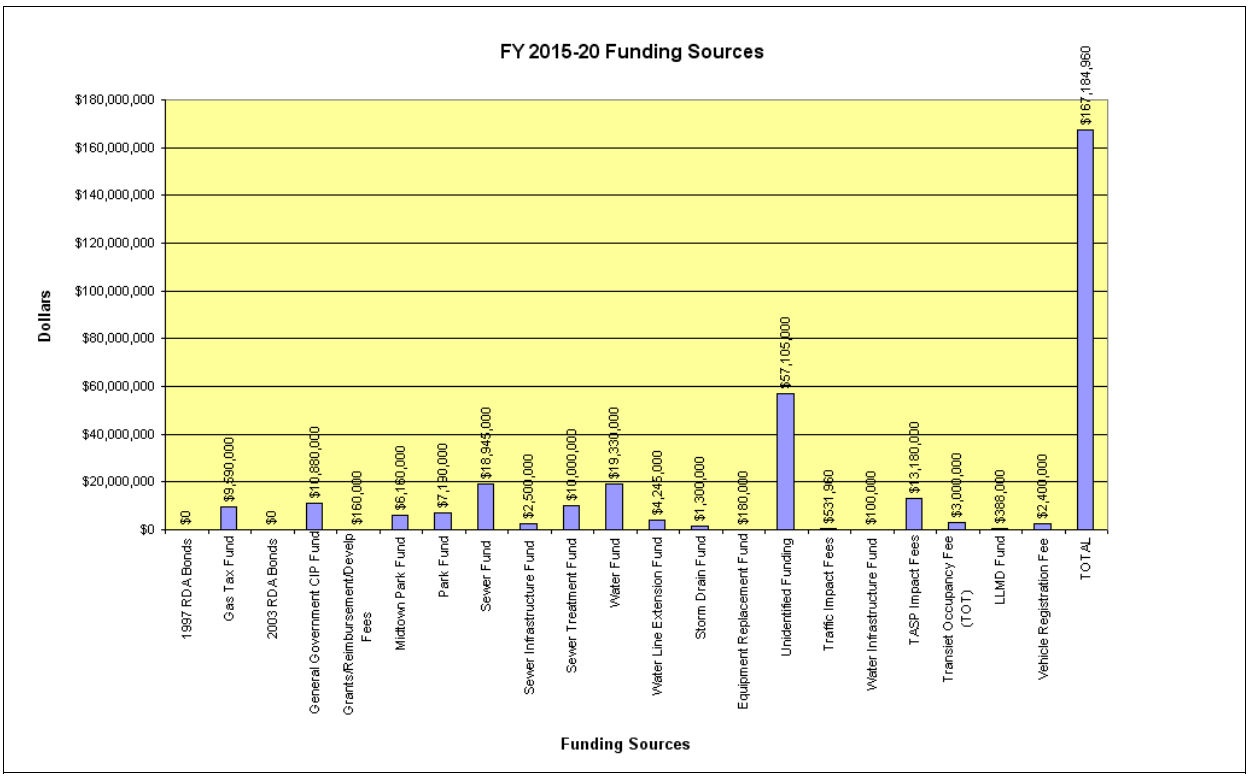
(b) "Other" are identified on the detailed project sheets.

(c) Grants are identified on the detailed project sheets.

(d) $3.996M of RDA bonds were appropriated for the reconstruction of S. Main Street CIP 4277 on 1/6/15.

# City of Milpitas
# 2015-20 CAPITAL IMPROVEMENT PROGRAM



# City of Milpitas
# 2015 - 2020 CAPITAL IMPROVEMENT PROGRAM

## FY 2014-15 and FY 2015-16 COMPARISON

| PG. NO. | PROJECT | | 2014-15 | | 2015-16 |
|---|---|---|---|---|---|
| 10 | 3406 | City Building Improvements | 250,000 | | 250,000 |
| 13 | New | City Buildings, Exterior Painting & Repairs | | | 100,000 |
| 18 | New | PD Communications | | | 335,000 |
| 29 | 5055 | Alviso Adobe Renovation | | | 1,000,000 |
| 33 | New | International Park | | | 500,000 |
| 34 | New | MSC Pool Rehabilitation | | | 1,500,000 |
| 40 | New | Sports Center Sports Fields | | | 2,875,000 |
| 51 | 3402 | McCarthy Blvd. Landscape & Lighting Improvements | 45,000 | | 75,000 |
| 52 | 3411 | Sinclair LMD Improvements | 13,000 | | |
| 53 | 4253 | Dixon Landing Road Plan Line | | | 31,960 |
| 55 | 4267 | Soundwall Renovation | 300,000 | | 200,000 |
| 56 | 4271 | Bridge Improvements | | | 200,000 |
| 57 | 4273 | Street Landscape Irrigation Repair 2014 | | | 150,000 |
| 58 | New | Milpitas Boulevard Plan Line Study | | | 150,000 |
| 59 | New | Minor Traffic Improvements 2016 | | | 100,000 |
| 64 | New | Street Resurfacing Project 2016 | | | 2,650,000 |
| 69 | New | TASP Underground Utility District | | | 40,000 |
| 83 | 7100 | Water System Seismic Improvements | (2,000,000) | | 1,000,000 |
| 85 | 7118 | Dempsey Road Water Line Replacement | 2,575,000 | * 1 | 1,000,000 |
| 86 | 7121 | Automated Water Meter Replacement | 1,295,000 | | |
| 87 | New | BART Project - Water Improvements | | | 2,000,000 |
| 107 | 6116 | Sewer System Replacement 12-13 | 250,000 | | 800,000 |
| 108 | 6118 | San Jose/Santa Clara Regional Waste Water Facility | 6,500,000 | | 5,000,000 |
| 109 | 6119 | CCTV Sanitary Sewer | 165,000 | | 165,000 |
| 110 | New | BART Project - Sewer Improvements | | | 350,000 |
| 128 | 3709 | Dempsey Road Storm Drain Replacement | 400,000 | | 1,600,000 |
| 129 | 3710 | Penitencia Pump Station Improvements | 250,000 | | |
| 131 | New | BART Project - Storm Improvements | | | 250,000 |
| 135 | New | Minor Storm Drain Projects 2016 | | | 100,000 |
| 147 | 2005 | Lower Penitencia Creek Pedestrian Bridge | 650,000 | * | |
| 150 | 3408 | MSC Facility Improvements | 600,000 | | |
| 153 | 3413 | 2015 Finance System Upgrade | 170,000 | | |
| 156 | 3706 | Minor Storm Drain Projects 2011-12 | 110,000 | | |
| 166 | 4270 | 2014 Road Rehabilitation | 115,920 | * | |
| 169 | 4275 | Street Resurfacing Project 2015 | 4,250,000 | | |
| 170 | 4276 | Electrical Vehicle Charging Stations | 40,200 | | |
| 171 | 4277 | Main Street Pavement Reconstruction | 3,996,000 | * | |
| 179 | 5097 | Higuera Adobe Park Picnic and Playground Renovation | 1,700,000 | | |
| 180 | 5098 | Park Irrigation System Repair & Improvement | 150,000 | | |
| 181 | 5099 | Park Renovation Project 2015 | 300,000 | | |
| 182 | 5100 | Sports Center Skate Park & Fields Feasibility Study | 100,000 | | |
| 183 | 5102 | McCandless Park | 300,000 | * | |
| 189 | 6115 | Sewer System Replacement 11-12 | 250,000 | | |
| 190 | 6117 | TASP Sewer Line Replacement | (2,500,000) | | |
| 191 | 6120 | Minor Sewer Projects 2015 | 350,000 | | |
| 203 | 7119 | Sunnyhills Turnout Pressure Reducing Valve | 500,000 | | |
| 205 | 7122 | Daniel Court Water Service Replacement | 525,000 | | |
| 206 | 7123 | Minor Water Projects 2015 | 105,000 | | |
| 207 | 7124 | Water System Air Relief Modifications 2015 | 350,000 | | |
| N/A | 2003 | TASP Recycled Water Line Extension | (1,000,000) | | |
| | | **TOTAL COST** | **21,105,120** | | **22,421,960** |

**NOTES**

* Midyear budget appropriation

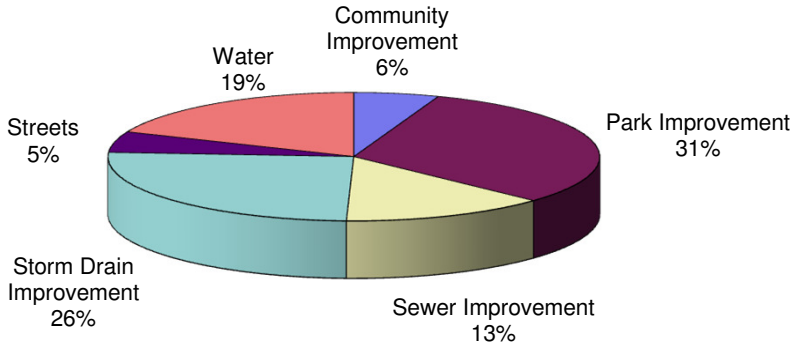
1 Budget appropriation of $575K

# City of Milpitas
# 2015 - 2020 CAPITAL IMPROVEMENT PROGRAM

## FY 2015-2020
## Unidentified Funding Summary

| PROJECT CATEGORIES | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL |
|---|---|---|---|---|---|---|
| Community Improvement | | 2,200,000 | 1,000,000 | | | 3,200,000 |
| Park Improvement | | | | | 17,925,000 | 17,925,000 |
| Streets | | 1,950,000 | 1,900,000 | 1,900,000 | 1,950,000 | 7,700,000 |
| Water | | 7,500,000 | 6,100,000 | 1,000,000 | | 14,600,000 |
| Sewer Improvement | | 2,000,000 | 500,000 | 500,000 | | 3,000,000 |
| Storm Drain Improvement | | 1,700,000 | 4,530,000 | 2,025,000 | 2,425,000 | 10,680,000 |
| **TOTAL** | 0 | 15,350,000 | 14,030,000 | 5,425,000 | 22,300,000 | 57,105,000 |

## FY 2015-20
## Unidentified Funding by Project Category



# City of Milpitas
# 2015 - 2020 CAPITAL IMPROVEMENT PROGRAM

## COMMUNITY IMPROVEMENT PROJECTS SUMMARY

### PROJECTS THAT HAVE IDENTIFIED FUNDING SOURCES

| PG. NO. | PROJECT | | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL COST |
|---|---|---|---|---|---|---|---|---|
| 10 | 3406 | City Building Improvements | 250,000 | 500,000 | 500,000 | | | 1,250,000 |
| 11 | New | 2018 Finance System Upgrade | | | 180,000 | | | 180,000 |
| 12 | New | City Building ADA Compliance Review | | | 50,000 | | | 50,000 |
| 13 | New | City Buildings, Exterior Painting & Repairs | 100,000 | 600,000 | | | | 700,000 |
| 14 | New | City Buildings, Roofing | | | | | 150,000 | 150,000 |
| 15 | New | City Hall Pond & Water Feature Rehabilitation | | | | | 225,000 | 225,000 |
| 16 | New | City Parking Lot Improvements | | | 600,000 | | | 600,000 |
| 17 | New | MSC Master Plan Update | | | | 150,000 | | 150,000 |
| 18 | New | PD Communications | 335,000 | 335,000 | 3,785,000 | | | 4,455,000 |
| | | **TOTAL COST** | **685,000** | **1,435,000** | **5,115,000** | **150,000** | **375,000** | **7,760,000** |

### PROJECTS THAT HAVE UNIDENTIFIED FUNDING SOURCES

| PG. NO. | PROJECT | | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL COST |
|---|---|---|---|---|---|---|---|---|
| 9 | 3403 | Fire Station Improvements | | 1,500,000 | 1,000,000 | | | 2,500,000 |
| 19 | New | Police Records Management System | | 700,000 | | | | 700,000 |
| | | **TOTAL COST** | **0** | **2,200,000** | **1,000,000** | **0** | **0** | **3,200,000** |
| **TOTAL COMMUNITY IMPROVEMENT NEEDS** | | | **685,000** | **3,635,000** | **6,115,000** | **150,000** | **375,000** | **10,960,000** |

# City of Milpitas
# 2015 - 2020 CAPITAL IMPROVEMENT PROGRAM

## PARK IMPROVEMENT PROJECTS SUMMARY

### PROJECTS THAT HAVE IDENTIFIED FUNDING SOURCES

| PG. NO. | PROJECT | | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL COST |
|---|---|---|---|---|---|---|---|---|
| 29 | 5055 | Alviso Adobe Renovation | 1,000,000 | | | | | 1,000,000 |
| 30 | New | Berryessa Creek Trail, Reach 4, 5, 6A | | | | | 3,500,000 | 3,500,000 |
| 32 | New | Creighton Park Renovation Design & Constr | | 300,000 | 1,100,000 | | | 1,400,000 |
| 33 | New | International Park | 500,000 | | | | | 500,000 |
| 34 | New | MSC Pool Rehabilitation | 1,500,000 | | | | | 1,500,000 |
| 36 | New | Park Access Improvement and Resurfacing | | 600,000 | | | | 600,000 |
| 37 | New | Sandalwood Park Renovation | | | 275,000 | 1,000,000 | | 1,275,000 |
| 38 | New | Sinnott Park Renovation | | | | 250,000 | 900,000 | 1,150,000 |
| 39 | New | Sports Center Skate Park | | | 1,650,000 | | | 1,650,000 |
| 40 | New | Sports Center Sports Fields | 2,875,000 | | | | | 2,875,000 |
| 41 | New | Starlite Park Renovation | | | | 300,000 | 1,100,000 | 1,400,000 |
| | | **TOTAL COST** | **5,875,000** | **900,000** | **3,025,000** | **1,550,000** | **5,500,000** | **16,850,000** |

### PROJECTS THAT HAVE UNIDENTIFIED FUNDING SOURCES

| PG. NO. | PROJECT | | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL COST |
|---|---|---|---|---|---|---|---|---|
| 30 | New | Berryessa Creek Trail, Reach 4, 5, 6A | | | | | 3,950,000 | 3,950,000 |
| 31 | New | Cardoza Park Improvements Phase II | | | | | 8,600,000 | 8,600,000 |
| 35 | New | Murphy Park Picnic and Playground Renova | | | | | 3,750,000 | 3,750,000 |
| 42 | New | Strickroth Park Renovation | | | | | 1,625,000 | 1,625,000 |
| | | **TOTAL COST** | **0** | **0** | **0** | **0** | **17,925,000** | **17,925,000** |
| **TOTAL PARK IMPROVEMENT NEEDS** | | | **5,875,000** | **900,000** | **3,025,000** | **1,550,000** | **23,425,000** | **34,775,000** |

# City of Milpitas
# 2015 - 2020 CAPITAL IMPROVEMENT PROGRAM

## STREET IMPROVEMENT PROJECTS SUMMARY

### PROJECTS THAT HAVE IDENTIFIED FUNDING SOURCES

| PG. NO. | PROJECT | | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL COST |
|---|---|---|---|---|---|---|---|---|
| 51 | 3402 | McCarthy Blvd. Landscape & Lighting Improve | 75,000 | 75,000 | 75,000 | 75,000 | 75,000 | 375,000 |
| 52 | 3411 | Sinclair LMD Improvements | | | 13,000 | | | 13,000 |
| 53 | 4253 | Dixon Landing Road Plan Line | 31,960 | | | | | 31,960 |
| 54 | 4266 | Street Light Improvements | | | | 250,000 | | 250,000 |
| 55 | 4267 | Soundwall Renovation | 200,000 | 300,000 | | 100,000 | 150,000 | 750,000 |
| 56 | 4271 | Bridge Improvements | 200,000 | 50,000 | 300,000 | | 150,000 | 700,000 |
| 57 | 4273 | Street Landscape Irrigation Repair 2014 | 150,000 | | | | | 150,000 |
| 58 | New | Milpitas Boulevard Plan Line Study | 150,000 | | | | | 150,000 |
| 59 | New | Minor Traffic Improvements 2016 | 100,000 | 100,000 | | | | 200,000 |
| 60 | New | Minor Traffic Improvements 2018 | | | 100,000 | 100,000 | | 200,000 |
| 61 | New | Minor Traffic Improvements 2020 | | | | | 100,000 | 100,000 |
| 62 | New | S. Milpitas Blvd Bike/Ped. Improvements | | | | 200,000 | | 200,000 |
| 63 | New | Street Landscape Irrigation Repair 2017 | | 150,000 | 200,000 | 50,000 | | 400,000 |
| 64 | New | Street Resurfacing Project 2016 | 2,650,000 | | | | | 2,650,000 |
| 65 | New | Street Resurfacing Project 2017 | | 2,550,000 | | | | 2,550,000 |
| 66 | New | Street Resurfacing Project 2018 | | | 2,600,000 | | | 2,600,000 |
| 67 | New | Street Resurfacing Project 2019 | | | | 2,600,000 | | 2,600,000 |
| 68 | New | Street Resurfacing Project 2020 | | | | | 2,600,000 | 2,600,000 |
| 69 | New | TASP Underground Utility District | 40,000 | 40,000 | | | | 80,000 |
| 70 | New | Traffic Management Enhacements 2020 | | | | | 200,000 | 200,000 |
| 71 | New | Traffic Signal Installation | | 350,000 | | | | 350,000 |
| | | **TOTAL COST** | **3,596,960** | **3,615,000** | **3,288,000** | **3,375,000** | **3,275,000** | **17,149,960** |

### PROJECTS THAT HAVE UNIDENTIFIED FUNDING SOURCES

| PG. NO. | PROJECT | | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL COST |
|---|---|---|---|---|---|---|---|---|
| 65 | New | Street Resurfacing Project 2017 | | 1,950,000 | | | | 1,950,000 |
| 66 | New | Street Resurfacing Project 2018 | | | 1,900,000 | | | 1,900,000 |
| 67 | New | Street Resurfacing Project 2019 | | | | 1,900,000 | | 1,900,000 |
| 68 | New | Street Resurfacing Project 2020 | | | | | 1,900,000 | 1,900,000 |
| 72 | New | Utility Undergrounding 2020 | | | | | 50,000 | 50,000 |
| | | **TOTAL COST** | **0** | **1,950,000** | **1,900,000** | **1,900,000** | **1,950,000** | **7,700,000** |
| **TOTAL STREET IMPROVEMENT NEEDS** | | | **3,596,960** | **5,565,000** | **5,188,000** | **5,275,000** | **5,225,000** | **24,849,960** |

# City of Milpitas
# 2015 - 2020 CAPITAL IMPROVEMENT PROGRAM

## WATER IMPROVEMENT PROJECTS SUMMARY

### PROJECTS THAT HAVE IDENTIFIED FUNDING SOURCES

| PG. NO. | PROJECT | | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL COST |
|---|---|---|---|---|---|---|---|---|
| 81 | 2002 | Second SCVWD Water Reservoir and Pump | | 6,500,000 | | | | 6,500,000 |
| 82 | 7076 | Well Upgrade Project | | 800,000 | | | | 800,000 |
| 83 | 7100 | Water System Seismic Improvements | 1,000,000 | 1,000,000 | | 1,000,000 | | 3,000,000 |
| 84 | 7110 | Hydrant Replacement | | 70,000 | | | | 70,000 |
| 85 | 7118 | Dempsey Road Water Line Replacement | 1,000,000 | 0 | | | | 1,000,000 |
| 86 | 7121 | Automated Water Meter Replacement | | 1,295,000 | 1,295,000 | 1,295,000 | 1,295,000 | 5,180,000 |
| 87 | New | BART Project - Water Improvements | 2,000,000 | | | | | 2,000,000 |
| 88 | New | Construction Water | | | 375,000 | | | 375,000 |
| 89 | New | Hillside Pump Station Equip. Replacement | | | 150,000 | | | 150,000 |
| 90 | New | Los Coches Backbone | | 850,000 | 3,350,000 | | | 4,200,000 |
| 91 | New | Minor Water Projects 2017 | | 100,000 | 100,000 | | | 200,000 |
| 93 | New | SCVWD Second Water Supply Turnout | | 100,000 | | 500,000 | 2,500,000 | 3,100,000 |
| 94 | New | Supervisory Control and Data Acquisition | | | 350,000 | 1,000,000 | 4,650,000 | 6,000,000 |
| 95 | New | Water O&M Database Management | | 100,000 | | | | 100,000 |
| 97 | New | Water System Replacement Study | | | 100,000 | | | 100,000 |
| | | **TOTAL COST** | **4,000,000** | **10,815,000** | **5,720,000** | **3,795,000** | **8,445,000** | **32,775,000** |

### PROJECTS THAT HAVE UNIDENTIFIED FUNDING SOURCES

| PG. NO. | PROJECT | | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL COST |
|---|---|---|---|---|---|---|---|---|
| 85 | 7118 | Dempsey Road Water Line Replacement | | 6,500,000 | | | | 6,500,000 |
| 92 | New | Recycled Water Line Extension | | 1,000,000 | 5,500,000 | | | 6,500,000 |
| 96 | New | Water System Replacement 18-19 | | | | 1,000,000 | | 1,000,000 |
| 98 | New | Water Valve Replacement | | | 600,000 | | | 600,000 |
| | | **TOTAL COST** | **0** | **7,500,000** | **6,100,000** | **1,000,000** | **0** | **14,600,000** |
| **TOTAL WATER IMPROVEMENT NEEDS** | | | **4,000,000** | **18,315,000** | **11,820,000** | **4,795,000** | **8,445,000** | **47,375,000** |

# City of Milpitas
# 2015 - 2020 CAPITAL IMPROVEMENT PROGRAM

## SEWER IMPROVEMENT PROJECTS SUMMARY

### PROJECTS THAT HAVE IDENTIFIED FUNDING SOURCES

| PG. NO. | PROJECT | | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL COST |
|---|---|---|---|---|---|---|---|---|
| 107 | 6116 | Sewer System Replacement 12-13 | 800,000 | | | | | 800,000 |
| 108 | 6118 | San Jose/Santa Clara Regional Waste Water I | 5,000,000 | 6,200,000 | 5,000,000 | 5,000,000 | 5,000,000 | 26,200,000 |
| 109 | 6119 | CCTV Sanitary Sewer | 165,000 | 165,000 | 165,000 | 165,000 | | 660,000 |
| 110 | New | BART Project - Sewer Improvements | 350,000 | | | | | 350,000 |
| 111 | New | Minor Sewer Projects 2018 | | | 50,000 | | | 50,000 |
| 112 | New | Sanitary Sewer Overflow Improvements | | | 100,000 | | | 100,000 |
| 113 | New | Sewer Main Replacement Study 2018 | | | 115,000 | | | 115,000 |
| 114 | New | Sewer System Replacement 16-17 | | 500,000 | | | | 500,000 |
| 115 | New | Sewer System Replacement 17-18 | | | 500,000 | | | 500,000 |
| 116 | New | Sewer System Replacement 18-19 | | | | 500,000 | | 500,000 |
| 117 | New | Supervisory Control & Data Acquisition | | | 250,000 | 870,000 | | 1,120,000 |
| 118 | New | Venus Pump Station Rehabilitation | | | 50,000 | | | 50,000 |
| | | **TOTAL COST** | **6,315,000** | **6,865,000** | **6,230,000** | **6,535,000** | **5,000,000** | **30,945,000** |

### PROJECTS THAT HAVE UNIDENTIFIED FUNDING SOURCES

| PG. NO. | PROJECT | | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL COST |
|---|---|---|---|---|---|---|---|---|
| 114 | New | Sewer System Replacement 16-17 | | 2,000,000 | | | | 2,000,000 |
| 115 | New | Sewer System Replacement 17-18 | | | 500,000 | | | 500,000 |
| 116 | New | Sewer System Replacement 18-19 | | | | 500,000 | | 500,000 |
| | | **TOTAL COST** | **0** | **2,000,000** | **500,000** | **500,000** | **0** | **3,000,000** |
| **TOTAL SEWER IMPROVEMENT NEEDS** | | | **6,315,000** | **8,865,000** | **6,730,000** | **7,035,000** | **5,000,000** | **33,945,000** |

# City of Milpitas
# 2015 - 2020 CAPITAL IMPROVEMENT PROGRAM

## STORM DRAIN IMPROVEMENT PROJECTS SUMMARY

### PROJECTS THAT HAVE IDENTIFIED FUNDING SOURCES

| PG. NO. | PROJECT | | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL COST |
|---|---|---|---|---|---|---|---|---|
| 127 | 3700 | Storm Drain System Deficiency Program | | 800,000 | | | | 800,000 |
| 128 | 3709 | Dempsey Road Storm Drain Replacement | 1,600,000 | | | | | 1,600,000 |
| 129 | 3710 | Penitencia Pump Station Improvements | | | 600,000 | 900,000 | | 1,500,000 |
| 131 | New | BART Project - Storm Improvements | 250,000 | | | | | 250,000 |
| 135 | New | Minor Storm Drain Projects 2016 | 100,000 | | | | | 100,000 |
| 141 | New | Trash Removal Devices | | 350,000 | | | | 350,000 |
| | | **TOTAL COST** | **1,950,000** | **1,150,000** | **600,000** | **900,000** | **0** | **4,600,000** |

### PROJECTS THAT HAVE UNIDENTIFIED FUNDING SOURCES

| PG. NO. | PROJECT | | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | TOTAL COST |
|---|---|---|---|---|---|---|---|---|
| 127 | 3700 | Storm Drain System Deficiency Program | | | 1,500,000 | | | 1,500,000 |
| 129 | 3710 | Penitencia Pump Station Improvements | | | | 1,500,000 | | 1,500,000 |
| 130 | New | Abbott Pump Station Controls Replacement | | | | 125,000 | 150,000 | 275,000 |
| 132 | New | California Circle Pump Station | | 1,700,000 | | | | 1,700,000 |
| 133 | New | Channel and Lagoon Dredging | | | 1,500,000 | | | 1,500,000 |
| 134 | New | Flap Gate Replacement | | | 125,000 | 125,000 | | 250,000 |
| 135 | New | Minor Storm Drain Projects 2016 | | | 100,000 | | | 100,000 |
| 137 | New | Oak Creek Pump Station Upgrade | | | | 275,000 | 1,900,000 | 2,175,000 |
| 138 | New | Spence Pump Station Improvements | | | 145,000 | | | 145,000 |
| 139 | New | Storm Drain Supervisory Control and Data A | | | | | 375,000 | 375,000 |
| 140 | New | Storm Drain System Improvements 2018 | | | 1,160,000 | | | 1,160,000 |
| | | **TOTAL COST** | **0** | **1,700,000** | **4,530,000** | **2,025,000** | **2,425,000** | **10,680,000** |
| **TOTAL STORM DRAIN IMPROVEMENT NEEDS** | | | **1,950,000** | **2,850,000** | **5,130,000** | **2,925,000** | **2,425,000** | **15,280,000** |

# City of Milpitas

## 2015-20 CAPITAL IMPROVEMENT PROGRAM

### COMMUNITY IMPROVEMENT PROJECTS SUMMARY

**SUMMARY OF COSTS**

| PG. NO. | PROJECT | | TOTAL COST | PRIOR YEARS | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 |
|---|---|---|---|---|---|---|---|---|---|
| 9 | 3403 | Fire Station Improvements | 4,000,000 | 1,500,000 | 0 | 1,500,000 | 1,000,000 | 0 | 0 |
| 10 | 3406 | City Building Improvements | 2,200,000 | 950,000 | 250,000 | 500,000 | 500,000 | 0 | 0 |
| 11 | New | 2018 Finance System Upgrade | 180,000 | 0 | 0 | 0 | 180,000 | 0 | 0 |
| 12 | New | City Building ADA Compliance Review | 50,000 | 0 | 0 | 0 | 50,000 | 0 | 0 |
| 13 | New | City Buildings, Exterior Painting & Repairs | 700,000 | 0 | 100,000 | 600,000 | 0 | 0 | 0 |
| 14 | ***New*** | ***City Buildings, Roofing*** | ***150,000*** | ***0*** | ***0*** | ***0*** | ***0*** | ***0*** | ***150,000*** |
| 15 | New | City Hall Pond & Water Feature Rehabilitation | 225,000 | 0 | 0 | 0 | 0 | 0 | 225,000 |
| 16 | New | City Parking Lot Improvements | 600,000 | 0 | 0 | 0 | 600,000 | 0 | 0 |
| 17 | New | MSC Master Plan Update | 150,000 | 0 | 0 | 0 | 0 | 150,000 | 0 |
| 18 | ***New*** | ***PD Communications*** | ***4,455,000*** | ***0*** | ***335,000*** | ***335,000*** | ***3,785,000*** | ***0*** | ***0*** |
| 19 | New | Police Records Management System | 700,000 | 0 | 0 | 700,000 | 0 | 0 | 0 |
| | | **Defunding Subtotal** | | | | | | | |
| | | **Funding Subtotal** | | | **685,000** | | | | |
| | | **TOTAL COST** | **$13,410,000** | **$2,450,000** | **$685,000** | **$3,635,000** | **$6,115,000** | **$150,000** | **$375,000** |

**SUMMARY OF AVAILABLE FINANCING**

| | | | | | |
|---|---|---|---|---|---|
| **Equipment Replacement Fund** | 0 | 0 | 180,000 | 0 | 0 |
| **General Government CIP Fund** | 685,000 | 1,435,000 | 4,935,000 | 150,000 | 375,000 |
| **Unidentified Funding** | 0 | 2,200,000 | 1,000,000 | 0 | 0 |
| ***TOTAL AVAILABLE*** | **$685,000** | **$3,635,000** | **$6,115,000** | **$150,000** | **$375,000** |

**NOTES**

(a) New projects listed in Bold Italics.

# City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

**SUMMARY OF PROJECT FUNDING SOURCES**

### Community Improvement

| PG | PROJECT | | 2015-16 | | | |
|---|---|---|---|---|---|---|
| | | | General Government CIP Fund | Equipment Replacement Fund | Other | Unidentified Funding |
| 9 | 3403 | Fire Station Improvements | 0 | 0 | 0 | 0 |
| 10 | 3406 | City Building Improvements | 250,000 | 0 | 0 | 0 |
| 11 | New | 2018 Finance System Upgrade | 0 | 0 | 0 | 0 |
| 12 | New | City Building ADA Compliance Review | 0 | 0 | 0 | 0 |
| 13 | New | City Buildings, Exterior Painting & Repairs | 100,000 | 0 | 0 | 0 |
| 14 | ***New*** | ***City Buildings, Roofing*** | ***0*** | ***0*** | ***0*** | ***0*** |
| 15 | New | City Hall Pond & Water Feature Rehabilitation | 0 | 0 | 0 | 0 |
| 16 | New | City Parking Lot Improvements | 0 | 0 | 0 | 0 |
| 17 | New | MSC Master Plan Update | 0 | 0 | 0 | 0 |
| 18 | ***New*** | ***PD Communications*** | ***335,000*** | ***0*** | ***0*** | ***0*** |
| 19 | New | Police Records Management System | 0 | 0 | 0 | 0 |
| | | **Total Defunding by Funding Source** | **(0)** | **(0)** | **(0)** | **(0)** |
| | | **Total Funding by Funding Source** | **685,000** | **0** | **0** | **0** |
| | | **Subtotal by Funding Source** | **685,000** | **0** | **0** | **0** |
| | | **Subtotal by Year** | **685,000** | | | |

**NOTES**

(a) New projects listed in Bold Italics.

(b) "Other" are identified on detailed project sheets.

# City of Milpitas

## 2015-20 CAPITAL IMPROVEMENT PROGRAM

**SUMMARY OF PROJECT FUNDING SOURCES**

### Community Improvement

| PG | PROJECT | | 2016-17 | | | |
|---|---|---|---|---|---|---|
| | | | General Government CIP Fund | Equipment Replacement Fund | Other | Unidentified Funding |
| 9 | 3403 | Fire Station Improvements | 0 | 0 | 0 | 1,500,000 |
| 10 | 3406 | City Building Improvements | 500,000 | 0 | 0 | 0 |
| 11 | New | 2018 Finance System Upgrade | 0 | 0 | 0 | 0 |
| 12 | New | City Building ADA Compliance Review | 0 | 0 | 0 | 0 |
| 13 | New | City Buildings, Exterior Painting & Repairs | 600,000 | 0 | 0 | 0 |
| 14 | ***New*** | ***City Buildings, Roofing*** | ***0*** | ***0*** | ***0*** | ***0*** |
| 15 | New | City Hall Pond & Water Feature Rehabilitation | 0 | 0 | 0 | 0 |
| 16 | New | City Parking Lot Improvements | 0 | 0 | 0 | 0 |
| 17 | New | MSC Master Plan Update | 0 | 0 | 0 | 0 |
| 18 | ***New*** | ***PD Communications*** | ***335,000*** | ***0*** | ***0*** | ***0*** |
| 19 | New | Police Records Management System | 0 | 0 | 0 | 700,000 |
| | | **Total Defunding by Funding Source** | **0** | **0** | **0** | **0** |
| | | **Total Funding by Funding Source** | **1,435,000** | **0** | **0** | **2,200,000** |
| | | **Subtotal by Funding Source** | **1,435,000** | **0** | **0** | **2,200,000** |
| | | **Subtotal by Year** | **3,635,000** | | | |

**NOTES**

(a) New projects listed in Bold Italics.

(b) "Other" are identified on detailed project sheets.

# City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

**SUMMARY OF PROJECT FUNDING SOURCES**

### Community Improvement

| PG | PROJECT | | 2017-18 | | | |
|---|---|---|---|---|---|---|
| | | | General Government CIP Fund | Equipment Replacement Fund | Other | Unidentified Funding |
| 9 | 3403 | Fire Station Improvements | 0 | 0 | 0 | 1,000,000 |
| 10 | 3406 | City Building Improvements | 500,000 | 0 | 0 | 0 |
| 11 | New | 2018 Finance System Upgrade | 0 | 180,000 | 0 | 0 |
| 12 | New | City Building ADA Compliance Review | 50,000 | 0 | 0 | 0 |
| 13 | New | City Buildings, Exterior Painting & Repairs | 0 | 0 | 0 | 0 |
| 14 | ***New*** | ***City Buildings, Roofing*** | ***0*** | ***0*** | ***0*** | ***0*** |
| 15 | New | City Hall Pond & Water Feature Rehabilitation | 0 | 0 | 0 | 0 |
| 16 | New | City Parking Lot Improvements | 600,000 | 0 | 0 | 0 |
| 17 | New | MSC Master Plan Update | 0 | 0 | 0 | 0 |
| 18 | ***New*** | ***PD Communications*** | ***3,785,000*** | ***0*** | ***0*** | ***0*** |
| 19 | New | Police Records Management System | 0 | 0 | 0 | 0 |
| | | **Total Defunding by Funding Source** | **0** | **0** | **0** | **0** |
| | | **Total Funding by Funding Source** | **4,935,000** | **180,000** | **0** | **1,000,000** |
| | | **Subtotal by Funding Source** | **4,935,000** | **180,000** | **0** | **1,000,000** |
| | | **Subtotal by Year** | **6,115,000** | | | |

**NOTES**

(a) New projects listed in Bold Italics.

(b) "Other" are identified on detailed project sheets.

# City of Milpitas

## 2015-20 CAPITAL IMPROVEMENT PROGRAM

**SUMMARY OF PROJECT FUNDING SOURCES**

### Community Improvement

| PG | PROJECT | | 2018-19 | | | |
|---|---|---|---|---|---|---|
| | | | General Government CIP Fund | Equipment Replacement Fund | Other | Unidentified Funding |
| 9 | 3403 | Fire Station Improvements | 0 | 0 | 0 | 0 |
| 10 | 3406 | City Building Improvements | 0 | 0 | 0 | 0 |
| 11 | New | 2018 Finance System Upgrade | 0 | 0 | 0 | 0 |
| 12 | New | City Building ADA Compliance Review | 0 | 0 | 0 | 0 |
| 13 | New | City Buildings, Exterior Painting & Repairs | 0 | 0 | 0 | 0 |
| 14 | ***New*** | ***City Buildings, Roofing*** | ***0*** | ***0*** | ***0*** | ***0*** |
| 15 | New | City Hall Pond & Water Feature Rehabilitation | 0 | 0 | 0 | 0 |
| 16 | New | City Parking Lot Improvements | 0 | 0 | 0 | 0 |
| 17 | New | MSC Master Plan Update | 150,000 | 0 | 0 | 0 |
| 18 | ***New*** | ***PD Communications*** | ***0*** | ***0*** | ***0*** | ***0*** |
| 19 | New | Police Records Management System | 0 | 0 | 0 | 0 |
| | | **Total Defunding by Funding Source** | **0** | **0** | **0** | **0** |
| | | **Total Funding by Funding Source** | **150,000** | **0** | **0** | **0** |
| | | **Subtotal by Funding Source** | **150,000** | **0** | **0** | **0** |
| | | **Subtotal by Year** | **150,000** | | | |

**NOTES**

(a) New projects listed in Bold Italics.

(b) "Other" are identified on detailed project sheets.

# City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

**SUMMARY OF PROJECT FUNDING SOURCES**

### Community Improvement

| PG | PROJECT | | 2019-20 General Government CIP Fund | 2019-20 Equipment Replacement Fund | 2019-20 Other | 2019-20 Unidentified Funding |
|---|---|---|---|---|---|---|
| 9 | 3403 | Fire Station Improvements | 0 | 0 | 0 | 0 |
| 10 | 3406 | City Building Improvements | 0 | 0 | 0 | 0 |
| 11 | New | 2018 Finance System Upgrade | 0 | 0 | 0 | 0 |
| 12 | New | City Building ADA Compliance Review | 0 | 0 | 0 | 0 |
| 13 | New | City Buildings, Exterior Painting & Repairs | 0 | 0 | 0 | 0 |
| 14 | ***New*** | ***City Buildings, Roofing*** | ***150,000*** | ***0*** | ***0*** | ***0*** |
| 15 | New | City Hall Pond & Water Feature Rehabilitation | 225,000 | 0 | 0 | 0 |
| 16 | New | City Parking Lot Improvements | 0 | 0 | 0 | 0 |
| 17 | New | MSC Master Plan Update | 0 | 0 | 0 | 0 |
| 18 | ***New*** | ***PD Communications*** | ***0*** | ***0*** | ***0*** | ***0*** |
| 19 | New | Police Records Management System | 0 | 0 | 0 | 0 |
| | | **Total Defunding by Funding Source** | **0** | **0** | **0** | **0** |
| | | **Total Funding by Funding Source** | **375,000** | **0** | **0** | **0** |
| | | **Subtotal by Funding Source** | **375,000** | **0** | **0** | **0** |
| | | **Subtotal by Year** | **375,000** | | | |

**NOTES**

(a) New projects listed in Bold Italics.

(b) "Other" are identified on detailed project sheets.

## City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Community Improvement | **3403** | **Fire Station Improvements** | 1 |

**CONTACT:** Michael Boitnott [3315]

**PRIORITY:** Rehabilitation of Existing Capital Assets or Systems

**DIAGRAM**

**DESCRIPTION**

This project provides various improvements at all four fire stations. The work involves renovation and/or replacement of electrical and mechanical systems, plumbing renovation, parking lots, emergency power generator systems, interior and exterior paintings, replacement of floor coverings, restroom and shower facilities, kitchen improvements, re-roofing and other building and site related improvements. Work will also include energy savings improvements. All work will be performed on a priority basis.

**COMMENTS:**

This project will also evaluate the need for replacement of station 2 & 3 or determine if the stations can be remodeling and modernized to meet the current codes and needs of the Fire Department. Fire Stations 2 & 3 are identical and were originally built back in the late 1960's.

**Uncommitted Balance as of 2/28/2015:** $1,053,789

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 100,000 | 0 | 125,000 | 90,000 | 0 | 0 | 315,000 |
| Administration | 75,000 | 0 | 25,000 | 110,000 | 0 | 0 | 210,000 |
| Inspection | 75,000 | 0 | 50,000 | 50,000 | 0 | 0 | 175,000 |
| Improvements | 1,250,000 | 0 | 1,300,000 | 750,000 | 0 | 0 | 3,300,000 |
| **Totals** | 1,500,000 | 0 | 1,500,000 | 1,000,000 | 0 | 0 | 4,000,000 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Transient Occupancy Tax (TOT) | 1,500,000 | 0 | 0 | 0 | 0 | 0 | 1,500,000 |
| Unidentified Funding | 0 | 0 | 1,500,000 | 1,000,000 | 0 | 0 | 2,500,000 |
| **Totals** | 1,500,000 | 0 | 1,500,000 | 1,000,000 | 0 | 0 | 4,000,000 |

**FINANCE NOTES**

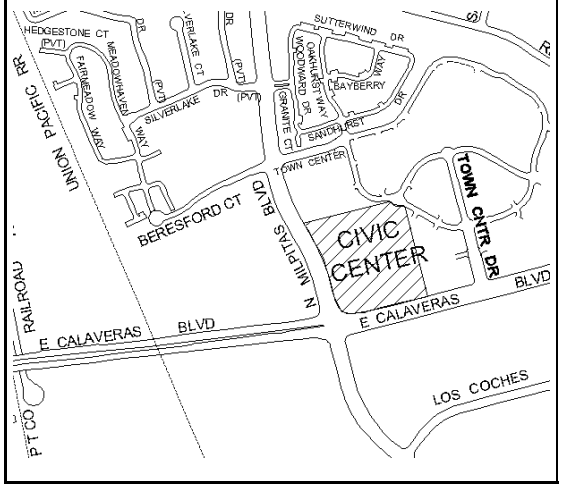
## City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Community Improvement | **3406** | **City Building Improvements** | 1 |

**CONTACT:** Michael Boitnott [3315]

**PRIORITY:** Rehabilitation of Existing Capital Assets or Systems

**DIAGRAM**




**DESCRIPTION**

This project involves renovation and rehabilitation improvements at all City buildings including Public Works/Police, Community Center, City Hall, and Sports Center. The work involves replacement of electrical and mechanical systems and pool equipment renovations at the Sports Center, electrical upgrades, including an emergency generator at the Sports Center. PW/PD and City Hall retrofit work, HVAC repairs, interior painting, carpeting and other related improvements. Work will also include energy savings improvements, such as replacement of lighting fixtures with energy saving fixtures, and installation of a more efficient climate controls systems.

**COMMENTS:**

This project will also include the replacement of the existing AV system at the Community Center Auditorium with a similar system, compatible with today's technology. Projects will be implemented based on a prioritized building renovation list, to assure a high level of service to the community and to maximize the life of the City Facilities. This project will also make improvements identified in the City Building ADA Compliance Study, starting with the highest priority projects, as funding is available.

**Uncommitted Balance as of 2/28/2015:** $332,547

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 90,000 | 0 | 30,000 | 40,000 | 0 | 0 | 160,000 |
| Administration | 45,000 | 0 | 10,000 | 25,000 | 0 | 0 | 80,000 |
| Inspection | 20,000 | 0 | 10,000 | 10,000 | 0 | 0 | 40,000 |
| Improvements | 395,000 | 250,000 | 100,000 | 425,000 | 0 | 0 | 1,170,000 |
| Equipment | 400,000 | 0 | 350,000 | 0 | 0 | 0 | 750,000 |
| **Totals** | 950,000 | 250,000 | 500,000 | 500,000 | 0 | 0 | 2,200,000 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Transient Occupancy Tax (TOT) | 150,000 | 0 | 0 | 0 | 0 | 0 | 150,000 |
| General Government CIP Fund | 800,000 | 250,000 | 500,000 | 500,000 | 0 | 0 | 2,050,000 |
| **Totals** | 950,000 | 250,000 | 500,000 | 500,000 | 0 | 0 | 2,200,000 |

**FINANCE NOTES**

City Council - 5/21/13 Midyear Budget Appropriation $100,000 from General Government CIP Fund

## City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Community Improvement | **New** | **2018 Finance System Upgrade** | 1 |

**CONTACT:** Jane Corpus [3125]

**PRIORITY:** Rehabilitation of Existing Capital Assets or Systems

**DESCRIPTION**

This project provides upgrades to keep our Financial system up to date. It is essential that the system be current in order to utilize technology efficiently and effectively. This major system includes General Ledger, Accounts Payable, Cash Collection, Payroll/Human Resources, Job Costing and Purchase Order. In addition, the Finance system also manages Budget Preparation, Business License, Investment Software and Fixed Asset systems.

**COMMENTS:**

The proposed funding is for the system required upgrades, equipment and staff training.

**Uncommitted Balance as of 2/28/2015:** $0

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Administration | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Surveying | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Inspection | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Land | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other | 0 | 0 | 0 | 180,000 | 0 | 0 | 180,000 |
| Building | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 0 | 0 | 0 | 180,000 | 0 | 0 | 180,000 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Equipment Replacement Fund | 0 | 0 | 0 | 180,000 | 0 | 0 | 180,000 |
| **Totals** | 0 | 0 | 0 | 180,000 | 0 | 0 | 180,000 |

**FINANCE NOTES**

## City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Community Improvement | **New** | **City Building ADA Compliance Review** | 1 |

**CONTACT:** Steve Erickson [3301]

**PRIORITY:** Studies and Analyses

**DESCRIPTION**

This project will provide for the review of all City Buildings constructed prior to 2000 to confirm compliance with access requirements in accordance with the Americans with Disabilities Act (ADA), and to identify any deficiencies and recommend improvements.

**COMMENTS:**

**Uncommitted Balance as of 2/28/2015:** $0

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 0 | 0 | 0 | 40,000 | 0 | 0 | 40,000 |
| Administration | 0 | 0 | 0 | 10,000 | 0 | 0 | 10,000 |
| **Totals** | 0 | 0 | 0 | 50,000 | 0 | 0 | 50,000 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| General Government CIP Fund | 0 | 0 | 0 | 50,000 | 0 | 0 | 50,000 |
| **Totals** | 0 | 0 | 0 | 50,000 | 0 | 0 | 50,000 |

**FINANCE NOTES**

## City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Community Improvement | **New** | **City Buildings, Exterior Painting & Repairs** | 1 |

**CONTACT:** Steve Erickson [3301]

**PRIORITY:** Rehabilitation of Existing Capital Assets or Systems

**DESCRIPTION**

This project provides for the minor exterior repairs, patching and painting of City buildings including minor roofing repairs. The exterior of the buildings should be painted approximately every ten years to maintain the buildings appearance and to prevent damage caused by moisture infiltration.

**COMMENTS:**

Exterior painting and replacement of rotted wood at the PD/PW Buildings and the Sports Center is a priority due to observed damage. The Sports Center roof needs attention due to age and leaks at several locations.

**Uncommitted Balance as of 2/28/2015:** $0

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 0 | 50,000 | 0 | 0 | 0 | 0 | 50,000 |
| Administration | 0 | 50,000 | 0 | 0 | 0 | 0 | 50,000 |
| Inspection | 0 | 0 | 30,000 | 0 | 0 | 0 | 30,000 |
| Improvements | 0 | 0 | 570,000 | 0 | 0 | 0 | 570,000 |
| **Totals** | 0 | 100,000 | 600,000 | 0 | 0 | 0 | 700,000 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| General Government CIP Fund | 0 | 100,000 | 600,000 | 0 | 0 | 0 | 700,000 |
| **Totals** | 0 | 100,000 | 600,000 | 0 | 0 | 0 | 700,000 |

**FINANCE NOTES**

## City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Community Improvement | **New** | **City Buildings, Roofing** | 1 |

**CONTACT:** Steve Erickson [3301]

**PRIORITY:** Rehabilitation of Existing Capital Assets or Systems

**DESCRIPTION**

This project provides for the roof replacement of the PD/PW Buildings and the portions of the Milpitas Sports Center. Typically, a roof has a 20-year life and to prevent damage caused by moisture infiltration these roofs will need to be replaced.

**COMMENTS:**

Construction costs are estimated at $850,000 and will be programed in 2020-21.

**Uncommitted Balance as of 2/28/2015:** $0

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 0 | 0 | 0 | 0 | 0 | 75,000 | 75,000 |
| Administration | 0 | 0 | 0 | 0 | 0 | 75,000 | 75,000 |
| **Totals** | 0 | 0 | 0 | 0 | 0 | 150,000 | 150,000 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| General Government CIP Fund | 0 | 0 | 0 | 0 | 0 | 150,000 | 150,000 |
| **Totals** | 0 | 0 | 0 | 0 | 0 | 150,000 | 150,000 |

**FINANCE NOTES**

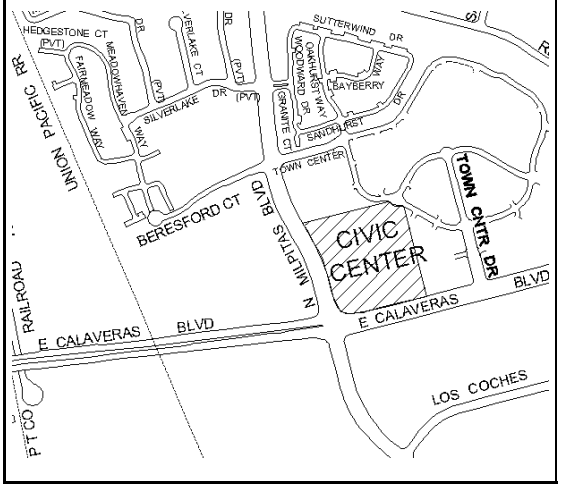
## City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Community Improvement | **New** | **City Hall Pond & Water Feature Rehabilitation** | 1 |

**CONTACT:** Steve Erickson [3301]

**PRIORITY:** Rehabilitation of Existing Capital Assets or Systems

**DIAGRAM**




**DESCRIPTION**

The project provides for the replacement of the pump system for the pond and water feature in front of City Hall, and provides for the replacement and upgrade of the chlorination and water quality systems. The project also provides for the re-coating of the pond at the rear of City Hall with a system that is less prone to annual maintenance.

**COMMENTS:**

The City Hall pond and water features require a significant amount of maintenance to maintain operational. The system for the front fountain failed several years ago and is in need of replacement. The chlorination and water quality systems are also in need of rehabilitation due to corrosion and age. The rear pond has recently required annual patching and coating to fill cracks that leak water. The installation of a coating system similar to what is installed in swimming pools is desired to seal the pond and reduce the amount of maintenance.

**Uncommitted Balance as of 2/28/2015:** $0

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 0 | 0 | 0 | 0 | 0 | 25,000 | 25,000 |
| Administration | 0 | 0 | 0 | 0 | 0 | 25,000 | 25,000 |
| Inspection | 0 | 0 | 0 | 0 | 0 | 25,000 | 25,000 |
| Improvements | 0 | 0 | 0 | 0 | 0 | 150,000 | 150,000 |
| **Totals** | 0 | 0 | 0 | 0 | 0 | 225,000 | 225,000 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| General Government CIP Fund | 0 | 0 | 0 | 0 | 0 | 225,000 | 225,000 |
| **Totals** | 0 | 0 | 0 | 0 | 0 | 225,000 | 225,000 |

**FINANCE NOTES**

## City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Community Improvement | **New** | **City Parking Lot Improvements** | 1 |

**CONTACT:** Steve Erickson [3301]

**PRIORITY:** Rehabilitation of Existing Capital Assets or Systems

**DESCRIPTION**

This project provides for minor pavement replacement, seal coating and restriping of City parking lots at the following facilities: Civic Center, Sports Center, Public Works, and Police Department. This project will also including required ADA upgrades to the handicap parking stalls and ramps within the parking areas.

**COMMENTS:**

**Uncommitted Balance as of 2/28/2015:** $0

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 0 | 0 | 0 | 30,000 | 0 | 0 | 30,000 |
| Administration | 0 | 0 | 0 | 40,000 | 0 | 0 | 40,000 |
| Inspection | 0 | 0 | 0 | 30,000 | 0 | 0 | 30,000 |
| Improvements | 0 | 0 | 0 | 500,000 | 0 | 0 | 500,000 |
| **Totals** | 0 | 0 | 0 | 600,000 | 0 | 0 | 600,000 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| General Government CIP Fund | 0 | 0 | 0 | 600,000 | 0 | 0 | 600,000 |
| **Totals** | 0 | 0 | 0 | 600,000 | 0 | 0 | 600,000 |

**FINANCE NOTES**

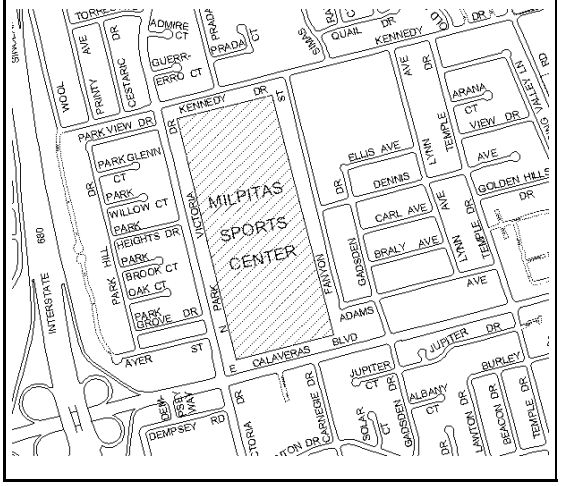
## City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Community Improvement | **New** | **MSC Master Plan Update** | 1 |

**CONTACT:** Steve Erickson [3301]

**PRIORITY:** Improve the Quality of Life

**DIAGRAM**




**DESCRIPTION**

The Milpitas Sports Center (MSC) Master Plan Update will focus in revising several elements of the existing Master Plan, due to physical changes implemented since the completion of the current Master Plan. The Master Plan update will also look at the MSC building programming and recommend improvements to support the indoor sports and fitness programs. Lastly, the Master Plan update will also include a vehicular, bicycle, and pedestrian circulation element.

**COMMENTS:**

**Uncommitted Balance as of 2/28/2015:** $0

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 0 | 0 | 0 | 0 | 140,000 | 0 | 140,000 |
| Administration | 0 | 0 | 0 | 0 | 10,000 | 0 | 10,000 |
| Inspection | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Building | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 0 | 0 | 0 | 0 | 150,000 | 0 | 150,000 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| General Government CIP Fund | 0 | 0 | 0 | 0 | 150,000 | 0 | 150,000 |
| **Totals** | 0 | 0 | 0 | 0 | 150,000 | 0 | 150,000 |

**FINANCE NOTES**

## City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Community Improvement | **New** | **PD Communications** | 1 |

**CONTACT:** Armando Corpuz [2534]

**PRIORITY:** Health and Safety Projects

**DESCRIPTION**

In 2001, the Santa Clara County / Cities Managers Association agreed to jointly fund a countywide radio interoperability and public safety radio and data communications network to improve public safety and emergency services. The countywide infrastructure construction has not yet been completed. The City of Milpitas' financial contribution will support the construction completion.

**COMMENTS:**

The countywide construction is expected to be completed during FY 17/18. In FY 18/19, our costs are expected to be approximately $100K, which includes operations, maintenance, and member assessment fees. The FY17/18 estimate includes the member assessment fee, countywide infrastructure commitment, and funds to transition the City of Milpitas to the new system. Our transitional costs include construction / installation, all radio replacements, console replacements, and infrastructure replacement. These costs include equipment for Police, Fire, and Public Works radios.

**Uncommitted Balance as of 2/28/2015:** $0

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Improvements | 0 | 335,000 | 335,000 | 335,000 | 0 | 0 | 1,005,000 |
| Equipment | 0 | 0 | 0 | 3,450,000 | 0 | 0 | 3,450,000 |
| **Totals** | 0 | 335,000 | 335,000 | 3,785,000 | 0 | 0 | 4,455,000 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| General Government CIP Fund | 0 | 335,000 | 335,000 | 3,785,000 | 0 | 0 | 4,455,000 |
| **Totals** | 0 | 335,000 | 335,000 | 3,785,000 | 0 | 0 | 4,455,000 |

**FINANCE NOTES**

## City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Community Improvement | **New** | **Police Records Management System** | 1 |

**CONTACT:** Armando Corpuz [2534]

**PRIORITY:** Rehabilitation of Existing Capital Assets or Systems

**DESCRIPTION**

This project provides upgrades to the Police Department's Records Management System (RMS). It is imperative that the Police Department maintain a reliable RMS to input and store data to respond to public requests, respond to public information requests, the processing of data for criminal cases and to meet the California Government Code requirements of preserving information.

**COMMENTS:**

The proposed funding is to upgrade or replace the existing software and hardware. The vendor (Tiburon) for the City current existing RMS will not support the current version after 2017. The RMS system will need to be upgraded or replaced before 2017.

**Uncommitted Balance as of 2/28/2015:** $0

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Equipment | 0 | 0 | 700,000 | 0 | 0 | 0 | 700,000 |
| **Totals** | 0 | 0 | 700,000 | 0 | 0 | 0 | 700,000 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Unidentified Funding | 0 | 0 | 700,000 | 0 | 0 | 0 | 700,000 |
| **Totals** | 0 | 0 | 700,000 | 0 | 0 | 0 | 700,000 |

**FINANCE NOTES**

# City of Milpitas

## 2015-20 CAPITAL IMPROVEMENT PROGRAM

### PARK IMPROVEMENT PROJECTS SUMMARY

**SUMMARY OF COSTS**

| PG. NO. | PROJECT | | TOTAL COST | PRIOR YEARS | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 |
|---|---|---|---|---|---|---|---|---|---|
| 29 | 5055 | Alviso Adobe Renovation | 6,424,272 | 5,424,272 | 1,000,000 | 0 | 0 | 0 | 0 |
| 30 | New | Berryessa Creek Trail, Reach 4, 5, 6A | 7,450,000 | 0 | 0 | 0 | 0 | 0 | 7,450,000 |
| 31 | New | Cardoza Park Improvements Phase II | 8,600,000 | 0 | 0 | 0 | 0 | 0 | 8,600,000 |
| 32 | New | Creighton Park Renovation Design & Constru | 1,400,000 | 0 | 0 | 300,000 | 1,100,000 | 0 | 0 |
| 33 | ***New*** | ***International Park*** | ***500,000*** | ***0*** | ***500,000*** | ***0*** | ***0*** | ***0*** | ***0*** |
| 34 | ***New*** | ***MSC Pool Rehabilitation*** | ***1,500,000*** | ***0*** | ***1,500,000*** | ***0*** | ***0*** | ***0*** | ***0*** |
| 35 | New | Murphy Park Picnic and Playground Renovati | 3,750,000 | 0 | 0 | 0 | 0 | 0 | 3,750,000 |
| 36 | ***New*** | ***Park Access Improvement and Resurfacin*** | ***600,000*** | ***0*** | ***0*** | ***600,000*** | ***0*** | ***0*** | ***0*** |
| 37 | ***New*** | ***Sandalwood Park Renovation*** | ***1,275,000*** | ***0*** | ***0*** | ***0*** | ***275,000*** | ***1,000,000*** | ***0*** |
| 38 | ***New*** | ***Sinnott Park Renovation*** | ***1,150,000*** | ***0*** | ***0*** | ***0*** | ***0*** | ***250,000*** | ***900,000*** |
| 39 | ***New*** | ***Sports Center Skate Park*** | ***1,650,000*** | ***0*** | ***0*** | ***0*** | ***1,650,000*** | ***0*** | ***0*** |
| 40 | ***New*** | ***Sports Center Sports Fields*** | ***2,875,000*** | ***0*** | ***2,875,000*** | ***0*** | ***0*** | ***0*** | ***0*** |
| 41 | ***New*** | ***Starlite Park Renovation*** | ***1,400,000*** | ***0*** | ***0*** | ***0*** | ***0*** | ***300,000*** | ***1,100,000*** |
| 42 | ***New*** | ***Strickroth Park Renovation*** | ***1,625,000*** | ***0*** | ***0*** | ***0*** | ***0*** | ***0*** | ***1,625,000*** |
| | | **Defunding Subtotal** | | | | | | | |
| | | **Funding Subtotal** | | | **5,875,000** | | | | |
| | | **TOTAL COST** | **$40,199,272** | **$5,424,272** | **$5,875,000** | **$900,000** | **$3,025,000** | **$1,550,000** | **$23,425,000** |

**NOTES**

(a) New projects listed in Bold Italics.

# City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

**SUMMARY OF PROJECT FUNDING SOURCES**

### Park Improvement

| PG | PROJECT | | 2015-16 Park Fund | 2015-16 Midtown Park Fund | 2015-16 Other | 2015-16 Unidentified Funding |
|---|---|---|---|---|---|---|
| 29 | 5055 | Alviso Adobe Renovation | 1,000,000 | 0 | 0 | 0 |
| 30 | New | Berryessa Creek Trail, Reach 4, 5, 6A | 0 | 0 | 0 | 0 |
| 31 | New | Cardoza Park Improvements Phase II | 0 | 0 | 0 | 0 |
| 32 | New | Creighton Park Renovation Design & Construction | 0 | 0 | 0 | 0 |
| 33 | ***New*** | ***International Park*** | ***0*** | ***500,000*** | ***0*** | ***0*** |
| 34 | ***New*** | ***MSC Pool Rehabilitation*** | ***0*** | ***1,500,000*** | ***0*** | ***0*** |
| 35 | New | Murphy Park Picnic and Playground Renovation | 0 | 0 | 0 | 0 |
| 36 | ***New*** | ***Park Access Improvement and Resurfacing*** | ***0*** | ***0*** | ***0*** | ***0*** |
| 37 | ***New*** | ***Sandalwood Park Renovation*** | ***0*** | ***0*** | ***0*** | ***0*** |
| 38 | ***New*** | ***Sinnott Park Renovation*** | ***0*** | ***0*** | ***0*** | ***0*** |
| 39 | ***New*** | ***Sports Center Skate Park*** | ***0*** | ***0*** | ***0*** | ***0*** |
| 40 | ***New*** | ***Sports Center Sports Fields*** | ***1,315,000*** | ***1,560,000*** | ***0*** | ***0*** |
| 41 | ***New*** | ***Starlite Park Renovation*** | ***0*** | ***0*** | ***0*** | ***0*** |
| 42 | ***New*** | ***Strickroth Park Renovation*** | ***0*** | ***0*** | ***0*** | ***0*** |
| | | **Total Defunding by Funding Source** | **(0)** | **(0)** | **(0)** | **(0)** |
| | | **Total Funding by Funding Source** | **2,315,000** | **3,560,000** | **0** | **0** |
| | | **Subtotal by Funding Source** | **2,315,000** | **3,560,000** | **0** | **0** |
| | | **Subtotal by Year** | **5,875,000** | | | |

**NOTES**

(a) New projects listed in Bold Italics.

(b) "Other" are identified on detailed project sheets.

(c) Grants are identified on detailed project sheets.

## City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

**SUMMARY OF PROJECT FUNDING SOURCES**

### Park Improvement

| PG | PROJECT | | 2016-17 | | | |
|---|---|---|---|---|---|---|
| | | | Park Fund | Midtown Park Fund | Other | Unidentified Funding |
| 29 | 5055 | Alviso Adobe Renovation | 0 | 0 | 0 | 0 |
| 30 | New | Berryessa Creek Trail, Reach 4, 5, 6A | 0 | 0 | 0 | 0 |
| 31 | New | Cardoza Park Improvements Phase II | 0 | 0 | 0 | 0 |
| 32 | New | Creighton Park Renovation Design & Construction | 300,000 | 0 | 0 | 0 |
| 33 | ***New*** | ***International Park*** | ***0*** | ***0*** | ***0*** | ***0*** |
| 34 | ***New*** | ***MSC Pool Rehabilitation*** | ***0*** | ***0*** | ***0*** | ***0*** |
| 35 | New | Murphy Park Picnic and Playground Renovation | 0 | 0 | 0 | 0 |
| 36 | ***New*** | ***Park Access Improvement and Resurfacing*** | ***300,000*** | ***300,000*** | ***0*** | ***0*** |
| 37 | ***New*** | ***Sandalwood Park Renovation*** | ***0*** | ***0*** | ***0*** | ***0*** |
| 38 | ***New*** | ***Sinnott Park Renovation*** | ***0*** | ***0*** | ***0*** | ***0*** |
| 39 | ***New*** | ***Sports Center Skate Park*** | ***0*** | ***0*** | ***0*** | ***0*** |
| 40 | ***New*** | ***Sports Center Sports Fields*** | ***0*** | ***0*** | ***0*** | ***0*** |
| 41 | ***New*** | ***Starlite Park Renovation*** | ***0*** | ***0*** | ***0*** | ***0*** |
| 42 | ***New*** | ***Strickroth Park Renovation*** | ***0*** | ***0*** | ***0*** | ***0*** |
| | | **Total Defunding by Funding Source** | **0** | **0** | **0** | **0** |
| | | **Total Funding by Funding Source** | **600,000** | **300,000** | **0** | **0** |
| | | **Subtotal by Funding Source** | **600,000** | **300,000** | **0** | **0** |
| | | **Subtotal by Year** | **900,000** | | | |

**NOTES**

(a) New projects listed in Bold Italics.

(b) "Other" are identified on detailed project sheets.

(c) Grants are identified on detailed project sheets.

## City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

**SUMMARY OF PROJECT FUNDING SOURCES**

### Park Improvement

| PG | PROJECT | | 2017-18 | | | |
|---|---|---|---|---|---|---|
| | | | Park Fund | Midtown Park Fund | Other | Unidentified Funding |
| 29 | 5055 | Alviso Adobe Renovation | 0 | 0 | 0 | 0 |
| 30 | New | Berryessa Creek Trail, Reach 4, 5, 6A | 0 | 0 | 0 | 0 |
| 31 | New | Cardoza Park Improvements Phase II | 0 | 0 | 0 | 0 |
| 32 | New | Creighton Park Renovation Design & Construction | 1,100,000 | 0 | 0 | 0 |
| 33 | ***New*** | ***International Park*** | ***0*** | ***0*** | ***0*** | ***0*** |
| 34 | ***New*** | ***MSC Pool Rehabilitation*** | ***0*** | ***0*** | ***0*** | ***0*** |
| 35 | New | Murphy Park Picnic and Playground Renovation | 0 | 0 | 0 | 0 |
| 36 | ***New*** | ***Park Access Improvement and Resurfacing*** | ***0*** | ***0*** | ***0*** | ***0*** |
| 37 | ***New*** | ***Sandalwood Park Renovation*** | ***275,000*** | ***0*** | ***0*** | ***0*** |
| 38 | ***New*** | ***Sinnott Park Renovation*** | ***0*** | ***0*** | ***0*** | ***0*** |
| 39 | ***New*** | ***Sports Center Skate Park*** | ***750,000*** | ***900,000*** | ***0*** | ***0*** |
| 40 | ***New*** | ***Sports Center Sports Fields*** | ***0*** | ***0*** | ***0*** | ***0*** |
| 41 | ***New*** | ***Starlite Park Renovation*** | ***0*** | ***0*** | ***0*** | ***0*** |
| 42 | ***New*** | ***Strickroth Park Renovation*** | ***0*** | ***0*** | ***0*** | ***0*** |
| | | **Total Defunding by Funding Source** | **0** | **0** | **0** | **0** |
| | | **Total Funding by Funding Source** | **2,125,000** | **900,000** | **0** | **0** |
| | | **Subtotal by Funding Source** | **2,125,000** | **900,000** | **0** | **0** |
| | | **Subtotal by Year** | **3,025,000** | | | |

**NOTES**

(a) New projects listed in Bold Italics.

(b) "Other" are identified on detailed project sheets.

(c) Grants are identified on detailed project sheets.

# City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

**SUMMARY OF PROJECT FUNDING SOURCES**

### Park Improvement

| PG | PROJECT | | 2018-19 Park Fund | Midtown Park Fund | Other | Unidentified Funding |
|---|---|---|---|---|---|---|
| 29 | 5055 | Alviso Adobe Renovation | 0 | 0 | 0 | 0 |
| 30 | New | Berryessa Creek Trail, Reach 4, 5, 6A | 0 | 0 | 0 | 0 |
| 31 | New | Cardoza Park Improvements Phase II | 0 | 0 | 0 | 0 |
| 32 | New | Creighton Park Renovation Design & Construction | 0 | 0 | 0 | 0 |
| 33 | ***New*** | ***International Park*** | ***0*** | ***0*** | ***0*** | ***0*** |
| 34 | ***New*** | ***MSC Pool Rehabilitation*** | ***0*** | ***0*** | ***0*** | ***0*** |
| 35 | New | Murphy Park Picnic and Playground Renovation | 0 | 0 | 0 | 0 |
| 36 | ***New*** | ***Park Access Improvement and Resurfacing*** | ***0*** | ***0*** | ***0*** | ***0*** |
| 37 | ***New*** | ***Sandalwood Park Renovation*** | ***1,000,000*** | ***0*** | ***0*** | ***0*** |
| 38 | ***New*** | ***Sinnott Park Renovation*** | ***250,000*** | ***0*** | ***0*** | ***0*** |
| 39 | ***New*** | ***Sports Center Skate Park*** | ***0*** | ***0*** | ***0*** | ***0*** |
| 40 | ***New*** | ***Sports Center Sports Fields*** | ***0*** | ***0*** | ***0*** | ***0*** |
| 41 | ***New*** | ***Starlite Park Renovation*** | ***0*** | ***300,000*** | ***0*** | ***0*** |
| 42 | ***New*** | ***Strickroth Park Renovation*** | ***0*** | ***0*** | ***0*** | ***0*** |
| | | **Total Defunding by Funding Source** | **0** | **0** | **0** | **0** |
| | | **Total Funding by Funding Source** | **1,250,000** | **300,000** | **0** | **0** |
| | | **Subtotal by Funding Source** | **1,250,000** | **300,000** | **0** | **0** |
| | | **Subtotal by Year** | **1,550,000** | | | |

**NOTES**

(a) New projects listed in Bold Italics.

(b) "Other" are identified on detailed project sheets.

(c) Grants are identified on detailed project sheets.

# City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

**SUMMARY OF PROJECT FUNDING SOURCES**

### Park Improvement

| PG | PROJECT | | 2019-20 Park Fund | 2019-20 Midtown Park Fund | 2019-20 Other | 2019-20 Unidentified Funding |
|---|---|---|---|---|---|---|
| 29 | 5055 | Alviso Adobe Renovation | 0 | 0 | 0 | 0 |
| 30 | New | Berryessa Creek Trail, Reach 4, 5, 6A | 0 | 0 | 3,500,000 | 3,950,000 |
| 31 | New | Cardoza Park Improvements Phase II | 0 | 0 | 0 | 8,600,000 |
| 32 | New | Creighton Park Renovation Design & Construction | 0 | 0 | 0 | 0 |
| 33 | ***New*** | ***International Park*** | ***0*** | ***0*** | ***0*** | ***0*** |
| 34 | ***New*** | ***MSC Pool Rehabilitation*** | ***0*** | ***0*** | ***0*** | ***0*** |
| 35 | New | Murphy Park Picnic and Playground Renovation | 0 | 0 | 0 | 3,750,000 |
| 36 | ***New*** | ***Park Access Improvement and Resurfacing*** | ***0*** | ***0*** | ***0*** | ***0*** |
| 37 | ***New*** | ***Sandalwood Park Renovation*** | ***0*** | ***0*** | ***0*** | ***0*** |
| 38 | ***New*** | ***Sinnott Park Renovation*** | ***900,000*** | ***0*** | ***0*** | ***0*** |
| 39 | ***New*** | ***Sports Center Skate Park*** | ***0*** | ***0*** | ***0*** | ***0*** |
| 40 | ***New*** | ***Sports Center Sports Fields*** | ***0*** | ***0*** | ***0*** | ***0*** |
| 41 | ***New*** | ***Starlite Park Renovation*** | ***0*** | ***1,100,000*** | ***0*** | ***0*** |
| 42 | ***New*** | ***Strickroth Park Renovation*** | ***0*** | ***0*** | ***0*** | ***1,625,000*** |
| | | **Total Defunding by Funding Source** | **0** | **0** | **0** | **0** |
| | | **Total Funding by Funding Source** | **900,000** | **1,100,000** | **3,500,000** | **17,925,000** |
| | | **Subtotal by Funding Source** | **900,000** | **1,100,000** | **3,500,000** | **17,925,000** |
| | | **Subtotal by Year** | **23,425,000** | | | |

**NOTES**

(a) New projects listed in Bold Italics.

(b) "Other" are identified on detailed project sheets.

(c) Grants are identified on detailed project sheets.

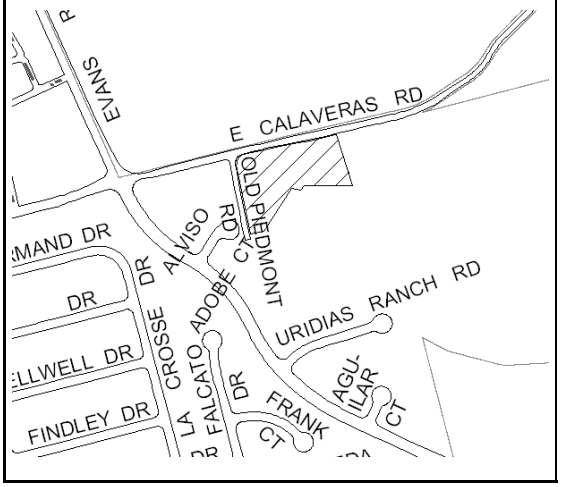
## City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Park Improvement | **5055** | **Alviso Adobe Renovation** | 1 |

**CONTACT:** Michael Boitnott [3315]

**PRIORITY:** Rehabilitation of Existing Capital Assets or Systems

**DIAGRAM**




**DESCRIPTION**

This project provides new park improvements and exterior restoration of the historic Alviso Adobe building. The first phase provides structural stabilization, seismic strengthening and exterior renovation of the Alviso adobe building. The second phase provides park improvements including picnic areas, lighting, walkways, a parking lot, apricot orchard, herb garden, landscaping and access improvements. Once completed, park visitors will experience the progressive history of Milpitas' from its origins as a Spanish land grant in the 1830's through the 1920's rural Santa Clara County farming era.

**COMMENTS:**

The final phase (V) provides the interior restoration of the 1st floor of the Adobe Building to museum quality level. This phase is unfunded and estimated at over $1.0 million. Staff will be pursuing additional grants for phase the phase V work to help offset the cost of doing the improvements.

**Uncommitted Balance as of 2/28/2015:** $4,521

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 344,000 | 150,000 | 0 | 0 | 0 | 0 | 494,000 |
| Administration | 120,000 | 100,000 | 0 | 0 | 0 | 0 | 220,000 |
| Surveying | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Inspection | 251,000 | 50,000 | 0 | 0 | 0 | 0 | 301,000 |
| Improvements | 4,652,972 | 700,000 | 0 | 0 | 0 | 0 | 5,352,972 |
| Other | 56,300 | 0 | 0 | 0 | 0 | 0 | 56,300 |
| **Totals** | 5,424,272 | 1,000,000 | 0 | 0 | 0 | 0 | 6,424,272 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Grants/Reimbursement/Develope | 785,910 | 0 | 0 | 0 | 0 | 0 | 785,910 |
| Park Fund | 4,638,362 | 1,000,000 | 0 | 0 | 0 | 0 | 5,638,362 |
| **Totals** | 5,424,272 | 1,000,000 | 0 | 0 | 0 | 0 | 6,424,272 |

**FINANCE NOTES**

Grants/Reimbursement/Developer Fees/Others: Received on 5/08 - SCC Historical Heritage $60,138 + $59,000 + $54,000.
SCC Open Space Authority Grant $356,837. FY09-10 SCC Open Space Authority Grant: $170,000. Piedmont 237 Limited Liability Corporation (LLC) development fees $3,935
Received 08/08 - $13,607 Milpitas Historical Society; $83,393 remains to be reimbursed, not included in budget yet.
FY 10-11 Park Fund $2,500,000.
FY 11-12 SCC Historical & Heritage Grant $85,000
City Council 2/7/12 - Midyear Budget Appropriation of $70,000 from SCVWD Open Space "Trails& Open Spaces Grant"
City Council 2/7/12 - Midyear Budget Appropriation of $83,393 from Milpitas Historical Society
The City was unable to obtain the $170,000 grant from the SCC Open Space Authority and $170,000 will be removed from the project.

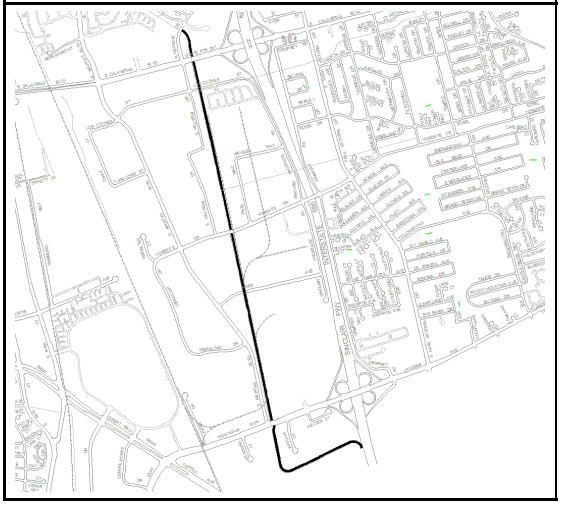
## City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Park Improvement | **New** | **Berryessa Creek Trail, Reach 4, 5, 6A** | 1 |

**CONTACT:** Steven Machida [3355]

**PRIORITY:** Improve the Quality of Life

**DIAGRAM**



**DESCRIPTION**

This project provides for the design and construction of Reach 4, 5 and 6A of the Berryessa Creek Trail from Calaveras Blvd to San Jose City limits South of Montague Expressway. The scope of work includes trail paving, trail accessibility improvements, intersection modifications at Yosemite/S. Hillview, Ames Ave./S. Milpitas Blvd., and Gibraltar Ave/S. Milpitas Boulevard, and S. Milpitas/Montague, plantings and trail amenities. The project will coordinated with the proposed US Army Corp of Engineers and SCVWD creek flood improvements project. It is also identified in the VTP 2040 Plan, as it provides a direct pedestrian/bicycle connection from the Town Center to the future BART station.

**COMMENTS:**

This project is identified and described further in the "Berryessa Creek Trail and Coyote Creek Trail Feasibility Report".

**Uncommitted Balance as of 2/28/2015:** $0

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 0 | 0 | 0 | 0 | 0 | 650,000 | 650,000 |
| Administration | 0 | 0 | 0 | 0 | 0 | 300,000 | 300,000 |
| Surveying | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Inspection | 0 | 0 | 0 | 0 | 0 | 250,000 | 250,000 |
| Land | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Improvements | 0 | 0 | 0 | 0 | 0 | 6,250,000 | 6,250,000 |
| Equipment | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 0 | 0 | 0 | 0 | 0 | 7,450,000 | 7,450,000 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Unidentified Funding | 0 | 0 | 0 | 0 | 0 | 3,950,000 | 3,950,000 |
| TASP Impact Fees | 0 | 0 | 0 | 0 | 0 | 3,500,000 | 3,500,000 |
| **Totals** | 0 | 0 | 0 | 0 | 0 | 7,450,000 | 7,450,000 |

**FINANCE NOTES**

Unidentified funding- possible funding may include future grants from the Army Corp of Engineers, SCVWD, developer contributions, and VTP 2040 Regional Transportation Program funds.

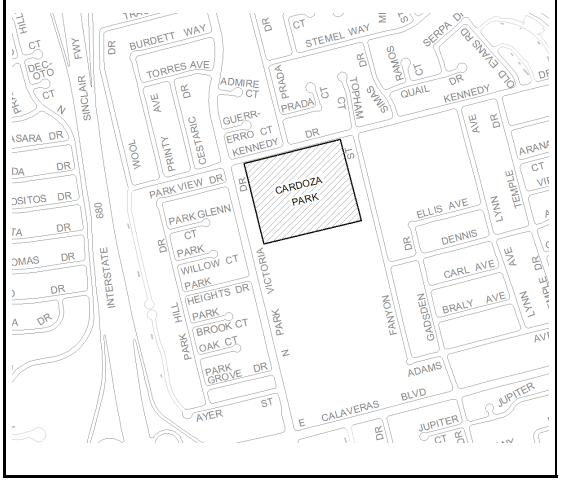
## City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | Estimate Level |
|---|---|---|
| Park Improvement | **New** **Cardoza Park Improvements Phase II** | 1 |

**CONTACT:** Michael Boitnott [3315] / Steve Erickson [3301]

**PRIORITY:** Rehabilitation of Existing Capital Assets or Systems

**DIAGRAM**




### DESCRIPTION

This project provides for the design and construction of phase II of the Cardoza Park renovation. The phase II improvements include: parking lot rehabilitation, community building, large picnic areas, an entry gateway, water spray park, pathways and landscaping.

### COMMENTS:

Cardoza is the City's most active park and is considered a "Community Park" serving all Milpitas residents. The Park Master Plan provides additional information on all phases of the park improvements. Originaly constructed in 1973, Renovated in 2010 (Phase I)

**Uncommitted Balance as of 2/28/2015:** $0

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 0 | 0 | 0 | 0 | 0 | 950,000 | 950,000 |
| Administration | 0 | 0 | 0 | 0 | 0 | 675,000 | 675,000 |
| Inspection | 0 | 0 | 0 | 0 | 0 | 225,000 | 225,000 |
| Improvements | 0 | 0 | 0 | 0 | 0 | 6,750,000 | 6,750,000 |
| **Totals** | 0 | 0 | 0 | 0 | 0 | 8,600,000 | 8,600,000 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Unidentified Funding | 0 | 0 | 0 | 0 | 0 | 8,600,000 | 8,600,000 |
| **Totals** | 0 | 0 | 0 | 0 | 0 | 8,600,000 | 8,600,000 |

**FINANCE NOTES**

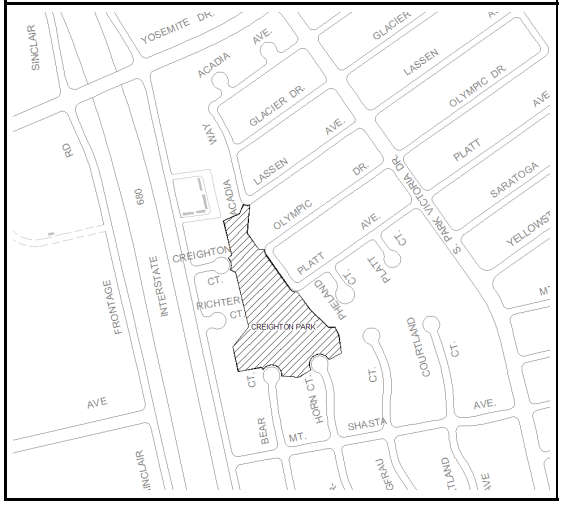
## City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Park Improvement | **New** | **Creighton Park Renovation Design & Construction** | 1 |

**CONTACT:** Michael Boitnott [3315]

**PRIORITY:** Rehabilitation of Existing Capital Assets or Systems

**DIAGRAM**




**DESCRIPTION**

This project provides for the design and construction of renovation improvements for various park elements at Creighton Park. Those include the picnic area, playground and surrounding area, ADA compliance assessment and improvements, drainage, landscaping, walkways and related improvements.

**COMMENTS:**

Creighton Park is approximately 5 acres, and it is heavily used by the surrounding neighborhoods. Originaly constructed in 1968, Renovated in 1981, Play structures replaced in 1991

**Uncommitted Balance as of 2/28/2015:** $0

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 0 | 0 | 200,000 | 0 | 0 | 0 | 200,000 |
| Administration | 0 | 0 | 100,000 | 50,000 | 0 | 0 | 150,000 |
| Inspection | 0 | 0 | 0 | 50,000 | 0 | 0 | 50,000 |
| Improvements | 0 | 0 | 0 | 1,000,000 | 0 | 0 | 1,000,000 |
| **Totals** | 0 | 0 | 300,000 | 1,100,000 | 0 | 0 | 1,400,000 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Park Fund | 0 | 0 | 300,000 | 1,100,000 | 0 | 0 | 1,400,000 |
| **Totals** | 0 | 0 | 300,000 | 1,100,000 | 0 | 0 | 1,400,000 |

**FINANCE NOTES**

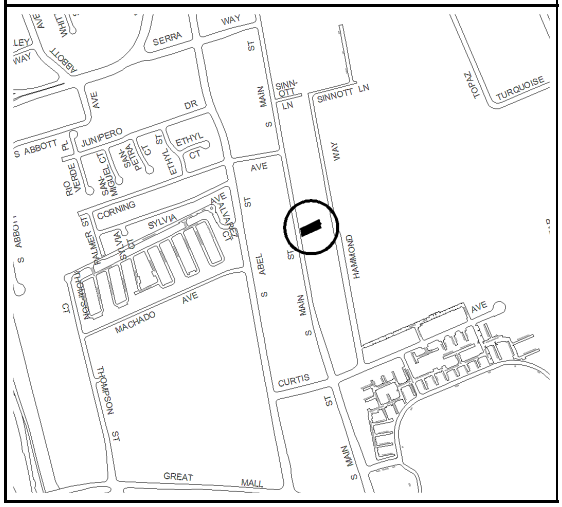
## City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Park Improvement | **New** | **International Park** | 1 |

**CONTACT:** Steven Machida [3355] / Adam Petersen [3274]

**PRIORITY:** Improve the Quality of Life

**DIAGRAM**




**DESCRIPTION**

This project provides for the design and construction of an International Park to be located at Tom Evatt Park. The park concept is to provide a public space with an educational non-political theme of culture, arts, history, architecture, geography, native plants for each participating international group. The park could be divided into small delineated areas with the first to be located on the east side of S. Main Street. The concept could expand to the west side of S. Main Street dependent on other organizations participation interest.

**COMMENTS:**

An encroachment permit from SFPUC will need to be obtained for the improvements to be installed at the park.

**Uncommitted Balance as of 2/28/2015:** $0

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 0 | 75,000 | 0 | 0 | 0 | 0 | 75,000 |
| Administration | 0 | 50,000 | 0 | 0 | 0 | 0 | 50,000 |
| Inspection | 0 | 25,000 | 0 | 0 | 0 | 0 | 25,000 |
| Improvements | 0 | 350,000 | 0 | 0 | 0 | 0 | 350,000 |
| **Totals** | 0 | 500,000 | 0 | 0 | 0 | 0 | 500,000 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Midtown Park Fund | 0 | 500,000 | 0 | 0 | 0 | 0 | 500,000 |
| **Totals** | 0 | 500,000 | 0 | 0 | 0 | 0 | 500,000 |

**FINANCE NOTES**

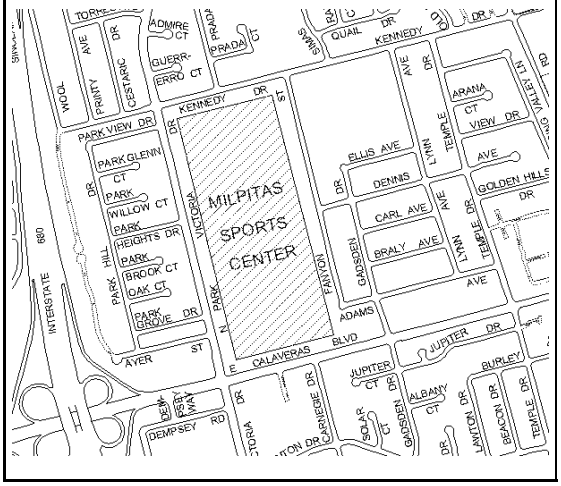
## City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Park Improvement | **New** | **MSC Pool Rehabilitation** | 1 |

**CONTACT:** Julie Waldron [3314] / Jaime Chew [3369]

**PRIORITY:** Health and Safety Projects

**DIAGRAM**




**DESCRIPTION**

This project provides for various improvements to the Milpitas Sports Center Pool facility. The work includes resurfacing the plaster at the three swimming pools, ADA upgrades to the pools, and replacement of pool decking and drainage, under deck pool piping, pool electrical, tile work, lane lines, and other pool elements. The project will also include removing the wading pool and installing outside showers.

**COMMENTS:**

These pools are heavily used year round and require resurfacing every 5 years. California Health and Safety Code, Section 3106B.3 states that the finished pool shell shall be lined with a smooth waterproof interior finish that will withstand repeated brushing, scrubbing and cleaning procedures.

**Uncommitted Balance as of 2/28/2015:** $0

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 0 | 20,000 | 0 | 0 | 0 | 0 | 20,000 |
| Administration | 0 | 50,000 | 0 | 0 | 0 | 0 | 50,000 |
| Inspection | 0 | 30,000 | 0 | 0 | 0 | 0 | 30,000 |
| Improvements | 0 | 1,400,000 | 0 | 0 | 0 | 0 | 1,400,000 |
| **Totals** | 0 | 1,500,000 | 0 | 0 | 0 | 0 | 1,500,000 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Midtown Park Fund | 0 | 1,500,000 | 0 | 0 | 0 | 0 | 1,500,000 |
| **Totals** | 0 | 1,500,000 | 0 | 0 | 0 | 0 | 1,500,000 |

**FINANCE NOTES**

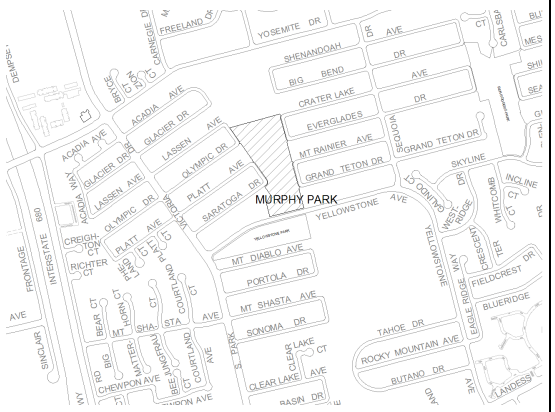
## City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Park Improvement | **New** | **Murphy Park Picnic and Playground Renovation** | 1 |

**CONTACT:** Michael Boitnott [3315]

**PRIORITY:** Rehabilitation of Existing Capital Assets or Systems

**DIAGRAM**




**DESCRIPTION**

This project provides for the design and construction of renovation improvements for various park elements at Murphy Park. Those include the large picnic area, playground and surrounding area, ADA compliance assessment and improvements, drainage, landscaping, walkways and related improvements.

**COMMENTS:**

Murphy Park is an older park which is heavily used, including sports activities and City programs such as "Music in the Park" and is in need of major renovation. Originaly constructed in 1969, Play structures replaced in 1990

**Uncommitted Balance as of 2/28/2015:** $0

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 0 | 0 | 0 | 0 | 0 | 375,000 | 375,000 |
| Administration | 0 | 0 | 0 | 0 | 0 | 275,000 | 275,000 |
| Inspection | 0 | 0 | 0 | 0 | 0 | 100,000 | 100,000 |
| Improvements | 0 | 0 | 0 | 0 | 0 | 3,000,000 | 3,000,000 |
| **Totals** | 0 | 0 | 0 | 0 | 0 | 3,750,000 | 3,750,000 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Unidentified Funding | 0 | 0 | 0 | 0 | 0 | 3,750,000 | 3,750,000 |
| **Totals** | 0 | 0 | 0 | 0 | 0 | 3,750,000 | 3,750,000 |

**FINANCE NOTES**

## City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Park Improvement | **New** | **Park Access Improvement and Resurfacing** | 1 |

**CONTACT:** Michael Boitnott [3315]

**PRIORITY:** Health and Safety Projects

**DESCRIPTION**

This project provides for the improvement and rehabilitation of vehicle, bike, and pedestrian access for City parks. Work would include the repair, seal coat, or asphalt overlay of park parking lots, trails, and walking pathways, including repairs and recoating of pedestrian bridges.

**COMMENTS:**

**Uncommitted Balance as of 2/28/2015:** $0

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 0 | 0 | 75,000 | 0 | 0 | 0 | 75,000 |
| Administration | 0 | 0 | 25,000 | 0 | 0 | 0 | 25,000 |
| Inspection | 0 | 0 | 25,000 | 0 | 0 | 0 | 25,000 |
| Improvements | 0 | 0 | 475,000 | 0 | 0 | 0 | 475,000 |
| **Totals** | 0 | 0 | 600,000 | 0 | 0 | 0 | 600,000 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Midtown Park Fund | 0 | 0 | 300,000 | 0 | 0 | 0 | 300,000 |
| Park Fund | 0 | 0 | 300,000 | 0 | 0 | 0 | 300,000 |
| **Totals** | 0 | 0 | 600,000 | 0 | 0 | 0 | 600,000 |

**FINANCE NOTES**

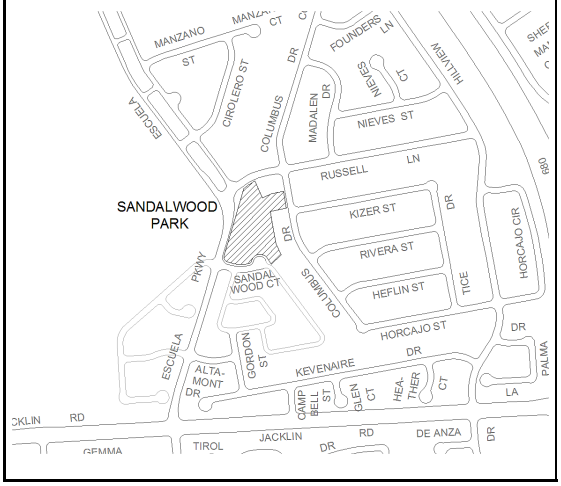
## City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Park Improvement | **New** | **Sandalwood Park Renovation** | 1 |

**CONTACT:** Michael Boitnott [3315]

**PRIORITY:** Health and Safety Projects

**DIAGRAM**




**DESCRIPTION**

This project provides for the design and construction of renovation improvements for various park elements at Sandalwood Park. Those include the picnic area, playground and surrounding area, ADA compliance assessment and improvements, drainage, lighting, landscaping, walkways and related improvements.

**COMMENTS:**

Sandalwood Park is approximately 3.9 acres, and it is heavily used by the surrounding neighborhoods. Originaly constructed in 1978, Expanded in 1988, Play structures replaced pre 1992

**Uncommitted Balance as of 2/28/2015:** $0

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 0 | 0 | 0 | 175,000 | 0 | 0 | 175,000 |
| Administration | 0 | 0 | 0 | 100,000 | 50,000 | 0 | 150,000 |
| Inspection | 0 | 0 | 0 | 0 | 50,000 | 0 | 50,000 |
| Improvements | 0 | 0 | 0 | 0 | 900,000 | 0 | 900,000 |
| **Totals** | 0 | 0 | 0 | 275,000 | 1,000,000 | 0 | 1,275,000 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Park Fund | 0 | 0 | 0 | 275,000 | 1,000,000 | 0 | 1,275,000 |
| **Totals** | 0 | 0 | 0 | 275,000 | 1,000,000 | 0 | 1,275,000 |

**FINANCE NOTES**

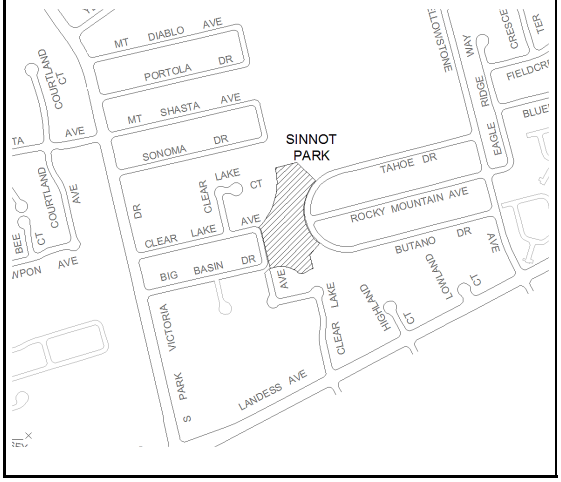
## City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Park Improvement | **New** | **Sinnott Park Renovation** | 1 |

**CONTACT:** Michael Boitnott [3315]

**PRIORITY:** Rehabilitation of Existing Capital Assets or Systems

**DIAGRAM**




**DESCRIPTION**

This project provides for the design and construction of renovation improvements for various park elements at Sinnott Park. Those include the picnic area, playground and surrounding area, ADA compliance assessment and improvements, drainage, lighting, landscaping, walkways and related improvements.

**COMMENTS:**

Sinnott Park is approximately 4.7 acres, and it is heavily used by the surrounding neighborhoods. Originaly constructed in 1970, Play structures replaced in 1991

**Uncommitted Balance as of 2/28/2015:** $0

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 0 | 0 | 0 | 0 | 170,000 | 0 | 170,000 |
| Administration | 0 | 0 | 0 | 0 | 80,000 | 55,000 | 135,000 |
| Inspection | 0 | 0 | 0 | 0 | 0 | 45,000 | 45,000 |
| Improvements | 0 | 0 | 0 | 0 | 0 | 800,000 | 800,000 |
| **Totals** | 0 | 0 | 0 | 0 | 250,000 | 900,000 | 1,150,000 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Park Fund | 0 | 0 | 0 | 0 | 250,000 | 900,000 | 1,150,000 |
| **Totals** | 0 | 0 | 0 | 0 | 250,000 | 900,000 | 1,150,000 |

**FINANCE NOTES**

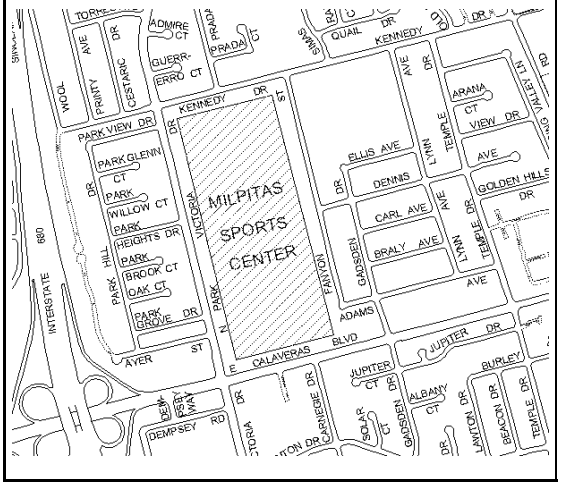
## City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Park Improvement | **New** | **Sports Center Skate Park** | 1 |

**CONTACT:** Julie Waldron [3314]

**PRIORITY:** Improve the Quality of Life

**DIAGRAM**




**DESCRIPTION**

This project provides for the design and construction of a new skate park to be located at the Milpitas Sports Complex between the parking lot and the existing football field. The improvements will include a 20,000 sq.ft. skate park with a 12,000 sq.ft. skate structure, lighting, landscaping, drainage, hardscape and amenities.

**COMMENTS:**

**Uncommitted Balance as of 2/28/2015:** $0

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 0 | 0 | 0 | 300,000 | 0 | 0 | 300,000 |
| Administration | 0 | 0 | 0 | 175,000 | 0 | 0 | 175,000 |
| Inspection | 0 | 0 | 0 | 50,000 | 0 | 0 | 50,000 |
| Improvements | 0 | 0 | 0 | 1,125,000 | 0 | 0 | 1,125,000 |
| **Totals** | 0 | 0 | 0 | 1,650,000 | 0 | 0 | 1,650,000 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Park Fund | 0 | 0 | 0 | 750,000 | 0 | 0 | 750,000 |
| Midtown Park Fund | 0 | 0 | 0 | 900,000 | 0 | 0 | 900,000 |
| **Totals** | 0 | 0 | 0 | 1,650,000 | 0 | 0 | 1,650,000 |

**FINANCE NOTES**

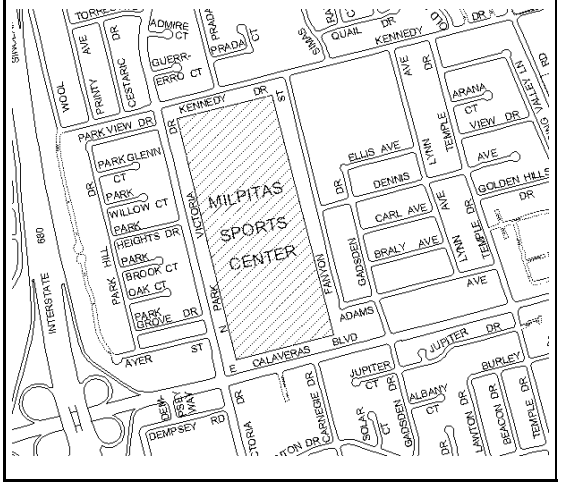
## City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Park Improvement | **New** | **Sports Center Sports Fields** | 1 |

**CONTACT:** Julie Waldron [3314]

**PRIORITY:** Rehabilitation of Existing Capital Assets or Systems

**DIAGRAM**




**DESCRIPTION**

This project provides for the design and construction of a U-11 soccer field and a multi-purpose field that can be used as one football field, two U-9/10 soccer fields or as one U-13 soccer field. The improvements will also include and modifying the existing stadium lighting and bleaches to accommodate the relocated fields and pathway improvements to the fields.

**COMMENTS:**

**Uncommitted Balance as of 2/28/2015:** $0

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 0 | 350,000 | 0 | 0 | 0 | 0 | 350,000 |
| Administration | 0 | 150,000 | 0 | 0 | 0 | 0 | 150,000 |
| Inspection | 0 | 75,000 | 0 | 0 | 0 | 0 | 75,000 |
| Improvements | 0 | 2,300,000 | 0 | 0 | 0 | 0 | 2,300,000 |
| **Totals** | 0 | 2,875,000 | 0 | 0 | 0 | 0 | 2,875,000 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Park Fund | 0 | 1,315,000 | 0 | 0 | 0 | 0 | 1,315,000 |
| Midtown Park Fund | 0 | 1,560,000 | 0 | 0 | 0 | 0 | 1,560,000 |
| **Totals** | 0 | 2,875,000 | 0 | 0 | 0 | 0 | 2,875,000 |

**FINANCE NOTES**

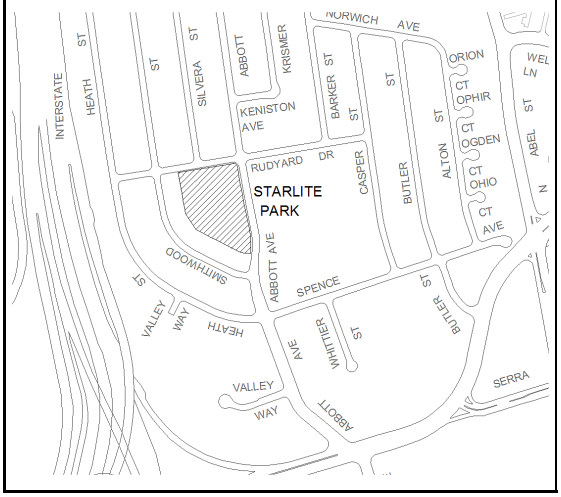
## City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Park Improvement | **New** | **Starlite Park Renovation** | 1 |

**CONTACT:** Michael Boitnott [3315]

**PRIORITY:** Rehabilitation of Existing Capital Assets or Systems

**DIAGRAM**




**DESCRIPTION**

This project provides for the design and construction of renovation improvements for various park elements at Starlite Park. Those include the picnic area, playground and surrounding area, ADA compliance assessment and improvements, drainage, lighting, landscaping, walkways and related improvements.

**COMMENTS:**

Starlite Park is approximately 3.4 acres, and it is heavily used by the surrounding neighborhoods and is right adjacent to the Midtown area. Originaly constructed in 1967, Play structures replaced in 1991

**Uncommitted Balance as of 2/28/2015:** $0

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 0 | 0 | 0 | 0 | 200,000 | 0 | 200,000 |
| Administration | 0 | 0 | 0 | 0 | 100,000 | 50,000 | 150,000 |
| Inspection | 0 | 0 | 0 | 0 | 0 | 50,000 | 50,000 |
| Improvements | 0 | 0 | 0 | 0 | 0 | 1,000,000 | 1,000,000 |
| **Totals** | 0 | 0 | 0 | 0 | 300,000 | 1,100,000 | 1,400,000 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Midtown Park Fund | 0 | 0 | 0 | 0 | 300,000 | 1,100,000 | 1,400,000 |
| **Totals** | 0 | 0 | 0 | 0 | 300,000 | 1,100,000 | 1,400,000 |

**FINANCE NOTES**

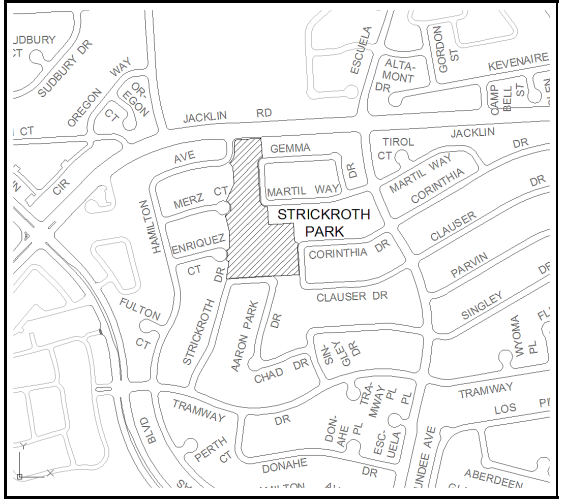
## City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Park Improvement | **New** | **Strickroth Park Renovation** | 1 |

**CONTACT:** Michael Boitnott [3315]

**PRIORITY:** Rehabilitation of Existing Capital Assets or Systems

**DIAGRAM**




**DESCRIPTION**

This project provides for the design and construction of renovation improvements for various park elements at Strickroth Park. Those include the picnic area, playground and surrounding area, ADA compliance assessment and improvements, drainage, lighting, landscaping, walkways and related improvements.

**COMMENTS:**

Strickroth Park is approximately 4.9 acres, and it is heavily used by the surrounding neighborhoods. Originaly constructed in 1979 Play structures replaced pre 1992

**Uncommitted Balance as of 2/28/2015:** $0

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 0 | 0 | 0 | 0 | 0 | 240,000 | 240,000 |
| Administration | 0 | 0 | 0 | 0 | 0 | 175,000 | 175,000 |
| Inspection | 0 | 0 | 0 | 0 | 0 | 60,000 | 60,000 |
| Improvements | 0 | 0 | 0 | 0 | 0 | 1,150,000 | 1,150,000 |
| **Totals** | 0 | 0 | 0 | 0 | 0 | 1,625,000 | 1,625,000 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Unidentified Funding | 0 | 0 | 0 | 0 | 0 | 1,625,000 | 1,625,000 |
| **Totals** | 0 | 0 | 0 | 0 | 0 | 1,625,000 | 1,625,000 |

**FINANCE NOTES**

# City of Milpitas

## 2015-20 CAPITAL IMPROVEMENT PROGRAM

### STREETS PROJECTS SUMMARY

**SUMMARY OF COSTS**

| PG. NO. | PROJECT | | TOTAL COST | PRIOR YEARS | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 |
|---|---|---|---|---|---|---|---|---|---|
| 51 | 3402 | McCarthy Blvd. Landscape & Lighting Improv | 970,000 | 595,000 | 75,000 | 75,000 | 75,000 | 75,000 | 75,000 |
| 52 | 3411 | Sinclair LMD Improvements | 86,000 | 73,000 | 0 | 0 | 13,000 | 0 | 0 |
| 53 | 4253 | Dixon Landing Road Plan Line | 327,423 | 295,463 | 31,960 | 0 | 0 | 0 | 0 |
| 54 | 4266 | Street Light Improvements | 725,000 | 475,000 | 0 | 0 | 0 | 250,000 | 0 |
| 55 | 4267 | Soundwall Renovation | 1,228,466 | 478,466 | 200,000 | 300,000 | 0 | 100,000 | 150,000 |
| 56 | 4271 | Bridge Improvements | 850,000 | 150,000 | 200,000 | 50,000 | 300,000 | 0 | 150,000 |
| 57 | 4273 | Street Landscape Irrigation Repair 2014 | 300,000 | 150,000 | 150,000 | 0 | 0 | 0 | 0 |
| 58 | New | Milpitas Boulevard Plan Line Study | 150,000 | 0 | 150,000 | 0 | 0 | 0 | 0 |
| 59 | New | Minor Traffic Improvements 2016 | 200,000 | 0 | 100,000 | 100,000 | 0 | 0 | 0 |
| 60 | New | Minor Traffic Improvements 2018 | 200,000 | 0 | 0 | 0 | 100,000 | 100,000 | 0 |
| 61 | ***New*** | ***Minor Traffic Improvements 2020*** | ***100,000*** | ***0*** | ***0*** | ***0*** | ***0*** | ***0*** | ***100,000*** |
| 62 | New | S. Milpitas Blvd Bike/Ped. Improvements | 200,000 | 0 | 0 | 0 | 0 | 200,000 | 0 |
| 63 | ***New*** | ***Street Landscape Irrigation Repair 2017*** | ***400,000*** | ***0*** | ***0*** | ***150,000*** | ***200,000*** | ***50,000*** | ***0*** |
| 64 | New | Street Resurfacing Project 2016 | 2,650,000 | 0 | 2,650,000 | 0 | 0 | 0 | 0 |
| 65 | New | Street Resurfacing Project 2017 | 4,500,000 | 0 | 0 | 4,500,000 | 0 | 0 | 0 |
| 66 | New | Street Resurfacing Project 2018 | 4,500,000 | 0 | 0 | 0 | 4,500,000 | 0 | 0 |
| 67 | New | Street Resurfacing Project 2019 | 4,500,000 | 0 | 0 | 0 | 0 | 4,500,000 | 0 |
| 68 | ***New*** | ***Street Resurfacing Project 2020*** | ***4,500,000*** | ***0*** | ***0*** | ***0*** | ***0*** | ***0*** | ***4,500,000*** |
| 69 | ***New*** | ***TASP Underground Utility District*** | ***80,000*** | ***0*** | ***40,000*** | ***40,000*** | ***0*** | ***0*** | ***0*** |
| 70 | ***New*** | ***Traffic Management Enhancements 2020*** | ***200,000*** | ***0*** | ***0*** | ***0*** | ***0*** | ***0*** | ***200,000*** |
| 71 | New | Traffic Signal Installation | 350,000 | 0 | 0 | 350,000 | 0 | 0 | 0 |
| 72 | ***New*** | ***Utility Undergrounding 2020*** | ***50,000*** | ***0*** | ***0*** | ***0*** | ***0*** | ***0*** | ***50,000*** |
| | | **Defunding Subtotal** | | | | | | | |
| | | **Funding Subtotal** | | | **3,596,960** | | | | |
| | | **TOTAL COST** | **$27,066,889** | **$2,216,929** | **$3,596,960** | **$5,565,000** | **$5,188,000** | **$5,275,000** | **$5,225,000** |

**NOTES**

(a) New projects listed in Bold Italics.

(b) $3.996M of RDA bonds were appropriated for the reconstruction of S. Main Street CIP 4277 on 1/6/15.

(c) FY 2014-15 & 2015-16 funding for street resurfacing related projects total $10.896M

# City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

**SUMMARY OF PROJECT FUNDING SOURCES**

### Streets

| PG | PROJECT | | 2015-16 | | | |
|---|---|---|---|---|---|---|
| | | | Gas Tax Fund | Vehicle Registration Fee | Other | Unidentified Funding |
| 51 | 3402 | McCarthy Blvd. Landscape & Lighting Improvements | 0 | 0 | 75,000 | 0 |
| 52 | 3411 | Sinclair LMD Improvements | 0 | 0 | 0 | 0 |
| 53 | 4253 | Dixon Landing Road Plan Line | 0 | 0 | 31,960 | 0 |
| 54 | 4266 | Street Light Improvements | 0 | 0 | 0 | 0 |
| 55 | 4267 | Soundwall Renovation | 200,000 | 0 | 0 | 0 |
| 56 | 4271 | Bridge Improvements | 200,000 | 0 | 0 | 0 |
| 57 | 4273 | Street Landscape Irrigation Repair 2014 | 150,000 | 0 | 0 | 0 |
| 58 | New | Milpitas Boulevard Plan Line Study | 0 | 0 | 150,000 | 0 |
| 59 | New | Minor Traffic Improvements 2016 | 100,000 | 0 | 0 | 0 |
| 60 | New | Minor Traffic Improvements 2018 | 0 | 0 | 0 | 0 |
| 61 | ***New*** | ***Minor Traffic Improvements 2020*** | ***0*** | ***0*** | ***0*** | ***0*** |
| 62 | New | S. Milpitas Blvd Bike/Ped. Improvements | 0 | 0 | 0 | 0 |
| 63 | ***New*** | ***Street Landscape Irrigation Repair 2017*** | ***0*** | ***0*** | ***0*** | ***0*** |
| 64 | New | Street Resurfacing Project 2016 | 1,400,000 | 450,000 | 800,000 | 0 |
| 65 | New | Street Resurfacing Project 2017 | 0 | 0 | 0 | 0 |
| 66 | New | Street Resurfacing Project 2018 | 0 | 0 | 0 | 0 |
| 67 | New | Street Resurfacing Project 2019 | 0 | 0 | 0 | 0 |
| 68 | ***New*** | ***Street Resurfacing Project 2020*** | ***0*** | ***0*** | ***0*** | ***0*** |
| 69 | ***New*** | ***TASP Underground Utility District*** | ***0*** | ***0*** | ***40,000*** | ***0*** |
| 70 | ***New*** | ***Traffic Management Enhancements 2020*** | ***0*** | ***0*** | ***0*** | ***0*** |
| 71 | New | Traffic Signal Installation | 0 | 0 | 0 | 0 |
| 72 | ***New*** | ***Utility Undergrounding 2020*** | ***0*** | ***0*** | ***0*** | ***0*** |
| | | **Total Defunding by Funding Source** | **(0)** | **(0)** | **(0)** | **(0)** |
| | | **Total Funding by Funding Source** | **2,050,000** | **450,000** | **1,096,960** | **0** |
| | | **Subtotal by Funding Source** | **2,050,000** | **450,000** | **1,096,960** | **0** |
| | | **Subtotal by Year** | **3,596,960** | | | |

**NOTES**

(a) New projects listed in Bold Italics.

(b) "Other" are identified on detailed project sheets.

(c) Grants are identified on detailed project sheets.

# City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

**SUMMARY OF PROJECT FUNDING SOURCES**

### Streets

| PG | PROJECT | | 2016-17 | | | |
|---|---|---|---|---|---|---|
| | | | Gas Tax Fund | Vehicle Registration Fee | Other | Unidentified Funding |
| 51 | 3402 | McCarthy Blvd. Landscape & Lighting Improvements | 0 | 0 | 75,000 | 0 |
| 52 | 3411 | Sinclair LMD Improvements | 0 | 0 | 0 | 0 |
| 53 | 4253 | Dixon Landing Road Plan Line | 0 | 0 | 0 | 0 |
| 54 | 4266 | Street Light Improvements | 0 | 0 | 0 | 0 |
| 55 | 4267 | Soundwall Renovation | 300,000 | 0 | 0 | 0 |
| 56 | 4271 | Bridge Improvements | 50,000 | 0 | 0 | 0 |
| 57 | 4273 | Street Landscape Irrigation Repair 2014 | 0 | 0 | 0 | 0 |
| 58 | New | Milpitas Boulevard Plan Line Study | 0 | 0 | 0 | 0 |
| 59 | New | Minor Traffic Improvements 2016 | 100,000 | 0 | 0 | 0 |
| 60 | New | Minor Traffic Improvements 2018 | 0 | 0 | 0 | 0 |
| 61 | ***New*** | ***Minor Traffic Improvements 2020*** | ***0*** | ***0*** | ***0*** | ***0*** |
| 62 | New | S. Milpitas Blvd Bike/Ped. Improvements | 0 | 0 | 0 | 0 |
| 63 | ***New*** | ***Street Landscape Irrigation Repair 2017*** | ***150,000*** | ***0*** | ***0*** | ***0*** |
| 64 | New | Street Resurfacing Project 2016 | 0 | 0 | 0 | 0 |
| 65 | New | Street Resurfacing Project 2017 | 1,300,000 | 450,000 | 800,000 | 1,950,000 |
| 66 | New | Street Resurfacing Project 2018 | 0 | 0 | 0 | 0 |
| 67 | New | Street Resurfacing Project 2019 | 0 | 0 | 0 | 0 |
| 68 | ***New*** | ***Street Resurfacing Project 2020*** | ***0*** | ***0*** | ***0*** | ***0*** |
| 69 | ***New*** | ***TASP Underground Utility District*** | ***0*** | ***0*** | ***40,000*** | ***0*** |
| 70 | ***New*** | ***Traffic Management Enhancements 2020*** | ***0*** | ***0*** | ***0*** | ***0*** |
| 71 | New | Traffic Signal Installation | 0 | 0 | 350,000 | 0 |
| 72 | ***New*** | ***Utility Undergrounding 2020*** | ***0*** | ***0*** | ***0*** | ***0*** |
| | | **Total Defunding by Funding Source** | **0** | **0** | **0** | **0** |
| | | **Total Funding by Funding Source** | **1,900,000** | **450,000** | **1,265,000** | **1,950,000** |
| | | **Subtotal by Funding Source** | **1,900,000** | **450,000** | **1,265,000** | **1,950,000** |
| | | **Subtotal by Year** | **5,565,000** | | | |

**NOTES**

(a) New projects listed in Bold Italics.

(b) "Other" are identified on detailed project sheets.

(c) Grants are identified on detailed project sheets.

## City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

**SUMMARY OF PROJECT FUNDING SOURCES**

### Streets

| PG | PROJECT | | 2017-18 | | | |
|---|---|---|---|---|---|---|
| | | | Gas Tax Fund | Vehicle Registration Fee | Other | Unidentified Funding |
| 51 | 3402 | McCarthy Blvd. Landscape & Lighting Improvements | 0 | 0 | 75,000 | 0 |
| 52 | 3411 | Sinclair LMD Improvements | 0 | 0 | 13,000 | 0 |
| 53 | 4253 | Dixon Landing Road Plan Line | 0 | 0 | 0 | 0 |
| 54 | 4266 | Street Light Improvements | 0 | 0 | 0 | 0 |
| 55 | 4267 | Soundwall Renovation | 0 | 0 | 0 | 0 |
| 56 | 4271 | Bridge Improvements | 300,000 | 0 | 0 | 0 |
| 57 | 4273 | Street Landscape Irrigation Repair 2014 | 0 | 0 | 0 | 0 |
| 58 | New | Milpitas Boulevard Plan Line Study | 0 | 0 | 0 | 0 |
| 59 | New | Minor Traffic Improvements 2016 | 0 | 0 | 0 | 0 |
| 60 | New | Minor Traffic Improvements 2018 | 100,000 | 0 | 0 | 0 |
| 61 | ***New*** | ***Minor Traffic Improvements 2020*** | ***0*** | ***0*** | ***0*** | ***0*** |
| 62 | New | S. Milpitas Blvd Bike/Ped. Improvements | 0 | 0 | 0 | 0 |
| 63 | ***New*** | ***Street Landscape Irrigation Repair 2017*** | ***200,000*** | ***0*** | ***0*** | ***0*** |
| 64 | New | Street Resurfacing Project 2016 | 0 | 0 | 0 | 0 |
| 65 | New | Street Resurfacing Project 2017 | 0 | 0 | 0 | 0 |
| 66 | New | Street Resurfacing Project 2018 | 1,300,000 | 500,000 | 800,000 | 1,900,000 |
| 67 | New | Street Resurfacing Project 2019 | 0 | 0 | 0 | 0 |
| 68 | ***New*** | ***Street Resurfacing Project 2020*** | ***0*** | ***0*** | ***0*** | ***0*** |
| 69 | ***New*** | ***TASP Underground Utility District*** | ***0*** | ***0*** | ***0*** | ***0*** |
| 70 | ***New*** | ***Traffic Management Enhancements 2020*** | ***0*** | ***0*** | ***0*** | ***0*** |
| 71 | New | Traffic Signal Installation | 0 | 0 | 0 | 0 |
| 72 | ***New*** | ***Utility Undergrounding 2020*** | ***0*** | ***0*** | ***0*** | ***0*** |
| | | **Total Defunding by Funding Source** | **0** | **0** | **0** | **0** |
| | | **Total Funding by Funding Source** | **1,900,000** | **500,000** | **888,000** | **1,900,000** |
| | | **Subtotal by Funding Source** | **1,900,000** | **500,000** | **888,000** | **1,900,000** |
| | | **Subtotal by Year** | **5,188,000** | | | |

**NOTES**

(a) New projects listed in Bold Italics.

(b) "Other" are identified on detailed project sheets.

(c) Grants are identified on detailed project sheets.

# City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

**SUMMARY OF PROJECT FUNDING SOURCES**

## Streets

| PG | PROJECT | | 2018-19 | | | |
|---|---|---|---|---|---|---|
| | | | Gas Tax Fund | Vehicle Registration Fee | Other | Unidentified Funding |
| 51 | 3402 | McCarthy Blvd. Landscape & Lighting Improvements | 0 | 0 | 75,000 | 0 |
| 52 | 3411 | Sinclair LMD Improvements | 0 | 0 | 0 | 0 |
| 53 | 4253 | Dixon Landing Road Plan Line | 0 | 0 | 0 | 0 |
| 54 | 4266 | Street Light Improvements | 250,000 | 0 | 0 | 0 |
| 55 | 4267 | Soundwall Renovation | 100,000 | 0 | 0 | 0 |
| 56 | 4271 | Bridge Improvements | 0 | 0 | 0 | 0 |
| 57 | 4273 | Street Landscape Irrigation Repair 2014 | 0 | 0 | 0 | 0 |
| 58 | New | Milpitas Boulevard Plan Line Study | 0 | 0 | 0 | 0 |
| 59 | New | Minor Traffic Improvements 2016 | 0 | 0 | 0 | 0 |
| 60 | New | Minor Traffic Improvements 2018 | 100,000 | 0 | 0 | 0 |
| 61 | ***New*** | ***Minor Traffic Improvements 2020*** | ***0*** | ***0*** | ***0*** | ***0*** |
| 62 | New | S. Milpitas Blvd Bike/Ped. Improvements | 40,000 | 0 | 160,000 | 0 |
| 63 | ***New*** | ***Street Landscape Irrigation Repair 2017*** | ***50,000*** | ***0*** | ***0*** | ***0*** |
| 64 | New | Street Resurfacing Project 2016 | 0 | 0 | 0 | 0 |
| 65 | New | Street Resurfacing Project 2017 | 0 | 0 | 0 | 0 |
| 66 | New | Street Resurfacing Project 2018 | 0 | 0 | 0 | 0 |
| 67 | New | Street Resurfacing Project 2019 | 1,300,000 | 500,000 | 800,000 | 1,900,000 |
| 68 | ***New*** | ***Street Resurfacing Project 2020*** | ***0*** | ***0*** | ***0*** | ***0*** |
| 69 | ***New*** | ***TASP Underground Utility District*** | ***0*** | ***0*** | ***0*** | ***0*** |
| 70 | ***New*** | ***Traffic Management Enhancements 2020*** | ***0*** | ***0*** | ***0*** | ***0*** |
| 71 | New | Traffic Signal Installation | 0 | 0 | 0 | 0 |
| 72 | ***New*** | ***Utility Undergrounding 2020*** | ***0*** | ***0*** | ***0*** | ***0*** |
| | | **Total Defunding by Funding Source** | **0** | **0** | **0** | **0** |
| | | **Total Funding by Funding Source** | **1,840,000** | **500,000** | **1,035,000** | **1,900,000** |
| | | **Subtotal by Funding Source** | **1,840,000** | **500,000** | **1,035,000** | **1,900,000** |
| | | **Subtotal by Year** | **5,275,000** | | | |

**NOTES**

(a) New projects listed in Bold Italics.

(b) "Other" are identified on detailed project sheets.

(c) Grants are identified on detailed project sheets.

# City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

**SUMMARY OF PROJECT FUNDING SOURCES**

### Streets

| PG | PROJECT | | 2019-20 | | | |
|---|---|---|---|---|---|---|
| | | | Gas Tax Fund | Vehicle Registration Fee | Other | Unidentified Funding |
| 51 | 3402 | McCarthy Blvd. Landscape & Lighting Improvements | 0 | 0 | 75,000 | 0 |
| 52 | 3411 | Sinclair LMD Improvements | 0 | 0 | 0 | 0 |
| 53 | 4253 | Dixon Landing Road Plan Line | 0 | 0 | 0 | 0 |
| 54 | 4266 | Street Light Improvements | 0 | 0 | 0 | 0 |
| 55 | 4267 | Soundwall Renovation | 150,000 | 0 | 0 | 0 |
| 56 | 4271 | Bridge Improvements | 150,000 | 0 | 0 | 0 |
| 57 | 4273 | Street Landscape Irrigation Repair 2014 | 0 | 0 | 0 | 0 |
| 58 | New | Milpitas Boulevard Plan Line Study | 0 | 0 | 0 | 0 |
| 59 | New | Minor Traffic Improvements 2016 | 0 | 0 | 0 | 0 |
| 60 | New | Minor Traffic Improvements 2018 | 0 | 0 | 0 | 0 |
| 61 | ***New*** | ***Minor Traffic Improvements 2020*** | ***100,000*** | ***0*** | ***0*** | ***0*** |
| 62 | New | S. Milpitas Blvd Bike/Ped. Improvements | 0 | 0 | 0 | 0 |
| 63 | ***New*** | ***Street Landscape Irrigation Repair 2017*** | ***0*** | ***0*** | ***0*** | ***0*** |
| 64 | New | Street Resurfacing Project 2016 | 0 | 0 | 0 | 0 |
| 65 | New | Street Resurfacing Project 2017 | 0 | 0 | 0 | 0 |
| 66 | New | Street Resurfacing Project 2018 | 0 | 0 | 0 | 0 |
| 67 | New | Street Resurfacing Project 2019 | 0 | 0 | 0 | 0 |
| 68 | ***New*** | ***Street Resurfacing Project 2020*** | ***1,300,000*** | ***500,000*** | ***800,000*** | ***1,900,000*** |
| 69 | ***New*** | ***TASP Underground Utility District*** | ***0*** | ***0*** | ***0*** | ***0*** |
| 70 | ***New*** | ***Traffic Management Enhancements 2020*** | ***200,000*** | ***0*** | ***0*** | ***0*** |
| 71 | New | Traffic Signal Installation | 0 | 0 | 0 | 0 |
| 72 | ***New*** | ***Utility Undergrounding 2020*** | ***0*** | ***0*** | ***0*** | ***50,000*** |
| | | **Total Defunding by Funding Source** | **0** | **0** | **0** | **0** |
| | | **Total Funding by Funding Source** | **1,900,000** | **500,000** | **875,000** | **1,950,000** |
| | | **Subtotal by Funding Source** | **1,900,000** | **500,000** | **875,000** | **1,950,000** |
| | | **Subtotal by Year** | **5,225,000** | | | |

**NOTES**

(a) New projects listed in Bold Italics.

(b) "Other" are identified on detailed project sheets.

(c) Grants are identified on detailed project sheets.

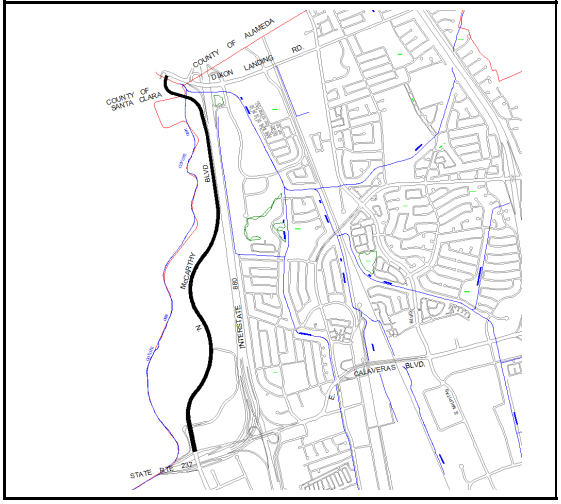
# City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Streets | **3402** | **McCarthy Blvd. Landscape & Lighting Improvements** | 1 |

**CONTACT:** Michael Boitnott [3315]

**PRIORITY:** Improve the Quality of Life

**DIAGRAM**




**DESCRIPTION**

This project provides for design and construction of landscape and irrigation system renovation on McCarthy Boulevard, between Hwy 237 and Dixon Landing Road. This project will also include lighting and other related improvements.

**COMMENTS:**

**Uncommitted Balance as of 2/28/2015:** $149,001

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 85,000 | 0 | 0 | 0 | 0 | 0 | 85,000 |
| Administration | 55,000 | 15,000 | 15,000 | 15,000 | 15,000 | 15,000 | 130,000 |
| Inspection | 33,000 | 5,000 | 5,000 | 5,000 | 5,000 | 5,000 | 58,000 |
| Improvements | 422,000 | 55,000 | 55,000 | 55,000 | 55,000 | 55,000 | 697,000 |
| **Totals** | 595,000 | 75,000 | 75,000 | 75,000 | 75,000 | 75,000 | 970,000 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| LLMD | 595,000 | 75,000 | 75,000 | 75,000 | 75,000 | 75,000 | 970,000 |
| **Totals** | 595,000 | 75,000 | 75,000 | 75,000 | 75,000 | 75,000 | 970,000 |

**FINANCE NOTES**

# City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Streets | **3411** | **Sinclair LMD Improvements** | 1 |

**CONTACT:** Steve Erickson [3301]

**PRIORITY:** Rehabilitation of Existing Capital Assets or Systems

**DIAGRAM**

**DESCRIPTION**

This project provides for design and construction of landscape and irrigation system renovation of 98-1 Lighting and Maintenance District, surrounding the Sinclair Horizon Development. This project will also include lighting and other related improvements.

**COMMENTS:**

**Uncommitted Balance as of 2/28/2015:** $51,515

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 10,000 | 0 | 0 | 0 | 0 | 0 | 10,000 |
| Administration | 12,000 | 0 | 0 | 2,000 | 0 | 0 | 14,000 |
| Inspection | 6,000 | 0 | 0 | 1,000 | 0 | 0 | 7,000 |
| Improvements | 45,000 | 0 | 0 | 10,000 | 0 | 0 | 55,000 |
| **Totals** | 73,000 | 0 | 0 | 13,000 | 0 | 0 | 86,000 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| LLMD | 73,000 | 0 | 0 | 13,000 | 0 | 0 | 86,000 |
| **Totals** | 73,000 | 0 | 0 | 13,000 | 0 | 0 | 86,000 |

**FINANCE NOTES**

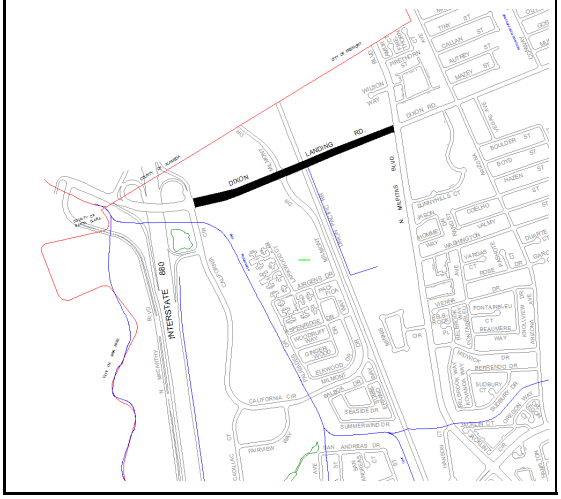
# City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Streets | **4253** | **Dixon Landing Road Plan Line** | 1 |

**CONTACT:** Steve Chan [3324]

**PRIORITY:** Studies and Analyses

**DIAGRAM**




**DESCRIPTION**

This project provides for the preparation of a Plan Line Study to evaluate the widening of Dixon Landing Road from N. Milpitas Boulevard to I-880 from 2 lanes to 3 lanes in each direction. The study will evaluate the right of way and feasibility of relocating sidewalks, street lighting, adding bicycle lanes and streetscape in medians and planter strips. This project will also include 35% level design in order to develop an Engineer's Estimate for design and construction of improvements.

**COMMENTS:**

The Plan Line Study will also be coordinated with the BART roadway/bridge improvements, where BART crosses Dixon Landing Road.

**Uncommitted Balance as of 2/28/2015:** $279,497

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 120,192 | 31,960 | 0 | 0 | 0 | 0 | 152,152 |
| Administration | 30,000 | 0 | 0 | 0 | 0 | 0 | 30,000 |
| Surveying | 40,000 | 0 | 0 | 0 | 0 | 0 | 40,000 |
| Land | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Improvements | 105,271 | 0 | 0 | 0 | 0 | 0 | 105,271 |
| **Totals** | 295,463 | 31,960 | 0 | 0 | 0 | 0 | 327,423 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Traffic Impact Fees | 270,463 | 31,960 | 0 | 0 | 0 | 0 | 302,423 |
| Street Fund | 25,000 | 0 | 0 | 0 | 0 | 0 | 25,000 |
| **Totals** | 295,463 | 31,960 | 0 | 0 | 0 | 0 | 327,423 |

**FINANCE NOTES**

Council 3/16/10: Approval to apply for Grant: $150,000, Caltrans Community Base Trasportation Planning (CBTP)
Traffic Impact Fees: $50,000 - Walmart and Joe McCarthy Development
City Council - Midyear appropriation $105,271 from Traffic Impact Fees
3/11:Defund $150,000 since Caltrans Community Base Trasportation Planning (CBTP) was not received
City did not receive $150K grant in 2010-11.
City Council 2/7/12 - Midyear Budget Appropriation of $115,192 from Traffic Impact Fee interest.
Traffic Impact Fee: $31,960 - Walmart

## City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Streets | **4266** | **Street Light Improvements** | 1 |

**CONTACT:** Steve Chan [3324]

**PRIORITY:** Rehabilitation of Existing Capital Assets or Systems

**DESCRIPTION**

This project will provide for various improvements to renovate and replace some of this aging infrastructure, including replacement of street ballasts/lamps, steel light poles, replacement of electrical wiring systems, modification of foundations, and other related improvements. Work will be performed based on a prioritized database inventory. Scope will also include a pilot program to convert a number of existing street lights to energy efficient Light Emitting Diode (LED) lamps and control systems.

**COMMENTS:**

This project could be eligible for a $1million PG&E matching program.

**Uncommitted Balance as of 2/28/2015:** $322,193

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 50,000 | 0 | 0 | 0 | 25,000 | 0 | 75,000 |
| Administration | 35,000 | 0 | 0 | 0 | 25,000 | 0 | 60,000 |
| Inspection | 25,000 | 0 | 0 | 0 | 15,000 | 0 | 40,000 |
| Improvements | 365,000 | 0 | 0 | 0 | 185,000 | 0 | 550,000 |
| **Totals** | 475,000 | 0 | 0 | 0 | 250,000 | 0 | 725,000 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Gas Tax Fund | 400,000 | 0 | 0 | 0 | 250,000 | 0 | 650,000 |
| Street Fund | 75,000 | 0 | 0 | 0 | 0 | 0 | 75,000 |
| **Totals** | 475,000 | 0 | 0 | 0 | 250,000 | 0 | 725,000 |

**FINANCE NOTES**

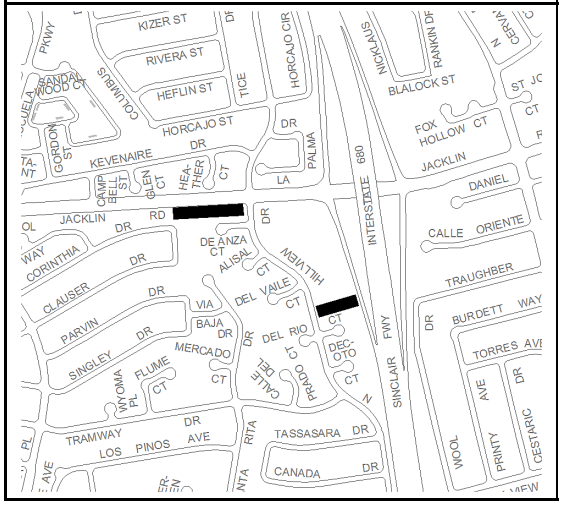
## City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Streets | **4267** | **Soundwall Renovation** | 1 |

**CONTACT:** Julie Waldron [3314]

**PRIORITY:** Rehabilitation of Existing Capital Assets or Systems

**DIAGRAM**




**DESCRIPTION**

This project renovates the City owned sound walls along N. Milpitas Boulevard, Escuela Parkway, Jacklin Road at Horcajo, La Palma, Hillview Drive at Tularcitos Creek, Nicklaus at N. Park Victoria and other locations. Portions of the walls have deteriorated and will need to be structurally repaired or completely replaced. In some locations, the ground elevation on the residence side is much higher than on the public street side. The soundwalls were not designed as retaining walls, so they require structural retrofit work or replacement.

**COMMENTS:**

**Uncommitted Balance as of 2/28/2015:** $325,019

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 60,000 | 10,000 | 50,000 | 0 | 10,000 | 10,000 | 140,000 |
| Administration | 45,000 | 20,000 | 20,000 | 0 | 10,000 | 15,000 | 110,000 |
| Inspection | 40,000 | 10,000 | 30,000 | 0 | 5,000 | 5,000 | 90,000 |
| Improvements | 333,466 | 160,000 | 200,000 | 0 | 75,000 | 120,000 | 888,466 |
| **Totals** | 478,466 | 200,000 | 300,000 | 0 | 100,000 | 150,000 | 1,228,466 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Street Fund | 478,466 | 0 | 0 | 0 | 0 | 0 | 478,466 |
| Gas Tax Fund | 0 | 200,000 | 300,000 | 0 | 100,000 | 150,000 | 750,000 |
| **Totals** | 478,466 | 200,000 | 300,000 | 0 | 100,000 | 150,000 | 1,228,466 |

**FINANCE NOTES**

## City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Streets | **4271** | **Bridge Improvements** | 3 |

**CONTACT:** Steve Erickson [3301]

**PRIORITY:** Rehabilitation of Existing Capital Assets or Systems

**DESCRIPTION**

The city owns and maintains eighteen roadway bridges and five pedestrian/bicycle bridges. The program includes a variety of preventative maintenance improvements including deck resurfacing, crack sealing, and improvements identified in the bi-annual bridge inspection reports performed by the California Department of Transportation.

**COMMENTS:**

**Uncommitted Balance as of 2/28/2015:** $20,612

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 20,000 | 20,000 | 0 | 20,000 | 0 | 20,000 | 80,000 |
| Administration | 20,000 | 20,000 | 0 | 20,000 | 0 | 20,000 | 80,000 |
| Inspection | 10,000 | 10,000 | 0 | 10,000 | 0 | 10,000 | 40,000 |
| Improvements | 100,000 | 150,000 | 50,000 | 250,000 | 0 | 100,000 | 650,000 |
| **Totals** | 150,000 | 200,000 | 50,000 | 300,000 | 0 | 150,000 | 850,000 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Gas Tax Fund | 150,000 | 200,000 | 50,000 | 300,000 | 0 | 150,000 | 850,000 |
| **Totals** | 150,000 | 200,000 | 50,000 | 300,000 | 0 | 150,000 | 850,000 |

**FINANCE NOTES**

## City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Streets | **4273** | **Street Landscape Irrigation Repair 2014** | 1 |

**CONTACT:** Steve Erickson [3301]

**PRIORITY:** Rehabilitation of Existing Capital Assets or Systems

**DESCRIPTION**

This project provides for the repair and replacement of streetscape and median irrigation systems and related equipment on City streets.

**COMMENTS:**

The City has many miles of landscaped street medians and curb planter areas in the City. The older irrigation systems are not well documented, leak, and are inefficient and do not provide suitable irrigation to support healthy landscape. The project would also provide for restoration of existing landscaping within the medians and curb planters.

**Uncommitted Balance as of 2/28/2015:** $131,103

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 20,000 | 25,000 | 0 | 0 | 0 | 0 | 45,000 |
| Administration | 10,000 | 15,000 | 0 | 0 | 0 | 0 | 25,000 |
| Inspection | 5,000 | 10,000 | 0 | 0 | 0 | 0 | 15,000 |
| Improvements | 115,000 | 100,000 | 0 | 0 | 0 | 0 | 215,000 |
| **Totals** | 150,000 | 150,000 | 0 | 0 | 0 | 0 | 300,000 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Street Fund | 150,000 | 0 | 0 | 0 | 0 | 0 | 150,000 |
| Gas Tax Fund | 0 | 150,000 | 0 | 0 | 0 | 0 | 150,000 |
| **Totals** | 150,000 | 150,000 | 0 | 0 | 0 | 0 | 300,000 |

**FINANCE NOTES**

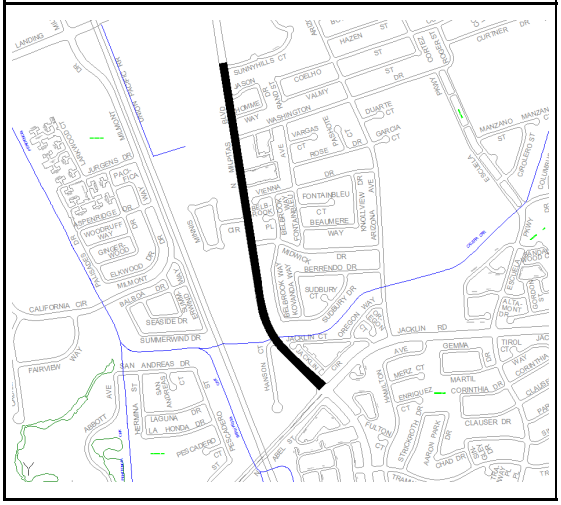
# City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Streets | **New** | **Milpitas Boulevard Plan Line Study** | 1 |

**CONTACT:** Steve Erickson [3301]

**PRIORITY:** Studies and Analyses

**DIAGRAM**




**DESCRIPTION**

This project provides for the preparation of a Plan Line Study to evaluate the feasibility of installing landscaped median islands on N. Milpitas Blvd between Jacklin and Sunnyhills Ct. Raised medians can provide improvements to traffic safety and provide an opportunity for street beautification. This study will also evaluate the feasibility of installing other street amenities such as street lighting, access control, pedestrian and bicycle improvements.

**COMMENTS:**

Plan Line Study will include an extensive community outreach plan, and will recommend a funding plan for the improvement.

**Uncommitted Balance as of 2/28/2015:** $0

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 0 | 115,000 | 0 | 0 | 0 | 0 | 115,000 |
| Administration | 0 | 10,000 | 0 | 0 | 0 | 0 | 10,000 |
| Surveying | 0 | 25,000 | 0 | 0 | 0 | 0 | 25,000 |
| Inspection | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Land | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Improvements | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Equipment | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 0 | 150,000 | 0 | 0 | 0 | 0 | 150,000 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Traffic Impact Fees | 0 | 150,000 | 0 | 0 | 0 | 0 | 150,000 |
| **Totals** | 0 | 150,000 | 0 | 0 | 0 | 0 | 150,000 |

**FINANCE NOTES**

## City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | Estimate Level |
|---|---|---|
| Streets | **New** **Minor Traffic Improvements 2016** | 1 |

**CONTACT:** Steve Chan [3324]

**PRIORITY:** Rehabilitation of Existing Capital Assets or Systems

**DESCRIPTION**

This project provides for traffic studies, speed surveys, and traffic counts. This project also includes minor traffic improvements that result from community service requests. Typical improvements include roadway markings/signage improvements and the installation of roadway undulators.

**COMMENTS:**

**Uncommitted Balance as of 2/28/2015:** $0

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 0 | 20,000 | 20,000 | 0 | 0 | 0 | 40,000 |
| Administration | 0 | 10,000 | 10,000 | 0 | 0 | 0 | 20,000 |
| Improvements | 0 | 70,000 | 70,000 | 0 | 0 | 0 | 140,000 |
| **Totals** | 0 | 100,000 | 100,000 | 0 | 0 | 0 | 200,000 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Gas Tax Fund | 0 | 100,000 | 100,000 | 0 | 0 | 0 | 200,000 |
| **Totals** | 0 | 100,000 | 100,000 | 0 | 0 | 0 | 200,000 |

**FINANCE NOTES**

## City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Streets | **New** | **Minor Traffic Improvements 2018** | 1 |

**CONTACT:** Steve Chan [3324]

**PRIORITY:** Rehabilitation of Existing Capital Assets or Systems

**DESCRIPTION**

This project provides for traffic studies, speed surveys, and traffic counts. This project also includes minor traffic improvements that result from community service requests. Typical improvements include roadway markings/signage improvements and the installation of roadway undulators.

**COMMENTS:**

**Uncommitted Balance as of 2/28/2015:** $0

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 0 | 0 | 0 | 20,000 | 20,000 | 0 | 40,000 |
| Administration | 0 | 0 | 0 | 10,000 | 10,000 | 0 | 20,000 |
| Improvements | 0 | 0 | 0 | 70,000 | 70,000 | 0 | 140,000 |
| **Totals** | 0 | 0 | 0 | 100,000 | 100,000 | 0 | 200,000 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Gas Tax Fund | 0 | 0 | 0 | 100,000 | 100,000 | 0 | 200,000 |
| **Totals** | 0 | 0 | 0 | 100,000 | 100,000 | 0 | 200,000 |

**FINANCE NOTES**

# City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Streets | **New** | **Minor Traffic Improvements 2020** | 1 |

**CONTACT:** Steve Chan [3324]

**PRIORITY:** Rehabilitation of Existing Capital Assets or Systems

**DESCRIPTION**

This project provides for traffic studies, speed surveys, and traffic counts. This project also includes minor traffic improvements that result from community service requests. Typical improvements include roadway markings/signage improvements and the installation of roadway undulators.

**COMMENTS:**

**Uncommitted Balance as of 2/28/2015:** $0

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 0 | 0 | 0 | 0 | 0 | 20,000 | 20,000 |
| Administration | 0 | 0 | 0 | 0 | 0 | 10,000 | 10,000 |
| Improvements | 0 | 0 | 0 | 0 | 0 | 70,000 | 70,000 |
| **Totals** | 0 | 0 | 0 | 0 | 0 | 100,000 | 100,000 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Gas Tax Fund | 0 | 0 | 0 | 0 | 0 | 100,000 | 100,000 |
| **Totals** | 0 | 0 | 0 | 0 | 0 | 100,000 | 100,000 |

**FINANCE NOTES**

## City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Streets | **New** | **S. Milpitas Blvd Bike/Ped. Improvements** | 1 |

**CONTACT:** Steve Chan [3324]

**PRIORITY:** Rehabilitation of Existing Capital Assets or Systems

**DIAGRAM**

**DESCRIPTION**

This project provides a Plan Line Study to evaluate opportunities and constraints to install Class I bicycle lanes on either side of Milpitas Blvd. and to provide improved sidewalk facilities on South Milpitas Blvd. between Calaveras Blvd. and Montague Expressway. Roadway modifications will also be required to accommodate these enhanced facilities. The Plan Line Study will also identify additional right of way required for these improvements.

**COMMENTS:**

This project has been added to the VTP 2040 Plan for State Regional Grant Funding.

**Uncommitted Balance as of 2/28/2015:** $0

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 0 | 0 | 0 | 0 | 135,000 | 0 | 135,000 |
| Administration | 0 | 0 | 0 | 0 | 50,000 | 0 | 50,000 |
| Surveying | 0 | 0 | 0 | 0 | 15,000 | 0 | 15,000 |
| Improvements | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 0 | 0 | 0 | 0 | 200,000 | 0 | 200,000 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Grants/Reimbursement/Develope | 0 | 0 | 0 | 0 | 160,000 | 0 | 160,000 |
| Gas Tax Fund | 0 | 0 | 0 | 0 | 40,000 | 0 | 40,000 |
| **Totals** | 0 | 0 | 0 | 0 | 200,000 | 0 | 200,000 |

**FINANCE NOTES**

## City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Streets | **New** | **Street Landscape Irrigation Repair 2017** | 1 |

**CONTACT:** Steve Erickson [3301]

**PRIORITY:** Rehabilitation of Existing Capital Assets or Systems

**DESCRIPTION**

This project provides for the repair and replacement of streetscape and median irrigation systems and related equipment on City streets.

**COMMENTS:**

The City has many miles of landscaped street medians and curb planter areas in the City. The older irrigation systems are not well documented, leak, and are inefficient and do not provide suitable irrigation to support healthy landscape. The project would also provide for restoration of existing landscaping within the medians and curb planters. Due to the drought conditions, new landscape planting would be limited to those areas irrigated with recycled water - Alder Drive, Escuela Drive, Tasman Drive, and Thompson Street.

**Uncommitted Balance as of 2/28/2015:** $0

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 0 | 0 | 25,000 | 25,000 | 0 | 0 | 50,000 |
| Administration | 0 | 0 | 15,000 | 20,000 | 0 | 0 | 35,000 |
| Inspection | 0 | 0 | 10,000 | 15,000 | 0 | 0 | 25,000 |
| Improvements | 0 | 0 | 100,000 | 140,000 | 50,000 | 0 | 290,000 |
| **Totals** | 0 | 0 | 150,000 | 200,000 | 50,000 | 0 | 400,000 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Gas Tax Fund | 0 | 0 | 150,000 | 200,000 | 50,000 | 0 | 400,000 |
| **Totals** | 0 | 0 | 150,000 | 200,000 | 50,000 | 0 | 400,000 |

**FINANCE NOTES**

# City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | Estimate Level |
|---|---|---|
| Streets | **New** **Street Resurfacing Project 2016** | 1 |

**CONTACT:** Jimmy Nguyen [3318]

**PRIORITY:** Rehabilitation of Existing Capital Assets or Systems

**DESCRIPTION**

This project provides for a variety of pavement resurfacing treatments, from slurry seal to major rehabilitation and reconstruction. Streets are selected for improvements based on the City's Pavement Management System to optimize the pavement condition based on available the budget. There are currently over 123 centerline miles of streets that are owned and maintained by the City of Milpitas. This project will also include citywide replacement of existing curb, gutter and sidewalk, installation of ADA ramps and implementation of Class II bike lanes and Class III bike route facilities as described in the 2009 updated City of Milpitas Bikeway Master Plan.

**COMMENTS:**

The project also includes installation of ADA ramps along roads that are reconstructed or receive an AC overlay. Annually a visual inspection of city sidewalks is conducted to determine and establish a priority list of candidate sites for replacement. A PCI of 70 is defined as “good condition” by Metropolitan Transportation Commission (MTC).

**Uncommitted Balance as of 2/28/2015:** $0

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 0 | 140,000 | 0 | 0 | 0 | 0 | 140,000 |
| Administration | 0 | 50,000 | 0 | 0 | 0 | 0 | 50,000 |
| Inspection | 0 | 60,000 | 0 | 0 | 0 | 0 | 60,000 |
| Improvements | 0 | 2,400,000 | 0 | 0 | 0 | 0 | 2,400,000 |
| **Totals** | 0 | 2,650,000 | 0 | 0 | 0 | 0 | 2,650,000 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Transient Occupancy Tax (TOT) | 0 | 600,000 | 0 | 0 | 0 | 0 | 600,000 |
| Gas Tax Fund | 0 | 1,400,000 | 0 | 0 | 0 | 0 | 1,400,000 |
| Water Fund | 0 | 100,000 | 0 | 0 | 0 | 0 | 100,000 |
| Sewer Fund | 0 | 100,000 | 0 | 0 | 0 | 0 | 100,000 |
| Vehicle Registration Fee | 0 | 450,000 | 0 | 0 | 0 | 0 | 450,000 |
| **Totals** | 0 | 2,650,000 | 0 | 0 | 0 | 0 | 2,650,000 |

**FINANCE NOTES**

## City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Streets | **New** | **Street Resurfacing Project 2017** | 1 |

**CONTACT:** Jimmy Nguyen [3318]

**PRIORITY:** Rehabilitation of Existing Capital Assets or Systems

**DESCRIPTION**

This project provides for a variety of pavement resurfacing treatments, from slurry seal to major rehabilitation and reconstruction. Streets are selected for improvements based on the City's Pavement Management System to optimize the pavement condition based on available the budget. There are currently over 123 centerline miles of streets that are owned and maintained by the City of Milpitas. This project will also include citywide replacement of existing curb, gutter and sidewalk, installation of ADA ramps and implementation of Class II bike lanes and Class III bike route facilities as described in the 2009 updated City of Milpitas Bikeway Master Plan.

**COMMENTS:**

The project also includes installation of ADA ramps along roads that are reconstructed or receive an AC overlay. Annually a visual inspection of city sidewalks is conducted to determine and establish a priority list of candidate sites for replacement. An annual funding of $4.5 million is required to maintain the city wide pavement condition index of 70. A PCI of 70 is defined as “good condition” by Metropolitan Transportation Commission (MTC).

**Uncommitted Balance as of 2/28/2015:** $0

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 0 | 0 | 140,000 | 0 | 0 | 0 | 140,000 |
| Administration | 0 | 0 | 50,000 | 0 | 0 | 0 | 50,000 |
| Inspection | 0 | 0 | 60,000 | 0 | 0 | 0 | 60,000 |
| Improvements | 0 | 0 | 4,250,000 | 0 | 0 | 0 | 4,250,000 |
| **Totals** | 0 | 0 | 4,500,000 | 0 | 0 | 0 | 4,500,000 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Gas Tax Fund | 0 | 0 | 1,300,000 | 0 | 0 | 0 | 1,300,000 |
| Sewer Fund | 0 | 0 | 100,000 | 0 | 0 | 0 | 100,000 |
| Water Fund | 0 | 0 | 100,000 | 0 | 0 | 0 | 100,000 |
| Unidentified Funding | 0 | 0 | 1,950,000 | 0 | 0 | 0 | 1,950,000 |
| Vehicle Registration Fee | 0 | 0 | 450,000 | 0 | 0 | 0 | 450,000 |
| Transient Occupancy Tax (TOT) | 0 | 0 | 600,000 | 0 | 0 | 0 | 600,000 |
| **Totals** | 0 | 0 | 4,500,000 | 0 | 0 | 0 | 4,500,000 |

**FINANCE NOTES**

## City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Streets | **New** | **Street Resurfacing Project 2018** | 1 |

**CONTACT:** Jimmy Nguyen [3318]

**PRIORITY:** Rehabilitation of Existing Capital Assets or Systems

**DESCRIPTION**

This project provides for a variety of pavement resurfacing treatments, from slurry seal to major rehabilitation and reconstruction. Streets are selected for improvements based on the City's Pavement Management System to optimize the pavement condition based on available the budget. There are currently over 123 centerline miles of streets that are owned and maintained by the City of Milpitas. This project will also include citywide replacement of existing curb, gutter and sidewalk, installation of ADA ramps and implementation of Class II bike lanes and Class III bike route facilities as described in the 2009 updated City of Milpitas Bikeway Master Plan.

**COMMENTS:**

The project also includes installation of ADA ramps along roads that are reconstructed or receive an AC overlay. Annually a visual inspection of city sidewalks is conducted to determine and establish a priority list of candidate sites for replacement. An annual funding of $4.5 million is required to maintain the city wide pavement condition index of 70. A PCI of 70 is defined as “good condition” by Metropolitan Transportation Commission (MTC).

**Uncommitted Balance as of 2/28/2015:** $0

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 0 | 0 | 0 | 140,000 | 0 | 0 | 140,000 |
| Administration | 0 | 0 | 0 | 50,000 | 0 | 0 | 50,000 |
| Inspection | 0 | 0 | 0 | 60,000 | 0 | 0 | 60,000 |
| Improvements | 0 | 0 | 0 | 4,250,000 | 0 | 0 | 4,250,000 |
| **Totals** | 0 | 0 | 0 | 4,500,000 | 0 | 0 | 4,500,000 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Vehicle Registration Fee | 0 | 0 | 0 | 500,000 | 0 | 0 | 500,000 |
| Transient Occupancy Tax (TOT) | 0 | 0 | 0 | 600,000 | 0 | 0 | 600,000 |
| Gas Tax Fund | 0 | 0 | 0 | 1,300,000 | 0 | 0 | 1,300,000 |
| Sewer Fund | 0 | 0 | 0 | 100,000 | 0 | 0 | 100,000 |
| Unidentified Funding | 0 | 0 | 0 | 1,900,000 | 0 | 0 | 1,900,000 |
| Water Fund | 0 | 0 | 0 | 100,000 | 0 | 0 | 100,000 |
| **Totals** | 0 | 0 | 0 | 4,500,000 | 0 | 0 | 4,500,000 |

**FINANCE NOTES**

## City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Streets | **New** | **Street Resurfacing Project 2019** | 1 |

**CONTACT:** Jimmy Nguyen [3318]

**PRIORITY:** Rehabilitation of Existing Capital Assets or Systems

**DESCRIPTION**

This project provides for a variety of pavement resurfacing treatments, from slurry seal to major rehabilitation and reconstruction. Streets are selected for improvements based on the City's Pavement Management System to optimize the pavement condition based on available the budget. There are currently over 123 centerline miles of streets that are owned and maintained by the City of Milpitas. This project will also include citywide replacement of existing curb, gutter and sidewalk, installation of ADA ramps and implementation of Class II bike lanes and Class III bike route facilities as described in the 2009 updated City of Milpitas Bikeway Master Plan.

**COMMENTS:**

The project also includes installation of ADA ramps along roads that are reconstructed or receive an AC overlay. Annually a visual inspection of city sidewalks is conducted to determine and establish a priority list of candidate sites for replacement. An annual funding of $4.5 million is required to maintain the city wide pavement condition index of 70. A PCI of 70 is defined as “good condition” by Metropolitan Transportation Commission (MTC).

**Uncommitted Balance as of 2/28/2015:** $0

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 0 | 0 | 0 | 0 | 140,000 | 0 | 140,000 |
| Administration | 0 | 0 | 0 | 0 | 50,000 | 0 | 50,000 |
| Inspection | 0 | 0 | 0 | 0 | 60,000 | 0 | 60,000 |
| Improvements | 0 | 0 | 0 | 0 | 4,250,000 | 0 | 4,250,000 |
| **Totals** | 0 | 0 | 0 | 0 | 4,500,000 | 0 | 4,500,000 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Vehicle Registration Fee | 0 | 0 | 0 | 0 | 500,000 | 0 | 500,000 |
| Transient Occupancy Tax (TOT) | 0 | 0 | 0 | 0 | 600,000 | 0 | 600,000 |
| Water Fund | 0 | 0 | 0 | 0 | 100,000 | 0 | 100,000 |
| Sewer Fund | 0 | 0 | 0 | 0 | 100,000 | 0 | 100,000 |
| Gas Tax Fund | 0 | 0 | 0 | 0 | 1,300,000 | 0 | 1,300,000 |
| Unidentified Funding | 0 | 0 | 0 | 0 | 1,900,000 | 0 | 1,900,000 |
| **Totals** | 0 | 0 | 0 | 0 | 4,500,000 | 0 | 4,500,000 |

**FINANCE NOTES**

## City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Streets | **New** | **Street Resurfacing Project 2020** | 1 |

**CONTACT:** Jimmy Nguyen [3318]

**PRIORITY:** Rehabilitation of Existing Capital Assets or Systems

**DESCRIPTION**

This project provides for a variety of pavement resurfacing treatments, from slurry seal to major rehabilitation and reconstruction. Streets are selected for improvements based on the City's Pavement Management System to optimize the pavement condition based on available the budget. There are currently over 123 centerline miles of streets that are owned and maintained by the City of Milpitas. This project will also include citywide replacement of existing curb, gutter and sidewalk, installation of ADA ramps and implementation of Class II bike lanes and Class III bike route facilities as described in the 2009 updated City of Milpitas Bikeway Master Plan.

**COMMENTS:**

The project also includes installation of ADA ramps along roads that are reconstructed or receive an AC overlay. Annually a visual inspection of city sidewalks is conducted to determine and establish a priority list of candidate sites for replacement. An annual funding of $4.5 million is required to maintain the city wide pavement condition index of 70. A PCI of 70 is defined as “good condition” by Metropolitan Transportation Commission (MTC).

**Uncommitted Balance as of 2/28/2015:** $0

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 0 | 0 | 0 | 0 | 0 | 140,000 | 140,000 |
| Administration | 0 | 0 | 0 | 0 | 0 | 50,000 | 50,000 |
| Inspection | 0 | 0 | 0 | 0 | 0 | 60,000 | 60,000 |
| Improvements | 0 | 0 | 0 | 0 | 0 | 4,250,000 | 4,250,000 |
| **Totals** | 0 | 0 | 0 | 0 | 0 | 4,500,000 | 4,500,000 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Transient Occupancy Tax (TOT) | 0 | 0 | 0 | 0 | 0 | 600,000 | 600,000 |
| Sewer Fund | 0 | 0 | 0 | 0 | 0 | 100,000 | 100,000 |
| Gas Tax Fund | 0 | 0 | 0 | 0 | 0 | 1,300,000 | 1,300,000 |
| Unidentified Funding | 0 | 0 | 0 | 0 | 0 | 1,900,000 | 1,900,000 |
| Vehicle Registration Fee | 0 | 0 | 0 | 0 | 0 | 500,000 | 500,000 |
| Water Fund | 0 | 0 | 0 | 0 | 0 | 100,000 | 100,000 |
| **Totals** | 0 | 0 | 0 | 0 | 0 | 4,500,000 | 4,500,000 |

**FINANCE NOTES**

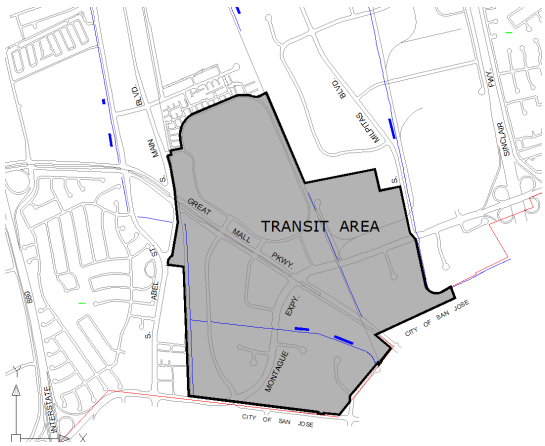
# City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | Estimate Level |
|---|---|---|
| Streets | **New** **TASP Underground Utility District** | 1 |

**CONTACT:** Steve Erickson [3301]

**PRIORITY:** Improve the Quality of Life

**DIAGRAM**




**DESCRIPTION**

This project provided for the creation of a new utility underground district that covers the City's Transit Area Specific Plan redevelopment area. The purpose of the district is to allow for the undergrounding of existing overhead electric, PG&E, Cable TV, and Phone lines. The new district would be administered by the City, with engineering design and construction to be completed by PG&E using the City's Rule 20A funds.

**COMMENTS:**

The initial project proposed within the district would underground approximately 1,130 lineal feet of overhead PG&E electric line along South Milpitas Blvd. from the existing UPRR rail crossing to Montague Expressway and along Montague Expressway from South Milpitas Blvd. to Gladding Ct. The Valley Transportation Authority (VTA) will install the new undergrounding substructure as part of the BART project at their cost. The County Roads and Airports will provide their available Rule 20A funds for PG&E to install the underground cables, the cost of which is estimated at $1.13M. The City would be responsible to administer the project with PG&E. (Approximately $3.6 million in PG&E credits are available as of January 2013.)

**Uncommitted Balance as of 2/28/2015:** $0

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Administration | 0 | 25,000 | 25,000 | 0 | 0 | 0 | 50,000 |
| Inspection | 0 | 15,000 | 15,000 | 0 | 0 | 0 | 30,000 |
| **Totals** | 0 | 40,000 | 40,000 | 0 | 0 | 0 | 80,000 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| TASP Impact Fees | 0 | 40,000 | 40,000 | 0 | 0 | 0 | 80,000 |
| **Totals** | 0 | 40,000 | 40,000 | 0 | 0 | 0 | 80,000 |

**FINANCE NOTES**

## City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Streets | **New** | **Traffic Management Enhancements 2020** | 1 |

**CONTACT:** Steve Chan [3324]

**PRIORITY:** Rehabilitation of Existing Capital Assets or Systems

**DESCRIPTION**

This project provides for the upgrade and deployment of traffic management equipment used to monitor and control the City's roadway network. Typical improvements include the deployment of traffic signal control equipment and upgrades to the traffic operations center's video monitoring equipment.

**COMMENTS:**

This project also provides resources to pursue grant funding sources to augment the traffic management projects.

**Uncommitted Balance as of 2/28/2015:** $0

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 0 | 0 | 0 | 0 | 0 | 25,000 | 25,000 |
| Administration | 0 | 0 | 0 | 0 | 0 | 25,000 | 25,000 |
| Improvements | 0 | 0 | 0 | 0 | 0 | 150,000 | 150,000 |
| **Totals** | 0 | 0 | 0 | 0 | 0 | 200,000 | 200,000 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Gas Tax Fund | 0 | 0 | 0 | 0 | 0 | 200,000 | 200,000 |
| **Totals** | 0 | 0 | 0 | 0 | 0 | 200,000 | 200,000 |

**FINANCE NOTES**

## City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Streets | **New** | **Traffic Signal Installation** | 1 |

**CONTACT:** Steve Chan [3324]

**PRIORITY:** Improve the Quality of Life

**DESCRIPTION**

This project provides for the design and construction of a traffic signal system. The following three intersections are being monitored for traffic signal warrants: Milpitas Blvd & Tramway Dr., S. Park Victoria Dr. & Mt. Shasta Ave., and McCarthy Blvd. & SanDisk Dr.

**COMMENTS:**

The State traffic signal warrant criteria is used to determine the warrants for signalizing an intersection.

**Uncommitted Balance as of 2/28/2015:** $0

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 0 | 0 | 75,000 | 0 | 0 | 0 | 75,000 |
| Administration | 0 | 0 | 25,000 | 0 | 0 | 0 | 25,000 |
| Surveying | 0 | 0 | 10,000 | 0 | 0 | 0 | 10,000 |
| Inspection | 0 | 0 | 40,000 | 0 | 0 | 0 | 40,000 |
| Land | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Improvements | 0 | 0 | 200,000 | 0 | 0 | 0 | 200,000 |
| **Totals** | 0 | 0 | 350,000 | 0 | 0 | 0 | 350,000 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Traffic Impact Fees | 0 | 0 | 350,000 | 0 | 0 | 0 | 350,000 |
| **Totals** | 0 | 0 | 350,000 | 0 | 0 | 0 | 350,000 |

**FINANCE NOTES**

## City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Streets | **New** | **Utility Undergrounding 2020** | 1 |

**CONTACT:** Steve Erickson [3301]

**PRIORITY:** Improve the Quality of Life

**DESCRIPTION**

This project provides preliminary engineering and City administration for the undergrounding of existing overhead electric telephone and CATV facilities at various locations City-wide. Construction is funded by the PG&E Rule 20A Program and other utilities (Approximately $3.6 million in PG&E credits are available as of January 2013.)

**COMMENTS:**

**Uncommitted Balance as of 2/28/2015:** $0

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 0 | 0 | 0 | 0 | 0 | 35,000 | 35,000 |
| Administration | 0 | 0 | 0 | 0 | 0 | 15,000 | 15,000 |
| Inspection | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Equipment | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Building | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 0 | 0 | 0 | 0 | 0 | 50,000 | 50,000 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Unidentified Funding | 0 | 0 | 0 | 0 | 0 | 50,000 | 50,000 |
| **Totals** | 0 | 0 | 0 | 0 | 0 | 50,000 | 50,000 |

**FINANCE NOTES**

# City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM
### WATER PROJECTS SUMMARY

**SUMMARY OF COSTS**

| PG. NO. | PROJECT | | TOTAL COST | PRIOR YEARS | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 |
|---|---|---|---|---|---|---|---|---|---|
| 81 | 2002 | Second SCVWD Water Reservoir and Pump | 6,700,000 | 200,000 | 0 | 6,500,000 | 0 | 0 | 0 |
| 82 | 7076 | Well Upgrade Project | 5,445,000 | 4,645,000 | 0 | 800,000 | 0 | 0 | 0 |
| 83 | 7100 | Water System Seismic Improvements | 7,187,951 | 4,187,951 | 1,000,000 | 1,000,000 | 0 | 1,000,000 | 0 |
| 84 | 7110 | Hydrant Replacement | 240,000 | 170,000 | 0 | 70,000 | 0 | 0 | 0 |
| 85 | 7118 | Dempsey Road Water Line Replacement | 10,575,000 | 3,075,000 | 1,000,000 | 6,500,000 | 0 | 0 | 0 |
| 86 | 7121 | Automated Water Meter Replacement | 6,475,000 | 1,295,000 | 0 | 1,295,000 | 1,295,000 | 1,295,000 | 1,295,000 |
| 87 | New | BART Project - Water Improvements | 2,000,000 | 0 | 2,000,000 | 0 | 0 | 0 | 0 |
| 88 | New | Construction Water | 375,000 | 0 | 0 | 0 | 375,000 | 0 | 0 |
| 89 | New | Hillside Pump Station Equip. Replacement | 150,000 | 0 | 0 | 0 | 150,000 | 0 | 0 |
| 90 | New | Los Coches Backbone | 4,200,000 | 0 | 0 | 850,000 | 3,350,000 | 0 | 0 |
| 91 | New | Minor Water Projects 2017 | 200,000 | 0 | 0 | 100,000 | 100,000 | 0 | 0 |
| 92 | ***New*** | ***Recycled Water Line Extension*** | ***6,500,000*** | ***0*** | ***0*** | ***1,000,000*** | ***5,500,000*** | ***0*** | ***0*** |
| 93 | New | SCVWD Second Water Supply Turnout | 3,100,000 | 0 | 0 | 100,000 | 0 | 500,000 | 2,500,000 |
| 94 | New | Supervisory Control and Data Acquisition (SC | 6,000,000 | 0 | 0 | 0 | 350,000 | 1,000,000 | 4,650,000 |
| 95 | New | Water O&M Database Management | 100,000 | 0 | 0 | 100,000 | 0 | 0 | 0 |
| 96 | New | Water System Replacement 18-19 | 1,000,000 | 0 | 0 | 0 | 0 | 1,000,000 | 0 |
| 97 | New | Water System Replacement Study | 100,000 | 0 | 0 | 0 | 100,000 | 0 | 0 |
| 98 | New | Water Valve Replacement | 600,000 | 0 | 0 | 0 | 600,000 | 0 | 0 |
| | | **Defunding Subtotal** | | | | | | | |
| | | **Funding Subtotal** | | | **4,000,000** | | | | |
| | | **TOTAL COST** | **$60,947,951** | **$13,572,951** | **$4,000,000** | **$18,315,000** | **$11,820,000** | **$4,795,000** | **$8,445,000** |

**SUMMARY OF AVAILABLE FINANCING**

| | | | | | |
|---|---|---|---|---|---|
| **Other** | 0 | 6,700,000 | 0 | 500,000 | 2,500,000 |
| **Unidentified Funding** | 0 | 7,500,000 | 6,100,000 | 1,000,000 | 0 |
| **Water Fund** | 4,000,000 | 3,245,000 | 5,170,000 | 2,795,000 | 3,620,000 |
| **Water Line Extension Fund** | 0 | 870,000 | 550,000 | 500,000 | 2,325,000 |
| ***TOTAL AVAILABLE*** | **$4,000,000** | **$18,315,000** | **$11,820,000** | **$4,795,000** | **$8,445,000** |

**NOTES**

(a) New projects listed in Bold Italics.

# City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

**SUMMARY OF PROJECT FUNDING SOURCES**

### Water

| PG | PROJECT | | 2015-16 | | | |
|---|---|---|---|---|---|---|
| | | | Water Fund | Water Line Extension Fund | Other | Unidentified Funding |
| 81 | 2002 | Second SCVWD Water Reservoir and Pump Station | 0 | 0 | 0 | 0 |
| 82 | 7076 | Well Upgrade Project | 0 | 0 | 0 | 0 |
| 83 | 7100 | Water System Seismic Improvements | 1,000,000 | 0 | 0 | 0 |
| 84 | 7110 | Hydrant Replacement | 0 | 0 | 0 | 0 |
| 85 | 7118 | Dempsey Road Water Line Replacement | 1,000,000 | 0 | 0 | 0 |
| 86 | 7121 | Automated Water Meter Replacement | 0 | 0 | 0 | 0 |
| 87 | New | BART Project - Water Improvements | 2,000,000 | 0 | 0 | 0 |
| 88 | New | Construction Water | 0 | 0 | 0 | 0 |
| 89 | New | Hillside Pump Station Equip. Replacement | 0 | 0 | 0 | 0 |
| 90 | New | Los Coches Backbone | 0 | 0 | 0 | 0 |
| 91 | New | Minor Water Projects 2017 | 0 | 0 | 0 | 0 |
| 92 | ***New*** | ***Recycled Water Line Extension*** | ***0*** | ***0*** | ***0*** | ***0*** |
| 93 | New | SCVWD Second Water Supply Turnout | 0 | 0 | 0 | 0 |
| 94 | New | Supervisory Control and Data Acquisition (SCADA) | 0 | 0 | 0 | 0 |
| 95 | New | Water O&M Database Management | 0 | 0 | 0 | 0 |
| 96 | New | Water System Replacement 18-19 | 0 | 0 | 0 | 0 |
| 97 | New | Water System Replacement Study | 0 | 0 | 0 | 0 |
| 98 | New | Water Valve Replacement | 0 | 0 | 0 | 0 |
| | | **Total Defunding by Funding Source** | **(0)** | **(0)** | **(0)** | **(0)** |
| | | **Total Funding by Funding Source** | **4,000,000** | **0** | **0** | **0** |
| | | **Subtotal by Funding Source** | **4,000,000** | **0** | **0** | **0** |
| | | **Subtotal by Year** | **4,000,000** | | | |

**NOTES**

(a) New projects listed in Bold Italics.

(b) "Other" are identified on detailed project sheets.

## City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

**SUMMARY OF PROJECT FUNDING SOURCES**

### Water

| PG | PROJECT | | 2016-17 | | | |
|---|---|---|---|---|---|---|
| | | | Water Fund | Water Line Extension Fund | Other | Unidentified Funding |
| 81 | 2002 | Second SCVWD Water Reservoir and Pump Station | 0 | 0 | 6,500,000 | 0 |
| 82 | 7076 | Well Upgrade Project | 0 | 800,000 | 0 | 0 |
| 83 | 7100 | Water System Seismic Improvements | 1,000,000 | 0 | 0 | 0 |
| 84 | 7110 | Hydrant Replacement | 0 | 70,000 | 0 | 0 |
| 85 | 7118 | Dempsey Road Water Line Replacement | 0 | 0 | 0 | 6,500,000 |
| 86 | 7121 | Automated Water Meter Replacement | 1,295,000 | 0 | 0 | 0 |
| 87 | New | BART Project - Water Improvements | 0 | 0 | 0 | 0 |
| 88 | New | Construction Water | 0 | 0 | 0 | 0 |
| 89 | New | Hillside Pump Station Equip. Replacement | 0 | 0 | 0 | 0 |
| 90 | New | Los Coches Backbone | 850,000 | 0 | 0 | 0 |
| 91 | New | Minor Water Projects 2017 | 100,000 | 0 | 0 | 0 |
| 92 | ***New*** | ***Recycled Water Line Extension*** | ***0*** | ***0*** | ***0*** | ***1,000,000*** |
| 93 | New | SCVWD Second Water Supply Turnout | 0 | 0 | 100,000 | 0 |
| 94 | New | Supervisory Control and Data Acquisition (SCADA) | 0 | 0 | 0 | 0 |
| 95 | New | Water O&M Database Management | 0 | 0 | 100,000 | 0 |
| 96 | New | Water System Replacement 18-19 | 0 | 0 | 0 | 0 |
| 97 | New | Water System Replacement Study | 0 | 0 | 0 | 0 |
| 98 | New | Water Valve Replacement | 0 | 0 | 0 | 0 |
| | | **Total Defunding by Funding Source** | **0** | **0** | **0** | **0** |
| | | **Total Funding by Funding Source** | **3,245,000** | **870,000** | **6,700,000** | **7,500,000** |
| | | **Subtotal by Funding Source** | **3,245,000** | **870,000** | **6,700,000** | **7,500,000** |
| | | **Subtotal by Year** | **18,315,000** | | | |

**NOTES**

(a) New projects listed in Bold Italics.

(b) "Other" are identified on detailed project sheets.

# City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

**SUMMARY OF PROJECT FUNDING SOURCES**

## Water

| PG | PROJECT | | 2017-18 | | | |
|---|---|---|---|---|---|---|
| | | | Water Fund | Water Line Extension Fund | Other | Unidentified Funding |
| 81 | 2002 | Second SCVWD Water Reservoir and Pump Station | 0 | 0 | 0 | 0 |
| 82 | 7076 | Well Upgrade Project | 0 | 0 | 0 | 0 |
| 83 | 7100 | Water System Seismic Improvements | 0 | 0 | 0 | 0 |
| 84 | 7110 | Hydrant Replacement | 0 | 0 | 0 | 0 |
| 85 | 7118 | Dempsey Road Water Line Replacement | 0 | 0 | 0 | 0 |
| 86 | 7121 | Automated Water Meter Replacement | 1,295,000 | 0 | 0 | 0 |
| 87 | New | BART Project - Water Improvements | 0 | 0 | 0 | 0 |
| 88 | New | Construction Water | 0 | 375,000 | 0 | 0 |
| 89 | New | Hillside Pump Station Equip. Replacement | 150,000 | 0 | 0 | 0 |
| 90 | New | Los Coches Backbone | 3,350,000 | 0 | 0 | 0 |
| 91 | New | Minor Water Projects 2017 | 100,000 | 0 | 0 | 0 |
| 92 | ***New*** | ***Recycled Water Line Extension*** | ***0*** | ***0*** | ***0*** | ***5,500,000*** |
| 93 | New | SCVWD Second Water Supply Turnout | 0 | 0 | 0 | 0 |
| 94 | New | Supervisory Control and Data Acquisition (SCADA) | 175,000 | 175,000 | 0 | 0 |
| 95 | New | Water O&M Database Management | 0 | 0 | 0 | 0 |
| 96 | New | Water System Replacement 18-19 | 0 | 0 | 0 | 0 |
| 97 | New | Water System Replacement Study | 100,000 | 0 | 0 | 0 |
| 98 | New | Water Valve Replacement | 0 | 0 | 0 | 600,000 |
| | | **Total Defunding by Funding Source** | **0** | **0** | **0** | **0** |
| | | **Total Funding by Funding Source** | **5,170,000** | **550,000** | **0** | **6,100,000** |
| | | **Subtotal by Funding Source** | **5,170,000** | **550,000** | **0** | **6,100,000** |
| | | **Subtotal by Year** | **11,820,000** | | | |

**NOTES**

(a) New projects listed in Bold Italics.

(b) "Other" are identified on detailed project sheets.

# City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

**SUMMARY OF PROJECT FUNDING SOURCES**

### Water

| PG | PROJECT | | 2018-19 | | | |
|---|---|---|---|---|---|---|
| | | | Water Fund | Water Line Extension Fund | Other | Unidentified Funding |
| 81 | 2002 | Second SCVWD Water Reservoir and Pump Station | 0 | 0 | 0 | 0 |
| 82 | 7076 | Well Upgrade Project | 0 | 0 | 0 | 0 |
| 83 | 7100 | Water System Seismic Improvements | 1,000,000 | 0 | 0 | 0 |
| 84 | 7110 | Hydrant Replacement | 0 | 0 | 0 | 0 |
| 85 | 7118 | Dempsey Road Water Line Replacement | 0 | 0 | 0 | 0 |
| 86 | 7121 | Automated Water Meter Replacement | 1,295,000 | 0 | 0 | 0 |
| 87 | New | BART Project - Water Improvements | 0 | 0 | 0 | 0 |
| 88 | New | Construction Water | 0 | 0 | 0 | 0 |
| 89 | New | Hillside Pump Station Equip. Replacement | 0 | 0 | 0 | 0 |
| 90 | New | Los Coches Backbone | 0 | 0 | 0 | 0 |
| 91 | New | Minor Water Projects 2017 | 0 | 0 | 0 | 0 |
| 92 | ***New*** | ***Recycled Water Line Extension*** | ***0*** | ***0*** | ***0*** | ***0*** |
| 93 | New | SCVWD Second Water Supply Turnout | 0 | 0 | 500,000 | 0 |
| 94 | New | Supervisory Control and Data Acquisition (SCADA) | 500,000 | 500,000 | 0 | 0 |
| 95 | New | Water O&M Database Management | 0 | 0 | 0 | 0 |
| 96 | New | Water System Replacement 18-19 | 0 | 0 | 0 | 1,000,000 |
| 97 | New | Water System Replacement Study | 0 | 0 | 0 | 0 |
| 98 | New | Water Valve Replacement | 0 | 0 | 0 | 0 |
| | | **Total Defunding by Funding Source** | **0** | **0** | **0** | **0** |
| | | **Total Funding by Funding Source** | **2,795,000** | **500,000** | **500,000** | **1,000,000** |
| | | **Subtotal by Funding Source** | **2,795,000** | **500,000** | **500,000** | **1,000,000** |
| | | **Subtotal by Year** | **4,795,000** | | | |

**NOTES**

(a) New projects listed in Bold Italics.

(b) "Other" are identified on detailed project sheets.

# City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

**SUMMARY OF PROJECT FUNDING SOURCES**

### Water

| PG | PROJECT | | 2019-20 | | | |
|---|---|---|---|---|---|---|
| | | | Water Fund | Water Line Extension Fund | Other | Unidentified Funding |
| 81 | 2002 | Second SCVWD Water Reservoir and Pump Station | 0 | 0 | 0 | 0 |
| 82 | 7076 | Well Upgrade Project | 0 | 0 | 0 | 0 |
| 83 | 7100 | Water System Seismic Improvements | 0 | 0 | 0 | 0 |
| 84 | 7110 | Hydrant Replacement | 0 | 0 | 0 | 0 |
| 85 | 7118 | Dempsey Road Water Line Replacement | 0 | 0 | 0 | 0 |
| 86 | 7121 | Automated Water Meter Replacement | 1,295,000 | 0 | 0 | 0 |
| 87 | New | BART Project - Water Improvements | 0 | 0 | 0 | 0 |
| 88 | New | Construction Water | 0 | 0 | 0 | 0 |
| 89 | New | Hillside Pump Station Equip. Replacement | 0 | 0 | 0 | 0 |
| 90 | New | Los Coches Backbone | 0 | 0 | 0 | 0 |
| 91 | New | Minor Water Projects 2017 | 0 | 0 | 0 | 0 |
| 92 | ***New*** | ***Recycled Water Line Extension*** | ***0*** | ***0*** | ***0*** | ***0*** |
| 93 | New | SCVWD Second Water Supply Turnout | 0 | 0 | 2,500,000 | 0 |
| 94 | New | Supervisory Control and Data Acquisition (SCADA) | 2,325,000 | 2,325,000 | 0 | 0 |
| 95 | New | Water O&M Database Management | 0 | 0 | 0 | 0 |
| 96 | New | Water System Replacement 18-19 | 0 | 0 | 0 | 0 |
| 97 | New | Water System Replacement Study | 0 | 0 | 0 | 0 |
| 98 | New | Water Valve Replacement | 0 | 0 | 0 | 0 |
| | | **Total Defunding by Funding Source** | **0** | **0** | **0** | **0** |
| | | **Total Funding by Funding Source** | **3,620,000** | **2,325,000** | **2,500,000** | **0** |
| | | **Subtotal by Funding Source** | **3,620,000** | **2,325,000** | **2,500,000** | **0** |
| | | **Subtotal by Year** | **8,445,000** | | | |

**NOTES**

(a) New projects listed in Bold Italics.

(b) "Other" are identified on detailed project sheets.

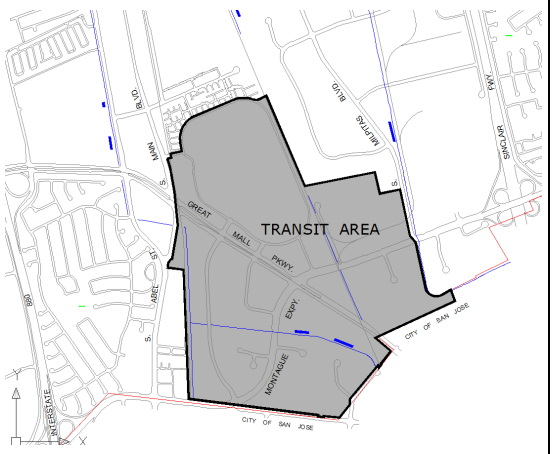
# City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Water | **2002** | **Second SCVWD Water Reservoir and Pump Station** | 1 |

**CONTACT:** Marilyn Nickel [3347]

**PRIORITY:** Mandatory or Committed Projects

**DIAGRAM**




**DESCRIPTION**

This project will provide potable water reservoir (6.6 million gallons) and pump station to serve the SCVWD water service area, as recommended in the Milpitas 2009 Water Master Plan Update. This facility is necessary to serve the Midtown and Transit Area Specific Plan and other future development. The scope includes land purchase, design and construction of a reservoir, pump station, a second SCVWD water supply turnout and related improvements. The new water facility will require acquisition of approximately 3 acres in the Transit Area at an estimated cost of $6.7 million. Design and Construction will be programmed in the future at a cost estimate of $15 Million. Total cost estimate is $21.7 Million.

**COMMENTS:**

The new water facility will require acquisition of approximately 3 acres in the Transit Area at an estimated cost of $6.7 million. Design and Construction will be programmed in the future at a cost estimate of $15 Million. Total cost estimate is $21.7 Million.

**Uncommitted Balance as of 2/28/2015:** $200,000

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 150,000 | 0 | 0 | 0 | 0 | 0 | 150,000 |
| Administration | 50,000 | 0 | 0 | 0 | 0 | 0 | 50,000 |
| Surveying | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Inspection | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Land | 0 | 0 | 6,500,000 | 0 | 0 | 0 | 6,500,000 |
| Improvements | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 200,000 | 0 | 6,500,000 | 0 | 0 | 0 | 6,700,000 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| TASP Impact Fees | 200,000 | 0 | 6,500,000 | 0 | 0 | 0 | 6,700,000 |
| **Totals** | 200,000 | 0 | 6,500,000 | 0 | 0 | 0 | 6,700,000 |

**FINANCE NOTES**

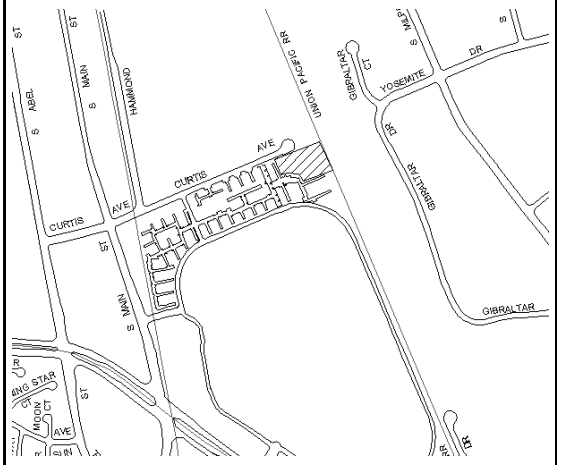
## City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Water | **7076** | **Well Upgrade Project** | 1 |

**CONTACT:** Michael Boitnott [3315]

**PRIORITY:** Mandatory or Committed Projects

**DIAGRAM**




**DESCRIPTION**

Phase 1 of this project includes drilling a new well within the City's East Curtis Park and Phase 2 upgrades the City's existing well at Pinewood Park to include Chlorination system improvements as required by the California Department of Public Health (CDPH). Phase 3 constructs the new Curtis well pump station, and installs approximately 1,400 linear feet of pipe to connect the well to the reservoir at Gibraltar for blending into the City water system. Phases 1 and 2 have been completed.

**COMMENTS:**

These two wells will provide the City with an emergency water supply, in case Hetch-Hetchy and/or Santa Clara Valley Water District systems are not available due to an earthquake or other catastrophe.

**Uncommitted Balance as of 2/28/2015:** $2,787,457

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 358,200 | 0 | 140,000 | 0 | 0 | 0 | 498,200 |
| Administration | 12,800 | 0 | 75,000 | 0 | 0 | 0 | 87,800 |
| Surveying | 3,000 | 0 | 0 | 0 | 0 | 0 | 3,000 |
| Inspection | 125,800 | 0 | 25,000 | 0 | 0 | 0 | 150,800 |
| Land | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Improvements | 4,145,200 | 0 | 560,000 | 0 | 0 | 0 | 4,705,200 |
| Equipment | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 4,645,000 | 0 | 800,000 | 0 | 0 | 0 | 5,445,000 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Grants/Reimbursement/Develope | 140,000 | 0 | 0 | 0 | 0 | 0 | 140,000 |
| RDA Fund | 1,100,000 | 0 | 0 | 0 | 0 | 0 | 1,100,000 |
| Water Fund | 2,935,000 | 0 | 0 | 0 | 0 | 0 | 2,935,000 |
| Water Line Extension Fund | 470,000 | 0 | 800,000 | 0 | 0 | 0 | 1,270,000 |
| **Totals** | 4,645,000 | 0 | 800,000 | 0 | 0 | 0 | 5,445,000 |

**FINANCE NOTES**

Reimbursement: Valley Transportation Authority (VTA): $140,000, VTA funds are for VTA requested modifications due to BART Transit Station.

## City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Water | **7100** | **Water System Seismic Improvements** | 1 |

**CONTACT:** Michael Boitnott [3315]

**PRIORITY:** Health and Safety Projects

**DESCRIPTION**

This project develops a comprehensive Water System Seismic Improvements Program which includes seismic upgrades to the City's "back-bone" water system as defined in the Water System Seismic Improvement Strategic Plan. The scope also includes purchase of water system materials and equipment for emergency response to a major disaster. A complete list of improvements is identified in the priority list (Appendix F of DSWA report) with additional work scope identified in follow up engineering studies.

**COMMENTS:**

Total program preliminary cost estimate is a minimum of $25 million, through 2020.

**Uncommitted Balance as of 2/28/2015:** $3,304,136

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 930,000 | 100,000 | 100,000 | 0 | 100,000 | 0 | 1,230,000 |
| Administration | 153,000 | 40,000 | 40,000 | 0 | 40,000 | 0 | 273,000 |
| Surveying | 25,000 | 0 | 0 | 0 | 0 | 0 | 25,000 |
| Inspection | 192,000 | 60,000 | 60,000 | 0 | 60,000 | 0 | 372,000 |
| Land | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Improvements | 2,887,951 | 800,000 | 800,000 | 0 | 800,000 | 0 | 5,287,951 |
| Equipment | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 4,187,951 | 1,000,000 | 1,000,000 | 0 | 1,000,000 | 0 | 7,187,951 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Water Fund | 3,087,951 | 1,000,000 | 1,000,000 | 0 | 1,000,000 | 0 | 6,087,951 |
| Water Infrastructure Fund | 1,100,000 | 0 | 0 | 0 | 0 | 0 | 1,100,000 |
| **Totals** | 4,187,951 | 1,000,000 | 1,000,000 | 0 | 1,000,000 | 0 | 7,187,951 |

**FINANCE NOTES**

## City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Water | **7110** | **Hydrant Replacement** | 1 |

**CONTACT:** Michael Boitnott [3315]

**PRIORITY:** Rehabilitation of Existing Capital Assets or Systems

**DESCRIPTION**

This project involves replacement of hydrants in the Manor, Sunnyhills, and Milford neighborhoods. Other locations may include Calaveras Blvd, Park Victoria and Jacklin Road. Additional work may include replacement of the water valve for the hydrant.

**COMMENTS:**

These hydrants have reached the end of their useful life and need to be replaced.

**Uncommitted Balance as of 2/28/2015:** $169,379

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 10,000 | 0 | 0 | 0 | 0 | 0 | 10,000 |
| Administration | 5,000 | 0 | 0 | 0 | 0 | 0 | 5,000 |
| Surveying | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Inspection | 10,000 | 0 | 0 | 0 | 0 | 0 | 10,000 |
| Land | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Improvements | 145,000 | 0 | 70,000 | 0 | 0 | 0 | 215,000 |
| **Totals** | 170,000 | 0 | 70,000 | 0 | 0 | 0 | 240,000 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Water Line Extension Fund | 170,000 | 0 | 70,000 | 0 | 0 | 0 | 240,000 |
| **Totals** | 170,000 | 0 | 70,000 | 0 | 0 | 0 | 240,000 |

**FINANCE NOTES**

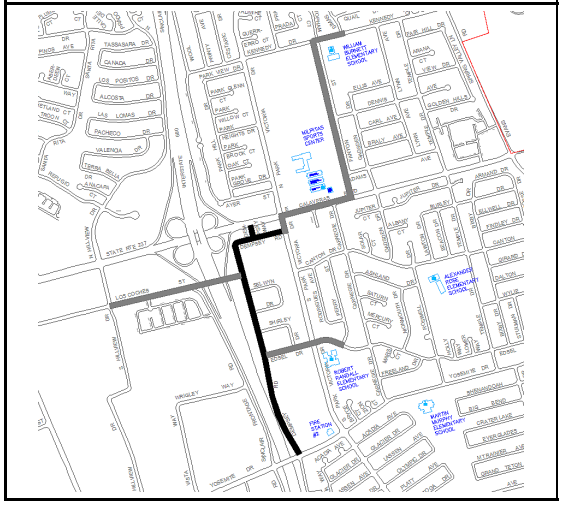
# City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Water | **7118** | **Dempsey Road Water Line Replacement** | 1 |

**CONTACT:** Michael Boitnott [3315]

**PRIORITY:** Rehabilitation of Existing Capital Assets or Systems

**DIAGRAM**



**DESCRIPTION**

This project replaces approximately 3,400 linear feet of 12" diameter cast iron pipe along Dempsey Rd. between Calaveras Blvd. and Yosemite Dr. The pipe line was installed in 1950's and has reached the end of its useful life. The project will also inculde the design of a 10,000 linear feet recycled water line main from Los Coches St. and Hillview Dr. to Kennedy Dr. and Simas Dr. to the north and Edsel Dr. and Perry St. to the south.

**COMMENTS:**

The pipeline has experienced excessive corrosion which is causing line breaks. Replacement must occur to minimize impacting water customers. This segment of water line is going to be constructed to the seismic back bone standard and the Water System Seismic Improvement Project is going to pay for the incremental cost of the upgrade. Funding for the construction of the waterline has not be identified. The City is looking to apply for water grants for the construction of the recycled waterline, which is estimated at approximately $6.5Mil.

**Uncommitted Balance as of 2/28/2015:** $2,133,282

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 925,000 | 0 | 0 | 0 | 0 | 0 | 925,000 |
| Administration | 250,000 | 0 | 0 | 0 | 0 | 0 | 250,000 |
| Surveying | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Inspection | 80,000 | 0 | 0 | 0 | 0 | 0 | 80,000 |
| Improvements | 1,820,000 | 1,000,000 | 6,500,000 | 0 | 0 | 0 | 9,320,000 |
| **Totals** | 3,075,000 | 1,000,000 | 6,500,000 | 0 | 0 | 0 | 10,575,000 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Unidentified Funding | 0 | 0 | 6,500,000 | 0 | 0 | 0 | 6,500,000 |
| Water Fund | 3,075,000 | 1,000,000 | 0 | 0 | 0 | 0 | 4,075,000 |
| **Totals** | 3,075,000 | 1,000,000 | 6,500,000 | 0 | 0 | 0 | 10,575,000 |

**FINANCE NOTES**

City Council 12/16/14 - Budget appropriation of $575,000 from Water Fund

## City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Water | **7121** | **Automated Water Meter Replacement** | 1 |

**CONTACT:** Steven Machida [3355]

**PRIORITY:** Projects Which Avoid Future Additional Costs

**DESCRIPTION**

A City-Wide replacement of existing water meters will be implemented to improve overall service to the City's customers and improve the reliability of the meter reading data. As meters age, the meter readings will read lower over time. Other cities have experienced a reduction ranging of 10-13% lower readings before they completed their meter change out.

**COMMENTS:**

The project will replace all of the City meters over a five year period. The new meters will provide electronic results for the 17,000 water accounts and thereby eliminating manual reads. The system will continuously monitor customer water usage and provide alerts for extraordinary usage patterns or possible leaks.

**Uncommitted Balance as of 2/28/2015:** $1,288,002

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Administration | 5,000 | 0 | 5,000 | 5,000 | 5,000 | 5,000 | 25,000 |
| Improvements | 190,000 | 0 | 190,000 | 190,000 | 190,000 | 190,000 | 950,000 |
| Equipment | 1,100,000 | 0 | 1,100,000 | 1,100,000 | 1,100,000 | 1,100,000 | 5,500,000 |
| **Totals** | 1,295,000 | 0 | 1,295,000 | 1,295,000 | 1,295,000 | 1,295,000 | 6,475,000 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Water Fund | 1,295,000 | 0 | 1,295,000 | 1,295,000 | 1,295,000 | 1,295,000 | 6,475,000 |
| **Totals** | 1,295,000 | 0 | 1,295,000 | 1,295,000 | 1,295,000 | 1,295,000 | 6,475,000 |

**FINANCE NOTES**

## City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Water | **New** | **BART Project - Water Improvements** | 1 |

**CONTACT:** Steven Machida [3355]

**PRIORITY:** Rehabilitation of Existing Capital Assets or Systems

**DESCRIPTION**

The BART project will cause the relocation of existing utilities along the BART corridor at its own expense. In addition, there are other related water system improvements which have been identified by the City, to be completed as part of the BART utility relocation effort. The City is required to cost share for these enhancements. Water projects include: the upsize of existing water crossing at Montague and Capitol, installation of 2 new water crossings south of Montague, and possible upsizing of pipelines in the area of Piper Drive.

**COMMENTS:**

**Uncommitted Balance as of 2/28/2015:** $0

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Administration | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Surveying | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Inspection | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Improvements | 0 | 2,000,000 | 0 | 0 | 0 | 0 | 2,000,000 |
| **Totals** | 0 | 2,000,000 | 0 | 0 | 0 | 0 | 2,000,000 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Water Fund | 0 | 2,000,000 | 0 | 0 | 0 | 0 | 2,000,000 |
| **Totals** | 0 | 2,000,000 | 0 | 0 | 0 | 0 | 2,000,000 |

**FINANCE NOTES**

## City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Water | **New** | **Construction Water** | 1 |

**CONTACT:** Steven Machida [3355]

**PRIORITY:** Rehabilitation of Existing Capital Assets or Systems

**DESCRIPTION**

The construction activities for public infrastructure and private development require the use of water for increasing moisture content to achieve optimum compaction, dust control as well as other uses. This project will install stormwater and recycled water construction pay stations in strategic locations and will provide for the use of non-potable water instead of potable water for these construction activities.

**COMMENTS:**

**Uncommitted Balance as of 2/28/2015:** $0

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 0 | 0 | 0 | 56,250 | 0 | 0 | 56,250 |
| Surveying | 0 | 0 | 0 | 18,750 | 0 | 0 | 18,750 |
| Inspection | 0 | 0 | 0 | 56,250 | 0 | 0 | 56,250 |
| Improvements | 0 | 0 | 0 | 243,750 | 0 | 0 | 243,750 |
| **Totals** | 0 | 0 | 0 | 375,000 | 0 | 0 | 375,000 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Water Line Extension Fund | 0 | 0 | 0 | 375,000 | 0 | 0 | 375,000 |
| **Totals** | 0 | 0 | 0 | 375,000 | 0 | 0 | 375,000 |

**FINANCE NOTES**

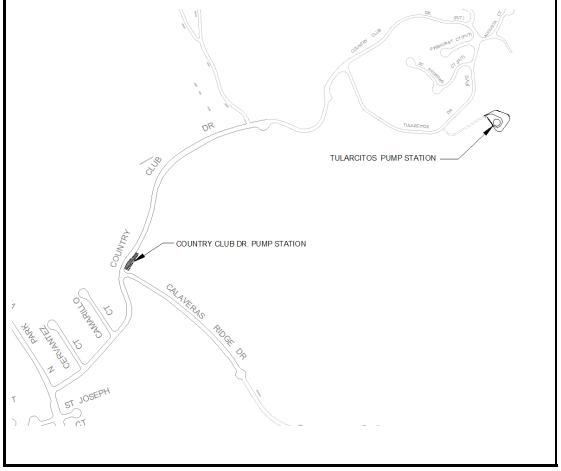
## City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Water | **New** | **Hillside Pump Station Equip. Replacement** | 1 |

**CONTACT:** Marilyn Nickel [3347]

**PRIORITY:** Rehabilitation of Existing Capital Assets or Systems

**DIAGRAM**




**DESCRIPTION**

This project provides rehabilitation or replacement of equipment at the Country Club and Tularcitos Water Pump Stations.

**COMMENTS:**

The last equipment upgrade occurred in 2004-06 and the equipment life is estimated at 10 years.

**Uncommitted Balance as of 2/28/2015:** $0

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 0 | 0 | 0 | 30,000 | 0 | 0 | 30,000 |
| Administration | 0 | 0 | 0 | 20,000 | 0 | 0 | 20,000 |
| Inspection | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Improvements | 0 | 0 | 0 | 20,000 | 0 | 0 | 20,000 |
| Equipment | 0 | 0 | 0 | 80,000 | 0 | 0 | 80,000 |
| Construction Reserves | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 0 | 0 | 0 | 150,000 | 0 | 0 | 150,000 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Water Fund | 0 | 0 | 0 | 150,000 | 0 | 0 | 150,000 |
| **Totals** | 0 | 0 | 0 | 150,000 | 0 | 0 | 150,000 |

**FINANCE NOTES**

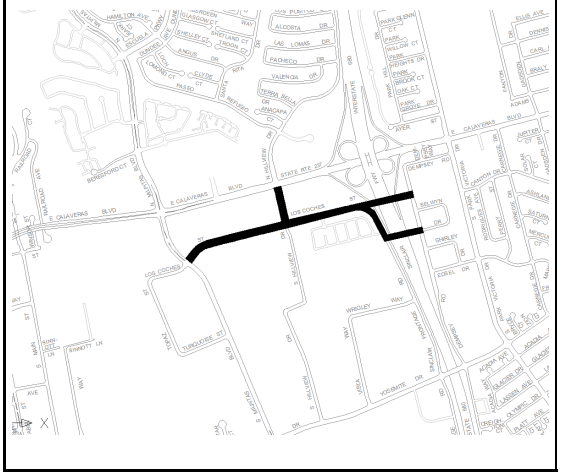
## City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Water | **New** | **Los Coches Backbone** | 1 |

**CONTACT:** Michael Boitnott [3315] / Steven Machida [3355]

**PRIORITY:** Major Service Equipment Replacement

**DIAGRAM**



**DESCRIPTION**

The Los Coches Transmission Main will be constructed between S. Milpitas Boulevard and Dempsey Road. The main will tie the existing dead end main Zone 2 San Francisco PUC at S. Milpitas and Los Coches to tie into the Dempsey Road water main to the east. The project also involves the construction of a new water turnout on Los Coches Street adjacent to E. Calaveras Boulevard near Hillview Drive. The new turnout will improve the overall City water system reliability and convert a few parcels of Zone 2 Santa Clara Valley Water District service area to Zone 2 San Francisco PUC.

**COMMENTS:**

The intent of this project is to eliminate the dead end main in S. Milpitas Boulevard and avoid traffic and utility disruption in E. Calaveras during the project construction. The turnout work has to be designed and constructed by San Francisco PUC, which normally takes approximately 2-3 years.

**Uncommitted Balance as of 2/28/2015:** $0

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 0 | 0 | 450,000 | 0 | 0 | 0 | 450,000 |
| Administration | 0 | 0 | 50,000 | 200,000 | 0 | 0 | 250,000 |
| Inspection | 0 | 0 | 0 | 150,000 | 0 | 0 | 150,000 |
| Improvements | 0 | 0 | 350,000 | 3,000,000 | 0 | 0 | 3,350,000 |
| **Totals** | 0 | 0 | 850,000 | 3,350,000 | 0 | 0 | 4,200,000 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Water Fund | 0 | 0 | 850,000 | 3,350,000 | 0 | 0 | 4,200,000 |
| **Totals** | 0 | 0 | 850,000 | 3,350,000 | 0 | 0 | 4,200,000 |

**FINANCE NOTES**

## City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Water | **New** | **Minor Water Projects 2017** | 1 |

**CONTACT:** Steve Erickson [3301]

**PRIORITY:** Rehabilitation of Existing Capital Assets or Systems

**DESCRIPTION**

This on-going project involves the analysis and implementation of various water projects which arise during the year. This project also provides for on-going modifications and improvements to existing water system including enhancing security at various water facilities.

**COMMENTS:**

This project will also installs sump pumps in water system vaults, such as pressure reducing valve vaults.

**Uncommitted Balance as of 2/28/2015:** $0

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 0 | 0 | 0 | 5,000 | 0 | 0 | 5,000 |
| Administration | 0 | 0 | 5,000 | 0 | 0 | 0 | 5,000 |
| Surveying | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Inspection | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Land | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Improvements | 0 | 0 | 95,000 | 95,000 | 0 | 0 | 190,000 |
| Equipment | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 0 | 0 | 100,000 | 100,000 | 0 | 0 | 200,000 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Water Fund | 0 | 0 | 100,000 | 100,000 | 0 | 0 | 200,000 |
| **Totals** | 0 | 0 | 100,000 | 100,000 | 0 | 0 | 200,000 |

**FINANCE NOTES**

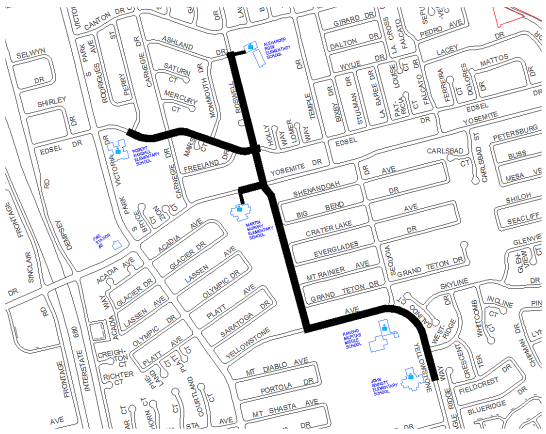
# City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | Estimate Level |
|---|---|---|
| Water | **New** **Recycled Water Line Extension** | 1 |

**CONTACT:** Steven Machida [3355] / Michael Boitnott [3315]

**PRIORITY:** Improve the Quality of Life

**DIAGRAM**



**DESCRIPTION**

Phase I of the recycled water line extension project has been incorporated into the Dempsey Water Line Replacement project, which will provide for an approximate 10,000 lineal foot extension of the recycled water line main, from Los Coches at Hillview east, under I-880 and extend to Kennedy Dr. and Simas Dr. to the north, and Edsel Dr. and Perry St. to the south. Phase II of the project is anticipated to extend from the phase I recycled water line main approximately 8,200 lineal feet from Edsel Dr. and Perry St. to Roswell Dr. at Ashland Dr., to the north and Yellowstone at Tahoe Dr. to the south. Phase II would be able to serve the following sites with recycled water: Alexander Rose Elementary School, Martin Murphy Elementary School, John Sinnott Elementary School, Rancho Milpitas Middle School, Foothills Park, Murphy Park, Robert E. Browne Park.

**COMMENTS:**

Phase II of the project is estimated to cost $6.5Mil. The City is looking to apply for water grants for the design and construction of the recycled waterline. Phases III & IV of the project would look to extend the main lines to complete a reliability loop and extend the recycled water line to hillside golf courses and the County parks.

**Uncommitted Balance as of 2/28/2015:** $0

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 0 | 0 | 750,000 | 100,000 | 0 | 0 | 850,000 |
| Administration | 0 | 0 | 200,000 | 250,000 | 0 | 0 | 450,000 |
| Surveying | 0 | 0 | 50,000 | 0 | 0 | 0 | 50,000 |
| Inspection | 0 | 0 | 0 | 150,000 | 0 | 0 | 150,000 |
| Improvements | 0 | 0 | 0 | 5,000,000 | 0 | 0 | 5,000,000 |
| **Totals** | 0 | 0 | 1,000,000 | 5,500,000 | 0 | 0 | 6,500,000 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Unidentified Funding | 0 | 0 | 1,000,000 | 5,500,000 | 0 | 0 | 6,500,000 |
| **Totals** | 0 | 0 | 1,000,000 | 5,500,000 | 0 | 0 | 6,500,000 |

**FINANCE NOTES**

## City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Water | **New** | **SCVWD Second Water Supply Turnout** | 1 |

**CONTACT:** Marilyn Nickel [3347]

**PRIORITY:** Projects Which Avoid Future Additional Costs

**DESCRIPTION**

This is a joint project with SCVWD to install a second water supply turnout to Milpitas as describe in the Milpitas 2009 Water Master Plan.

**COMMENTS:**

A second turnout is required to meet increasing flow requirements in the City's south-central and western areas. Future appropriations are required as the total cost is estimated at $2.8 million.

**Uncommitted Balance as of 2/28/2015:** $0

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Administration | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Surveying | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Inspection | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Improvements | 0 | 0 | 100,000 | 0 | 500,000 | 2,500,000 | 3,100,000 |
| Equipment | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 0 | 0 | 100,000 | 0 | 500,000 | 2,500,000 | 3,100,000 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| TASP Impact Fees | 0 | 0 | 100,000 | 0 | 500,000 | 2,500,000 | 3,100,000 |
| **Totals** | 0 | 0 | 100,000 | 0 | 500,000 | 2,500,000 | 3,100,000 |

**FINANCE NOTES**

# City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Water | **New** | **Supervisory Control and Data Acquisition (SCADA)** | 1 |

**CONTACT:** Steven Machida [3355]

**PRIORITY:** Rehabilitation of Existing Capital Assets or Systems

**DESCRIPTION**

A Supervisory Control and Data Acquisition System (SCADA) provides real-time data, such as water tank level, pump operational status, system pressure, and flow rates to water system operators. Operators can use this data to identify operational problems, such as high velocities and low pressures, pressure spikes, both indicators of pipe breaks. SCADA also allows for remote monitoring and operation of pumps and valves to implement corrective actions and maintain water supply.

**COMMENTS:**

Currently operators rely on unsophisticated alarms at limited locations and customer complaints to become aware of water system problems. Operators must drive to sites to evaluate the problem and implement corrective action, such as starting a back-up pump, when the main pumps fail.

**Uncommitted Balance as of 2/28/2015:** $0

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 0 | 0 | 0 | 300,000 | 0 | 0 | 300,000 |
| Administration | 0 | 0 | 0 | 50,000 | 25,000 | 75,000 | 150,000 |
| Surveying | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Inspection | 0 | 0 | 0 | 0 | 75,000 | 75,000 | 150,000 |
| Land | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Improvements | 0 | 0 | 0 | 0 | 0 | 4,500,000 | 4,500,000 |
| Equipment | 0 | 0 | 0 | 0 | 900,000 | 0 | 900,000 |
| Other | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 0 | 0 | 0 | 350,000 | 1,000,000 | 4,650,000 | 6,000,000 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Water Line Extension Fund | 0 | 0 | 0 | 175,000 | 500,000 | 2,325,000 | 3,000,000 |
| Water Fund | 0 | 0 | 0 | 175,000 | 500,000 | 2,325,000 | 3,000,000 |
| **Totals** | 0 | 0 | 0 | 350,000 | 1,000,000 | 4,650,000 | 6,000,000 |

**FINANCE NOTES**

## City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Water | **New** | **Water O&M Database Management** | 1 |

**CONTACT:** Steve Erickson [3301]

**PRIORITY:** Projects Which Avoid Future Additional Costs

**DESCRIPTION**

This project would integrate and expand the GIS database to include water system facility data, such as age of pipe, year of installation, type of pipe, age of valves, maintenance history, and frequency and type of breaks.

**COMMENTS:**

Some of the City's water system infrastructure is now 50 years old and reaching the end of its useful life. This database would enable staff to maintain repair records, identify and record the status of infrastructure and provide timing recommendations for replacement.

**Uncommitted Balance as of 2/28/2015:** $0

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 0 | 0 | 90,000 | 0 | 0 | 0 | 90,000 |
| Administration | 0 | 0 | 10,000 | 0 | 0 | 0 | 10,000 |
| Surveying | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Inspection | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Land | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Equipment | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 0 | 0 | 100,000 | 0 | 0 | 0 | 100,000 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Water Infrastructure Fund | 0 | 0 | 100,000 | 0 | 0 | 0 | 100,000 |
| **Totals** | 0 | 0 | 100,000 | 0 | 0 | 0 | 100,000 |

**FINANCE NOTES**

## City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Water | **New** | **Water System Replacement 18-19** | |

**CONTACT:** Marilyn Nickel [3347]

**PRIORITY:** Rehabilitation of Existing Capital Assets or Systems

**DESCRIPTION**

The project involves the replacement or rehabilitation of aging water infrastructure. Work program will be based upon the priorities identified in the 2002 Water Main Replacement Study, the Water System Replacement study to be conducted in 2017-18, maintenance records, other studies and pipe condition evaluations.

**COMMENTS:**

Over 25% of the City's water mains are fifty years or older, and well beyond the design life of the main lines.

**Uncommitted Balance as of 2/28/2015:** $0

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 0 | 0 | 0 | 0 | 150,000 | 0 | 150,000 |
| Administration | 0 | 0 | 0 | 0 | 50,000 | 0 | 50,000 |
| Surveying | 0 | 0 | 0 | 0 | 25,000 | 0 | 25,000 |
| Inspection | 0 | 0 | 0 | 0 | 75,000 | 0 | 75,000 |
| Improvements | 0 | 0 | 0 | 0 | 700,000 | 0 | 700,000 |
| Equipment | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 0 | 0 | 0 | 0 | 1,000,000 | 0 | 1,000,000 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Unidentified Funding | 0 | 0 | 0 | 0 | 1,000,000 | 0 | 1,000,000 |
| **Totals** | 0 | 0 | 0 | 0 | 1,000,000 | 0 | 1,000,000 |

**FINANCE NOTES**

## City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Water | **New** | **Water System Replacement Study** | 1 |

**CONTACT:** Marilyn Nickel [3347]

**PRIORITY:** Rehabilitation of Existing Capital Assets or Systems

**DESCRIPTION**

The 2002 Depreciation Study has estimated the remaining life of the existing water system infrastructure. This work is to field verify the projects identified with useful life ending by 2018, confirm need and scope of work, and prioritize improvements. This project evaluates the remaining useful life of water pipelines in the vicinity of Hillview Drive, Los Coches Street, Yosemite Drive, Columbus Drive, Horcajo Street, Heath Street, Landess Avenue and Jacklin Road.

**COMMENTS:**

**Uncommitted Balance as of 2/28/2015:** $0

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 0 | 0 | 0 | 85,000 | 0 | 0 | 85,000 |
| Administration | 0 | 0 | 0 | 15,000 | 0 | 0 | 15,000 |
| Surveying | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Inspection | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Equipment | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 0 | 0 | 0 | 100,000 | 0 | 0 | 100,000 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Water Fund | 0 | 0 | 0 | 100,000 | 0 | 0 | 100,000 |
| **Totals** | 0 | 0 | 0 | 100,000 | 0 | 0 | 100,000 |

**FINANCE NOTES**

## City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Water | **New** | **Water Valve Replacement** | 1 |

**CONTACT:** Marilyn Nickel [3347]

**PRIORITY:** Rehabilitation of Existing Capital Assets or Systems

**DESCRIPTION**

This project provides for the replacement of water valves on the water system. These valves are an important element of the aging infrastructure, allowing the system to be isolated during emergency or planned work on the water system.

**COMMENTS:**

**Uncommitted Balance as of 2/28/2015:** $0

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 0 | 0 | 0 | 25,000 | 0 | 0 | 25,000 |
| Administration | 0 | 0 | 0 | 25,000 | 0 | 0 | 25,000 |
| Surveying | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Inspection | 0 | 0 | 0 | 50,000 | 0 | 0 | 50,000 |
| Improvements | 0 | 0 | 0 | 500,000 | 0 | 0 | 500,000 |
| **Totals** | 0 | 0 | 0 | 600,000 | 0 | 0 | 600,000 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Unidentified Funding | 0 | 0 | 0 | 600,000 | 0 | 0 | 600,000 |
| **Totals** | 0 | 0 | 0 | 600,000 | 0 | 0 | 600,000 |

**FINANCE NOTES**

# City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM
### SEWER IMPROVEMENT PROJECTS SUMMARY

**SUMMARY OF COSTS**

| PG. NO. | | PROJECT | TOTAL COST | PRIOR YEARS | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 |
|---|---|---|---|---|---|---|---|---|---|
| 107 | 6116 | Sewer System Replacement 12-13 | 2,550,000 | 1,750,000 | 800,000 | 0 | 0 | 0 | 0 |
| 108 | 6118 | San Jose/Santa Clara Regional Waste Water | 40,200,000 | 14,000,000 | 5,000,000 | 6,200,000 | 5,000,000 | 5,000,000 | 5,000,000 |
| 109 | 6119 | CCTV Sanitary Sewer | 825,000 | 165,000 | 165,000 | 165,000 | 165,000 | 165,000 | 0 |
| 110 | New | BART Project - Sewer Improvements | 350,000 | 0 | 350,000 | 0 | 0 | 0 | 0 |
| 111 | New | Minor Sewer Projects 2018 | 50,000 | 0 | 0 | 0 | 50,000 | 0 | 0 |
| 112 | New | Sanitary Sewer Overflow Improvements | 100,000 | 0 | 0 | 0 | 100,000 | 0 | 0 |
| 113 | New | Sewer Main Replacement Study 2018 | 115,000 | 0 | 0 | 0 | 115,000 | 0 | 0 |
| 114 | New | Sewer System Replacement 16-17 | 2,500,000 | 0 | 0 | 2,500,000 | 0 | 0 | 0 |
| 115 | New | Sewer System Replacement 17-18 | 1,000,000 | 0 | 0 | 0 | 1,000,000 | 0 | 0 |
| 116 | ***New*** | ***Sewer System Replacement 18-19*** | ***1,000,000*** | ***0*** | ***0*** | ***0*** | ***0*** | ***1,000,000*** | ***0*** |
| 117 | New | Supervisory Control & Data Acquisition (SCA | 1,120,000 | 0 | 0 | 0 | 250,000 | 870,000 | 0 |
| 118 | New | Venus Pump Station Rehabilitation | 50,000 | 0 | 0 | 0 | 50,000 | 0 | 0 |
| | | **Defunding Subtotal** | | | | | | | |
| | | **Funding Subtotal** | | | **6,315,000** | | | | |
| | | **TOTAL COST** | **$49,860,000** | **$15,915,000** | **$6,315,000** | **$8,865,000** | **$6,730,000** | **$7,035,000** | **$5,000,000** |

**SUMMARY OF AVAILABLE FINANCING**

| | | | | | | |
|---|---|---|---|---|---|---|
| **Other** | 0 | 1,500,000 | 500,000 | 500,000 | 0 |
| **Sewer Fund** | 4,815,000 | 4,365,000 | 3,230,000 | 3,535,000 | 2,500,000 |
| **Sewer Treatment Fund** | 1,500,000 | 1,000,000 | 2,500,000 | 2,500,000 | 2,500,000 |
| **Unidentified Funding** | 0 | 2,000,000 | 500,000 | 500,000 | 0 |
| ***TOTAL AVAILABLE*** | **$6,315,000** | **$8,865,000** | **$6,730,000** | **$7,035,000** | **$5,000,000** |

**NOTES**

(a) New projects listed in Bold Italics.

# City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

**SUMMARY OF PROJECT FUNDING SOURCES**

### Sewer Improvement

| PG | PROJECT | | 2015-16 | | | |
|---|---|---|---|---|---|---|
| | | | Sewer Fund | Sewer Treatment Fund | Other | Unidentified Funding |
| 107 | 6116 | Sewer System Replacement 12-13 | 800,000 | 0 | 0 | 0 |
| 108 | 6118 | San Jose/Santa Clara Regional Waste Water Facility | 3,500,000 | 1,500,000 | 0 | 0 |
| 109 | 6119 | CCTV Sanitary Sewer | 165,000 | 0 | 0 | 0 |
| 110 | New | BART Project - Sewer Improvements | 350,000 | 0 | 0 | 0 |
| 111 | New | Minor Sewer Projects 2018 | 0 | 0 | 0 | 0 |
| 112 | New | Sanitary Sewer Overflow Improvements | 0 | 0 | 0 | 0 |
| 113 | New | Sewer Main Replacement Study 2018 | 0 | 0 | 0 | 0 |
| 114 | New | Sewer System Replacement 16-17 | 0 | 0 | 0 | 0 |
| 115 | New | Sewer System Replacement 17-18 | 0 | 0 | 0 | 0 |
| 116 | ***New*** | ***Sewer System Replacement 18-19*** | ***0*** | ***0*** | ***0*** | ***0*** |
| 117 | New | Supervisory Control & Data Acquisition (SCADA) | 0 | 0 | 0 | 0 |
| 118 | New | Venus Pump Station Rehabilitation | 0 | 0 | 0 | 0 |
| | | **Total Defunding by Funding Source** | **(0)** | **(0)** | **(0)** | **(0)** |
| | | **Total Funding by Funding Source** | **4,815,000** | **1,500,000** | **0** | **0** |
| | | **Subtotal by Funding Source** | **4,815,000** | **1,500,000** | **0** | **0** |
| | | **Subtotal by Year** | **6,315,000** | | | |

**NOTES**

(a) New projects listed in Bold Italics.

(b) "Other" are identified on detailed project sheets.

# City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

**SUMMARY OF PROJECT FUNDING SOURCES**

### Sewer Improvement

| PG | PROJECT | | 2016-17 | | | |
|---|---|---|---|---|---|---|
| | | | Sewer Fund | Sewer Treatment Fund | Other | Unidentified Funding |
| 107 | 6116 | Sewer System Replacement 12-13 | 0 | 0 | 0 | 0 |
| 108 | 6118 | San Jose/Santa Clara Regional Waste Water Facility | 4,200,000 | 1,000,000 | 1,000,000 | 0 |
| 109 | 6119 | CCTV Sanitary Sewer | 165,000 | 0 | 0 | 0 |
| 110 | New | BART Project - Sewer Improvements | 0 | 0 | 0 | 0 |
| 111 | New | Minor Sewer Projects 2018 | 0 | 0 | 0 | 0 |
| 112 | New | Sanitary Sewer Overflow Improvements | 0 | 0 | 0 | 0 |
| 113 | New | Sewer Main Replacement Study 2018 | 0 | 0 | 0 | 0 |
| 114 | New | Sewer System Replacement 16-17 | 0 | 0 | 500,000 | 2,000,000 |
| 115 | New | Sewer System Replacement 17-18 | 0 | 0 | 0 | 0 |
| 116 | ***New*** | ***Sewer System Replacement 18-19*** | ***0*** | ***0*** | ***0*** | ***0*** |
| 117 | New | Supervisory Control & Data Acquisition (SCADA) | 0 | 0 | 0 | 0 |
| 118 | New | Venus Pump Station Rehabilitation | 0 | 0 | 0 | 0 |
| | | **Total Defunding by Funding Source** | **0** | **0** | **0** | **0** |
| | | **Total Funding by Funding Source** | **4,365,000** | **1,000,000** | **1,500,000** | **2,000,000** |
| | | **Subtotal by Funding Source** | **4,365,000** | **1,000,000** | **1,500,000** | **2,000,000** |
| | | **Subtotal by Year** | **8,865,000** | | | |

**NOTES**

(a) New projects listed in Bold Italics.

(b) "Other" are identified on detailed project sheets.

# City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

**SUMMARY OF PROJECT FUNDING SOURCES**

### Sewer Improvement

| PG | PROJECT | | 2017-18 | | | |
|---|---|---|---|---|---|---|
| | | | Sewer Fund | Sewer Treatment Fund | Other | Unidentified Funding |
| 107 | 6116 | Sewer System Replacement 12-13 | 0 | 0 | 0 | 0 |
| 108 | 6118 | San Jose/Santa Clara Regional Waste Water Facility | 2,500,000 | 2,500,000 | 0 | 0 |
| 109 | 6119 | CCTV Sanitary Sewer | 165,000 | 0 | 0 | 0 |
| 110 | New | BART Project - Sewer Improvements | 0 | 0 | 0 | 0 |
| 111 | New | Minor Sewer Projects 2018 | 50,000 | 0 | 0 | 0 |
| 112 | New | Sanitary Sewer Overflow Improvements | 100,000 | 0 | 0 | 0 |
| 113 | New | Sewer Main Replacement Study 2018 | 115,000 | 0 | 0 | 0 |
| 114 | New | Sewer System Replacement 16-17 | 0 | 0 | 0 | 0 |
| 115 | New | Sewer System Replacement 17-18 | 0 | 0 | 500,000 | 500,000 |
| 116 | ***New*** | ***Sewer System Replacement 18-19*** | ***0*** | ***0*** | ***0*** | ***0*** |
| 117 | New | Supervisory Control & Data Acquisition (SCADA) | 250,000 | 0 | 0 | 0 |
| 118 | New | Venus Pump Station Rehabilitation | 50,000 | 0 | 0 | 0 |
| | | **Total Defunding by Funding Source** | **0** | **0** | **0** | **0** |
| | | **Total Funding by Funding Source** | **3,230,000** | **2,500,000** | **500,000** | **500,000** |
| | | **Subtotal by Funding Source** | **3,230,000** | **2,500,000** | **500,000** | **500,000** |
| | | **Subtotal by Year** | **6,730,000** | | | |

**NOTES**

(a) New projects listed in Bold Italics.

(b) "Other" are identified on detailed project sheets.

# City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

**SUMMARY OF PROJECT FUNDING SOURCES**

### Sewer Improvement

| PG | PROJECT | | 2018-19 | | | |
|---|---|---|---|---|---|---|
| | | | Sewer Fund | Sewer Treatment Fund | Other | Unidentified Funding |
| 107 | 6116 | Sewer System Replacement 12-13 | 0 | 0 | 0 | 0 |
| 108 | 6118 | San Jose/Santa Clara Regional Waste Water Facility | 2,500,000 | 2,500,000 | 0 | 0 |
| 109 | 6119 | CCTV Sanitary Sewer | 165,000 | 0 | 0 | 0 |
| 110 | New | BART Project - Sewer Improvements | 0 | 0 | 0 | 0 |
| 111 | New | Minor Sewer Projects 2018 | 0 | 0 | 0 | 0 |
| 112 | New | Sanitary Sewer Overflow Improvements | 0 | 0 | 0 | 0 |
| 113 | New | Sewer Main Replacement Study 2018 | 0 | 0 | 0 | 0 |
| 114 | New | Sewer System Replacement 16-17 | 0 | 0 | 0 | 0 |
| 115 | New | Sewer System Replacement 17-18 | 0 | 0 | 0 | 0 |
| 116 | ***New*** | ***Sewer System Replacement 18-19*** | ***0*** | ***0*** | ***500,000*** | ***500,000*** |
| 117 | New | Supervisory Control & Data Acquisition (SCADA) | 870,000 | 0 | 0 | 0 |
| 118 | New | Venus Pump Station Rehabilitation | 0 | 0 | 0 | 0 |
| | | **Total Defunding by Funding Source** | **0** | **0** | **0** | **0** |
| | | **Total Funding by Funding Source** | **3,535,000** | **2,500,000** | **500,000** | **500,000** |
| | | **Subtotal by Funding Source** | **3,535,000** | **2,500,000** | **500,000** | **500,000** |
| | | **Subtotal by Year** | **7,035,000** | | | |

**NOTES**

(a) New projects listed in Bold Italics.

(b) "Other" are identified on detailed project sheets.

# City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

**SUMMARY OF PROJECT FUNDING SOURCES**

### Sewer Improvement

| PG | PROJECT | | 2019-20 | | | |
|---|---|---|---|---|---|---|
| | | | Sewer Fund | Sewer Treatment Fund | Other | Unidentified Funding |
| 107 | 6116 | Sewer System Replacement 12-13 | 0 | 0 | 0 | 0 |
| 108 | 6118 | San Jose/Santa Clara Regional Waste Water Facility | 2,500,000 | 2,500,000 | 0 | 0 |
| 109 | 6119 | CCTV Sanitary Sewer | 0 | 0 | 0 | 0 |
| 110 | New | BART Project - Sewer Improvements | 0 | 0 | 0 | 0 |
| 111 | New | Minor Sewer Projects 2018 | 0 | 0 | 0 | 0 |
| 112 | New | Sanitary Sewer Overflow Improvements | 0 | 0 | 0 | 0 |
| 113 | New | Sewer Main Replacement Study 2018 | 0 | 0 | 0 | 0 |
| 114 | New | Sewer System Replacement 16-17 | 0 | 0 | 0 | 0 |
| 115 | New | Sewer System Replacement 17-18 | 0 | 0 | 0 | 0 |
| 116 | ***New*** | ***Sewer System Replacement 18-19*** | ***0*** | ***0*** | ***0*** | ***0*** |
| 117 | New | Supervisory Control & Data Acquisition (SCADA) | 0 | 0 | 0 | 0 |
| 118 | New | Venus Pump Station Rehabilitation | 0 | 0 | 0 | 0 |
| | | **Total Defunding by Funding Source** | **0** | **0** | **0** | **0** |
| | | **Total Funding by Funding Source** | **2,500,000** | **2,500,000** | **0** | **0** |
| | | **Subtotal by Funding Source** | **2,500,000** | **2,500,000** | **0** | **0** |
| | | **Subtotal by Year** | **5,000,000** | | | |

**NOTES**

(a) New projects listed in Bold Italics.

(b) "Other" are identified on detailed project sheets.

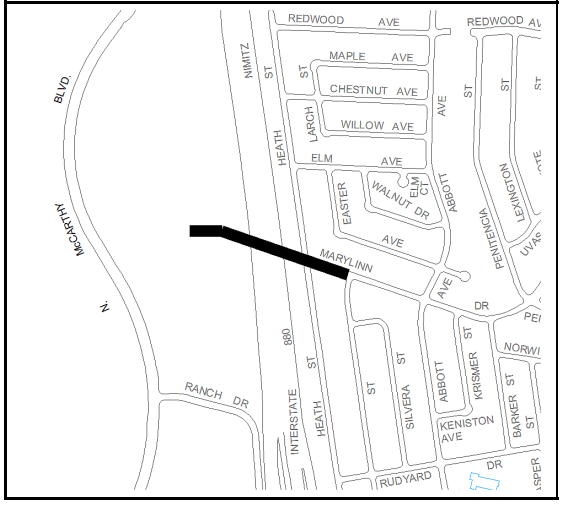
# City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Sewer Improvement | **6116** | **Sewer System Replacement 12-13** | 1 |

**CONTACT:** Michael Boitnott [3315]

**PRIORITY:** Rehabilitation of Existing Capital Assets or Systems

**DIAGRAM**




### DESCRIPTION

This project provides for the replacement of the highest priority facilities, including upgrades to the Sewer Pump Stations, forcemains and seismic retrofit work. The replacement prioritization is based on several factors including age, type of pipe material, soil conditions and physical evaluation based on video camera observations.

### COMMENTS:

This project is combination with project 6115 will replace the existing 27" sewer main that extends along Marylinn Drive and under I-880. The line is required to be realigned to allow the sewer to continue flow during construction of the new line since a temporary bypass could not be achieved. Additionally at the crossing of I-880, Caltrans requires new crossings to be installed perpendicular to the freeway.

**Uncommitted Balance as of 2/28/2015:** $1,511,357

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 260,000 | 0 | 0 | 0 | 0 | 0 | 260,000 |
| Administration | 95,000 | 0 | 0 | 0 | 0 | 0 | 95,000 |
| Surveying | 20,000 | 0 | 0 | 0 | 0 | 0 | 20,000 |
| Inspection | 40,000 | 0 | 0 | 0 | 0 | 0 | 40,000 |
| Land | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Improvements | 1,335,000 | 800,000 | 0 | 0 | 0 | 0 | 2,135,000 |
| Equipment | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 1,750,000 | 800,000 | 0 | 0 | 0 | 0 | 2,550,000 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Sewer Fund | 1,750,000 | 800,000 | 0 | 0 | 0 | 0 | 2,550,000 |
| **Totals** | 1,750,000 | 800,000 | 0 | 0 | 0 | 0 | 2,550,000 |

### FINANCE NOTES

## City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Sewer Improvement | **6118** | **San Jose/Santa Clara Regional Waste Water Facility** | 1 |

**CONTACT:** Marilyn Nickel [3347]

**PRIORITY:** Rehabilitation of Existing Capital Assets or Systems

**DESCRIPTION**

The City of Milpitas pumps our sewage to the San Jose/Santa Clara Regional Waste Water Facility for waste water treatment before it can be discharged into the San Francisco Bay. This project will fund Milpitas's share of the facilities rehabilitation costs. The facility was originally constructed in 1956 and is reaching the end of its useful life and is in need of a complete overhaul. The City of San Jose which operates the facility is undergoing a large rehabilitation project to completely overhaul the facility over the next 30 years. The City of Milpitas uses approximately 7% of the facility and will be responsible for 7% of the estimated $2 billion or $140 million in improvements that will be made over the next 30 years.

**COMMENTS:**

**Uncommitted Balance as of 2/28/2015:** $2,973,447

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Improvements | 14,000,000 | 5,000,000 | 6,200,000 | 5,000,000 | 5,000,000 | 5,000,000 | 40,200,000 |
| **Totals** | 14,000,000 | 5,000,000 | 6,200,000 | 5,000,000 | 5,000,000 | 5,000,000 | 40,200,000 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Sewer Fund | 7,500,000 | 3,500,000 | 4,200,000 | 2,500,000 | 2,500,000 | 2,500,000 | 22,700,000 |
| Sewer Treatment Fund | 5,000,000 | 1,500,000 | 1,000,000 | 2,500,000 | 2,500,000 | 2,500,000 | 15,000,000 |
| Sewer Infrastructure Fund | 1,500,000 | 0 | 1,000,000 | 0 | 0 | 0 | 2,500,000 |
| **Totals** | 14,000,000 | 5,000,000 | 6,200,000 | 5,000,000 | 5,000,000 | 5,000,000 | 40,200,000 |

**FINANCE NOTES**

# City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Sewer Improvement | **6119** | **CCTV Sanitary Sewer** | 1 |

**CONTACT:** Steven Machida [3355]

**PRIORITY:** Rehabilitation of Existing Capital Assets or Systems

**DESCRIPTION**

A Closed Circuit Television (CCTV) program is needed to be performed city-wide to determine the condition of the City's sanitary sewer system.

**COMMENTS:**

A CCTV program is used to measure the structural integrity and flow conditions of the underground pipes. During the initial construction, the pipes are constructed to grade and are structurally sound. However over time, pipes may develop "sags" and cracks that may cause pipe failures. Aggressive CCTV programs will identify conditions in the pipe before pipe failure and reduce the amount of pipe replacement that the City will need to perform.

**Uncommitted Balance as of 2/28/2015:** $165,000

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Administration | 5,000 | 5,000 | 5,000 | 5,000 | 5,000 | 0 | 25,000 |
| Inspection | 10,000 | 10,000 | 10,000 | 10,000 | 10,000 | 0 | 50,000 |
| Improvements | 150,000 | 150,000 | 150,000 | 150,000 | 150,000 | 0 | 750,000 |
| **Totals** | 165,000 | 165,000 | 165,000 | 165,000 | 165,000 | 0 | 825,000 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Sewer Fund | 165,000 | 165,000 | 165,000 | 165,000 | 165,000 | 0 | 825,000 |
| **Totals** | 165,000 | 165,000 | 165,000 | 165,000 | 165,000 | 0 | 825,000 |

**FINANCE NOTES**

## City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Sewer Improvement | **New** | **BART Project - Sewer Improvements** | |

**CONTACT:** Steven Machida [3355]

**PRIORITY:** Rehabilitation of Existing Capital Assets or Systems

**DESCRIPTION**

The BART project will cause the relocation of existing sewer pipelines utilities along the BART corridor at its own expense. The City has identified sewer pipelines improvements which should be completed as part of the BART utility relocation effort. These include rerouting and upsizing based on the City's Sewer Master Plan. These additional sewer system improvements are outside of the BART project scope and are to be paid for by the City.

**COMMENTS:**

**Uncommitted Balance as of 2/28/2015:** $0

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Administration | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Surveying | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Inspection | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Improvements | 0 | 350,000 | 0 | 0 | 0 | 0 | 350,000 |
| **Totals** | 0 | 350,000 | 0 | 0 | 0 | 0 | 350,000 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Sewer Fund | 0 | 350,000 | 0 | 0 | 0 | 0 | 350,000 |
| **Totals** | 0 | 350,000 | 0 | 0 | 0 | 0 | 350,000 |

**FINANCE NOTES**

## City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Sewer Improvement | **New** | **Minor Sewer Projects 2018** | 1 |

**CONTACT:** Steve Erickson [3301]

**PRIORITY:** Rehabilitation of Existing Capital Assets or Systems

**DESCRIPTION**

This project involves the ongoing analysis, engineering and implementation of various minor modifications and improvements to the existing sewer system which arise during the year.

**COMMENTS:**

**Uncommitted Balance as of 2/28/2015:** $0

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 0 | 0 | 0 | 10,000 | 0 | 0 | 10,000 |
| Administration | 0 | 0 | 0 | 5,000 | 0 | 0 | 5,000 |
| Surveying | 0 | 0 | 0 | 5,000 | 0 | 0 | 5,000 |
| Improvements | 0 | 0 | 0 | 30,000 | 0 | 0 | 30,000 |
| **Totals** | 0 | 0 | 0 | 50,000 | 0 | 0 | 50,000 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Sewer Fund | 0 | 0 | 0 | 50,000 | 0 | 0 | 50,000 |
| **Totals** | 0 | 0 | 0 | 50,000 | 0 | 0 | 50,000 |

**FINANCE NOTES**

## City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Sewer Improvement | **New** | **Sanitary Sewer Overflow Improvements** | 1 |

**CONTACT:** Marilyn Nickel [3347]

**PRIORITY:** Mandatory or Committed Projects

**DESCRIPTION**

This project includes multiple measures to reduce sewer system overflows. A pilot program for "smart" manhole covers would be implemented. These manhole covers contain a sewer manhole flow level sensor that would transmit alarms prior to overflows. In addition, sewer backflow devices would be installed at selected sites.

**COMMENTS:**

State regulations require sewer system agencies to reduce sewer system overflows.

**Uncommitted Balance as of 2/28/2015:** $0

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Administration | 0 | 0 | 0 | 10,000 | 0 | 0 | 10,000 |
| Improvements | 0 | 0 | 0 | 90,000 | 0 | 0 | 90,000 |
| **Totals** | 0 | 0 | 0 | 100,000 | 0 | 0 | 100,000 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Sewer Fund | 0 | 0 | 0 | 100,000 | 0 | 0 | 100,000 |
| **Totals** | 0 | 0 | 0 | 100,000 | 0 | 0 | 100,000 |

**FINANCE NOTES**

## City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Sewer Improvement | **New** | **Sewer Main Replacement Study 2018** | 1 |

**CONTACT:** Marilyn Nickel [3347]

**PRIORITY:** Studies and Analyses

**DESCRIPTION**

This project involves field evaluation of the remaining useful life of the city's sewer lines including but not limited to: McCarthy/Technology/Cypress and Barber/Bellew.

**COMMENTS:**

The 2002 Depreciation Study has estimated the remaining life of the existing sewer system infrastructure. This work is to field verify the projects identified with useful life ending by 2017, confirm the need and scope of work, and prioritize these projects. It may also include pipelines requiring significant attention even if they are not at the end of their useful life.

**Uncommitted Balance as of 2/28/2015:** $0

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 0 | 0 | 0 | 105,000 | 0 | 0 | 105,000 |
| Surveying | 0 | 0 | 0 | 10,000 | 0 | 0 | 10,000 |
| **Totals** | 0 | 0 | 0 | 115,000 | 0 | 0 | 115,000 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Sewer Fund | 0 | 0 | 0 | 115,000 | 0 | 0 | 115,000 |
| **Totals** | 0 | 0 | 0 | 115,000 | 0 | 0 | 115,000 |

**FINANCE NOTES**

## City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Sewer Improvement | **New** | **Sewer System Replacement 16-17** | 1 |

**CONTACT:** Steve Erickson [3301]

**PRIORITY:** Rehabilitation of Existing Capital Assets or Systems

**DESCRIPTION**

This project provides for the replacement of the highest priority facilities, including upgrades to the Sewer Pump Stations, forecemain and seismic retrofit work. The replacement prioritization is based on several factors including age, type of pipe material, soil conditions and physical evaluation based on video camera observations.

**COMMENTS:**

**Uncommitted Balance as of 2/28/2015:** $0

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 0 | 0 | 200,000 | 0 | 0 | 0 | 200,000 |
| Administration | 0 | 0 | 50,000 | 0 | 0 | 0 | 50,000 |
| Surveying | 0 | 0 | 50,000 | 0 | 0 | 0 | 50,000 |
| Inspection | 0 | 0 | 100,000 | 0 | 0 | 0 | 100,000 |
| Land | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Improvements | 0 | 0 | 2,100,000 | 0 | 0 | 0 | 2,100,000 |
| Equipment | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 0 | 0 | 2,500,000 | 0 | 0 | 0 | 2,500,000 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Sewer Infrastructure Fund | 0 | 0 | 500,000 | 0 | 0 | 0 | 500,000 |
| Unidentified Funding | 0 | 0 | 2,000,000 | 0 | 0 | 0 | 2,000,000 |
| **Totals** | 0 | 0 | 2,500,000 | 0 | 0 | 0 | 2,500,000 |

**FINANCE NOTES**

See following year's Sewer System Replacement for future year funding

## City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Sewer Improvement | **New** | **Sewer System Replacement 17-18** | 1 |

**CONTACT:** Steve Erickson [3301]

**PRIORITY:** Rehabilitation of Existing Capital Assets or Systems

**DESCRIPTION**

This project provides for the replacement of the highest priority facilities, including upgrades to the Sewer Pump Stations, forecemains and seismic retrofit work. The replacement prioritization is based on several factors including age, type of pipe material, soil conditions and physical evaluation based on video camera observations.

**COMMENTS:**

**Uncommitted Balance as of 2/28/2015:** $0

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 0 | 0 | 0 | 150,000 | 0 | 0 | 150,000 |
| Administration | 0 | 0 | 0 | 45,000 | 0 | 0 | 45,000 |
| Surveying | 0 | 0 | 0 | 20,000 | 0 | 0 | 20,000 |
| Inspection | 0 | 0 | 0 | 100,000 | 0 | 0 | 100,000 |
| Land | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Improvements | 0 | 0 | 0 | 685,000 | 0 | 0 | 685,000 |
| **Totals** | 0 | 0 | 0 | 1,000,000 | 0 | 0 | 1,000,000 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Unidentified Funding | 0 | 0 | 0 | 500,000 | 0 | 0 | 500,000 |
| Sewer Infrastructure Fund | 0 | 0 | 0 | 500,000 | 0 | 0 | 500,000 |
| **Totals** | 0 | 0 | 0 | 1,000,000 | 0 | 0 | 1,000,000 |

**FINANCE NOTES**

See following year's Sewer System Replacement for future year funding

## City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Sewer Improvement | **New** | **Sewer System Replacement 18-19** | 1 |

**CONTACT:** Steve Erickson [3301]

**PRIORITY:** Rehabilitation of Existing Capital Assets or Systems

**DESCRIPTION**

This project provides for the replacement of the highest priority facilities, including upgrades to the Sewer Pump Stations, forcemain's, and seismic retrofit work. The replacement prioritization is based on several factors including age, type of pipe material, soil conditions and physical evaluation based on video camera observations.

**COMMENTS:**

**Uncommitted Balance as of 2/28/2015:** $0

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 0 | 0 | 0 | 0 | 150,000 | 0 | 150,000 |
| Administration | 0 | 0 | 0 | 0 | 45,000 | 0 | 45,000 |
| Surveying | 0 | 0 | 0 | 0 | 20,000 | 0 | 20,000 |
| Inspection | 0 | 0 | 0 | 0 | 100,000 | 0 | 100,000 |
| Improvements | 0 | 0 | 0 | 0 | 685,000 | 0 | 685,000 |
| **Totals** | 0 | 0 | 0 | 0 | 1,000,000 | 0 | 1,000,000 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Sewer Infrastructure Fund | 0 | 0 | 0 | 0 | 500,000 | 0 | 500,000 |
| Unidentified Funding | 0 | 0 | 0 | 0 | 500,000 | 0 | 500,000 |
| **Totals** | 0 | 0 | 0 | 0 | 1,000,000 | 0 | 1,000,000 |

**FINANCE NOTES**

# City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Sewer Improvement | **New** | **Supervisory Control & Data Acquisition (SCADA)** | 1 |

**CONTACT:** Steve Erickson [3301]

**PRIORITY:** Projects Which Avoid Future Additional Costs

**DESCRIPTION**

A Supervisory Control and Data Acquisition (SCADA) system provides real-time data, such as wet well level, and pump operational status to sewer system operators. Operators can use this data to identify operational problems. SCADA allows for remote monitoring and operation of pumps to implement corrective actions and maintain wastewater discharge to the regional wastewater treatment plant.

**COMMENTS:**

Currently operators rely on unsophisticated alarms and must drive to sites to evaluate the problem and implement corrective action. This work includes analysis and design only. Additional funding is required for installation.

**Uncommitted Balance as of 2/28/2015:** $0

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 0 | 0 | 0 | 200,000 | 0 | 0 | 200,000 |
| Administration | 0 | 0 | 0 | 50,000 | 0 | 0 | 50,000 |
| Inspection | 0 | 0 | 0 | 0 | 40,000 | 0 | 40,000 |
| Improvements | 0 | 0 | 0 | 0 | 830,000 | 0 | 830,000 |
| **Totals** | 0 | 0 | 0 | 250,000 | 870,000 | 0 | 1,120,000 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Sewer Fund | 0 | 0 | 0 | 250,000 | 870,000 | 0 | 1,120,000 |
| **Totals** | 0 | 0 | 0 | 250,000 | 870,000 | 0 | 1,120,000 |

**FINANCE NOTES**

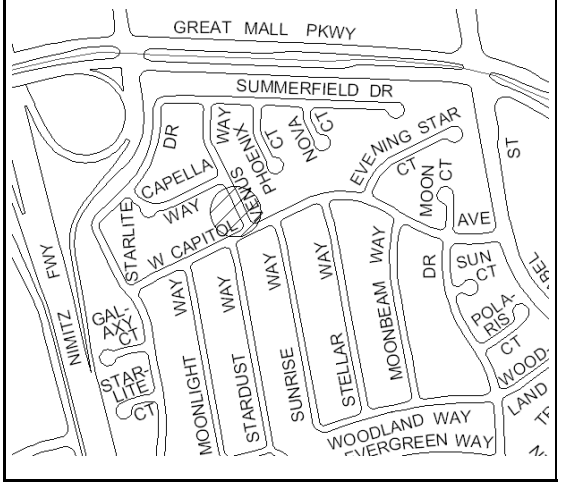
## City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Sewer Improvement | **New** | **Venus Pump Station Rehabilitation** | 1 |

**CONTACT:** Steve Erickson [3301]

**PRIORITY:** Rehabilitation of Existing Capital Assets or Systems

**DIAGRAM**




**DESCRIPTION**

This project provides rehabilitation or replacement of equipment at the Venus Pump station.

**COMMENTS:**

The last equipment upgrade occurred in 2004-06 and the equipment life is estimated at 10 years.

**Uncommitted Balance as of 2/28/2015:** $0

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 0 | 0 | 0 | 10,000 | 0 | 0 | 10,000 |
| Administration | 0 | 0 | 0 | 5,000 | 0 | 0 | 5,000 |
| Inspection | 0 | 0 | 0 | 5,000 | 0 | 0 | 5,000 |
| Equipment | 0 | 0 | 0 | 30,000 | 0 | 0 | 30,000 |
| **Totals** | 0 | 0 | 0 | 50,000 | 0 | 0 | 50,000 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Sewer Fund | 0 | 0 | 0 | 50,000 | 0 | 0 | 50,000 |
| **Totals** | 0 | 0 | 0 | 50,000 | 0 | 0 | 50,000 |

**FINANCE NOTES**

# City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM
### STORM DRAIN IMPROVEMENT PROJECTS SUMMARY

**SUMMARY OF COSTS**

| PG. NO. | PROJECT | | TOTAL COST | PRIOR YEARS | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 |
|---|---|---|---|---|---|---|---|---|---|
| 127 | 3700 | Storm Drain System Deficiency Program | 3,000,000 | 700,000 | 0 | 800,000 | 1,500,000 | 0 | 0 |
| 128 | 3709 | Dempsey Road Storm Drain Replacement | 2,000,000 | 400,000 | 1,600,000 | 0 | 0 | 0 | 0 |
| 129 | 3710 | Penitencia Pump Station Improvements | 3,250,000 | 250,000 | 0 | 0 | 600,000 | 2,400,000 | 0 |
| 130 | New | Abbott Pump Station Controls Replacement | 275,000 | 0 | 0 | 0 | 0 | 125,000 | 150,000 |
| 131 | New | BART Project - Storm Improvements | 250,000 | 0 | 250,000 | 0 | 0 | 0 | 0 |
| 132 | New | California Circle Pump Station | 1,700,000 | 0 | 0 | 1,700,000 | 0 | 0 | 0 |
| 133 | New | Channel and Lagoon Dredging | 1,500,000 | 0 | 0 | 0 | 1,500,000 | 0 | 0 |
| 134 | New | Flap Gate Replacement | 250,000 | 0 | 0 | 0 | 125,000 | 125,000 | 0 |
| 135 | New | Minor Storm Drain Projects 2016 | 100,000 | 0 | 100,000 | 0 | 0 | 0 | 0 |
| 136 | New | Minor Storm Drain Projects 2018 | 100,000 | 0 | 0 | 0 | 100,000 | 0 | 0 |
| 137 | New | Oak Creek Pump Station Upgrade | 2,175,000 | 0 | 0 | 0 | 0 | 275,000 | 1,900,000 |
| 138 | New | Spence Pump Station Improvements | 145,000 | 0 | 0 | 0 | 145,000 | 0 | 0 |
| 139 | ***New*** | ***Storm Drain Supervisory Control and Data*** | ***375,000*** | ***0*** | ***0*** | ***0*** | ***0*** | ***0*** | ***375,000*** |
| 140 | New | Storm Drain System Improvements 2018 | 1,160,000 | 0 | 0 | 0 | 1,160,000 | 0 | 0 |
| 141 | New | Trash Removal Devices | 350,000 | 0 | 0 | 350,000 | 0 | 0 | 0 |
| | | **Defunding Subtotal** | | | | | | | |
| | | **Funding Subtotal** | | | **1,950,000** | | | | |
| | | **TOTAL COST** | **$16,630,000** | **$1,350,000** | **$1,950,000** | **$2,850,000** | **$5,130,000** | **$2,925,000** | **$2,425,000** |

**SUMMARY OF AVAILABLE FINANCING**

| | | | | | | |
|---|---|---|---|---|---|---|
| **General Government CIP Fund** | 1,200,000 | 800,000 | 400,000 | 900,000 | 0 |
| **Storm Drain Fund** | 750,000 | 350,000 | 200,000 | 0 | 0 |
| **Unidentified Funding** | 0 | 1,700,000 | 4,530,000 | 2,025,000 | 2,425,000 |
| ***TOTAL AVAILABLE*** | **$1,950,000** | **$2,850,000** | **$5,130,000** | **$2,925,000** | **$2,425,000** |

**NOTES**

(a) New projects listed in Bold Italics.

## City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

**SUMMARY OF PROJECT FUNDING SOURCES**

### Storm Drain Improvement

| PG | PROJECT | | 2015-16 | | | |
|---|---|---|---|---|---|---|
| | | | Storm Drain Fund | General Government CIP Fund | Other | Unidentified Funding |
| 127 | 3700 | Storm Drain System Deficiency Program | 0 | 0 | 0 | 0 |
| 128 | 3709 | Dempsey Road Storm Drain Replacement | 400,000 | 1,200,000 | 0 | 0 |
| 129 | 3710 | Penitencia Pump Station Improvements | 0 | 0 | 0 | 0 |
| 130 | New | Abbott Pump Station Controls Replacement | 0 | 0 | 0 | 0 |
| 131 | New | BART Project - Storm Improvements | 250,000 | 0 | 0 | 0 |
| 132 | New | California Circle Pump Station | 0 | 0 | 0 | 0 |
| 133 | New | Channel and Lagoon Dredging | 0 | 0 | 0 | 0 |
| 134 | New | Flap Gate Replacement | 0 | 0 | 0 | 0 |
| 135 | New | Minor Storm Drain Projects 2016 | 100,000 | 0 | 0 | 0 |
| 136 | New | Minor Storm Drain Projects 2018 | 0 | 0 | 0 | 0 |
| 137 | New | Oak Creek Pump Station Upgrade | 0 | 0 | 0 | 0 |
| 138 | New | Spence Pump Station Improvements | 0 | 0 | 0 | 0 |
| 139 | ***New*** | ***Storm Drain Supervisory Control and Data Acquisition*** | ***0*** | ***0*** | ***0*** | ***0*** |
| 140 | New | Storm Drain System Improvements 2018 | 0 | 0 | 0 | 0 |
| 141 | New | Trash Removal Devices | 0 | 0 | 0 | 0 |
| | | **Total Defunding by Funding Source** | **(0)** | **(0)** | **(0)** | **(0)** |
| | | **Total Funding by Funding Source** | **750,000** | **1,200,000** | **0** | **0** |
| | | **Subtotal by Funding Source** | **750,000** | **1,200,000** | **0** | **0** |
| | | **Subtotal by Year** | **1,950,000** | | | |

**NOTES**

(a) New projects listed in Bold Italics.

(b) "Other' are identified on detailed project sheets.

# City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

**SUMMARY OF PROJECT FUNDING SOURCES**

### Storm Drain Improvement

| PG | PROJECT | | 2016-17 | | | |
|---|---|---|---|---|---|---|
| | | | Storm Drain Fund | General Government CIP Fund | Other | Unidentified Funding |
| 127 | 3700 | Storm Drain System Deficiency Program | 0 | 800,000 | 0 | 0 |
| 128 | 3709 | Dempsey Road Storm Drain Replacement | 0 | 0 | 0 | 0 |
| 129 | 3710 | Penitencia Pump Station Improvements | 0 | 0 | 0 | 0 |
| 130 | New | Abbott Pump Station Controls Replacement | 0 | 0 | 0 | 0 |
| 131 | New | BART Project - Storm Improvements | 0 | 0 | 0 | 0 |
| 132 | New | California Circle Pump Station | 0 | 0 | 0 | 1,700,000 |
| 133 | New | Channel and Lagoon Dredging | 0 | 0 | 0 | 0 |
| 134 | New | Flap Gate Replacement | 0 | 0 | 0 | 0 |
| 135 | New | Minor Storm Drain Projects 2016 | 0 | 0 | 0 | 0 |
| 136 | New | Minor Storm Drain Projects 2018 | 0 | 0 | 0 | 0 |
| 137 | New | Oak Creek Pump Station Upgrade | 0 | 0 | 0 | 0 |
| 138 | New | Spence Pump Station Improvements | 0 | 0 | 0 | 0 |
| 139 | ***New*** | ***Storm Drain Supervisory Control and Data Acquisition*** | ***0*** | ***0*** | ***0*** | ***0*** |
| 140 | New | Storm Drain System Improvements 2018 | 0 | 0 | 0 | 0 |
| 141 | New | Trash Removal Devices | 350,000 | 0 | 0 | 0 |
| | | **Total Defunding by Funding Source** | **0** | **0** | **0** | **0** |
| | | **Total Funding by Funding Source** | **350,000** | **800,000** | **0** | **1,700,000** |
| | | **Subtotal by Funding Source** | **350,000** | **800,000** | **0** | **1,700,000** |
| | | **Subtotal by Year** | **2,850,000** | | | |

**NOTES**

(a) New projects listed in Bold Italics.

(b) "Other' are identified on detailed project sheets.

# City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

**SUMMARY OF PROJECT FUNDING SOURCES**

### Storm Drain Improvement

| PG | PROJECT | | 2017-18 | | | |
|---|---|---|---|---|---|---|
| | | | Storm Drain Fund | General Government CIP Fund | Other | Unidentified Funding |
| 127 | 3700 | Storm Drain System Deficiency Program | 0 | 0 | 0 | 1,500,000 |
| 128 | 3709 | Dempsey Road Storm Drain Replacement | 0 | 0 | 0 | 0 |
| 129 | 3710 | Penitencia Pump Station Improvements | 200,000 | 400,000 | 0 | 0 |
| 130 | New | Abbott Pump Station Controls Replacement | 0 | 0 | 0 | 0 |
| 131 | New | BART Project - Storm Improvements | 0 | 0 | 0 | 0 |
| 132 | New | California Circle Pump Station | 0 | 0 | 0 | 0 |
| 133 | New | Channel and Lagoon Dredging | 0 | 0 | 0 | 1,500,000 |
| 134 | New | Flap Gate Replacement | 0 | 0 | 0 | 125,000 |
| 135 | New | Minor Storm Drain Projects 2016 | 0 | 0 | 0 | 0 |
| 136 | New | Minor Storm Drain Projects 2018 | 0 | 0 | 0 | 100,000 |
| 137 | New | Oak Creek Pump Station Upgrade | 0 | 0 | 0 | 0 |
| 138 | New | Spence Pump Station Improvements | 0 | 0 | 0 | 145,000 |
| 139 | ***New*** | ***Storm Drain Supervisory Control and Data Acquisition*** | ***0*** | ***0*** | ***0*** | ***0*** |
| 140 | New | Storm Drain System Improvements 2018 | 0 | 0 | 0 | 1,160,000 |
| 141 | New | Trash Removal Devices | 0 | 0 | 0 | 0 |
| | | **Total Defunding by Funding Source** | **0** | **0** | **0** | **0** |
| | | **Total Funding by Funding Source** | **200,000** | **400,000** | **0** | **4,530,000** |
| | | **Subtotal by Funding Source** | **200,000** | **400,000** | **0** | **4,530,000** |
| | | **Subtotal by Year** | **5,130,000** | | | |

**NOTES**

(a) New projects listed in Bold Italics.

(b) "Other' are identified on detailed project sheets.

# City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

**SUMMARY OF PROJECT FUNDING SOURCES**

### Storm Drain Improvement

| PG | PROJECT | | 2018-19 | | | |
|---|---|---|---|---|---|---|
| | | | Storm Drain Fund | General Government CIP Fund | Other | Unidentified Funding |
| 127 | 3700 | Storm Drain System Deficiency Program | 0 | 0 | 0 | 0 |
| 128 | 3709 | Dempsey Road Storm Drain Replacement | 0 | 0 | 0 | 0 |
| 129 | 3710 | Penitencia Pump Station Improvements | 0 | 900,000 | 0 | 1,500,000 |
| 130 | New | Abbott Pump Station Controls Replacement | 0 | 0 | 0 | 125,000 |
| 131 | New | BART Project - Storm Improvements | 0 | 0 | 0 | 0 |
| 132 | New | California Circle Pump Station | 0 | 0 | 0 | 0 |
| 133 | New | Channel and Lagoon Dredging | 0 | 0 | 0 | 0 |
| 134 | New | Flap Gate Replacement | 0 | 0 | 0 | 125,000 |
| 135 | New | Minor Storm Drain Projects 2016 | 0 | 0 | 0 | 0 |
| 136 | New | Minor Storm Drain Projects 2018 | 0 | 0 | 0 | 0 |
| 137 | New | Oak Creek Pump Station Upgrade | 0 | 0 | 0 | 275,000 |
| 138 | New | Spence Pump Station Improvements | 0 | 0 | 0 | 0 |
| 139 | ***New*** | ***Storm Drain Supervisory Control and Data Acquisition*** | ***0*** | ***0*** | ***0*** | ***0*** |
| 140 | New | Storm Drain System Improvements 2018 | 0 | 0 | 0 | 0 |
| 141 | New | Trash Removal Devices | 0 | 0 | 0 | 0 |
| | | **Total Defunding by Funding Source** | **0** | **0** | **0** | **0** |
| | | **Total Funding by Funding Source** | **0** | **900,000** | **0** | **2,025,000** |
| | | **Subtotal by Funding Source** | **0** | **900,000** | **0** | **2,025,000** |
| | | **Subtotal by Year** | **2,925,000** | | | |

**NOTES**

(a) New projects listed in Bold Italics.

(b) "Other' are identified on detailed project sheets.

# City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

**SUMMARY OF PROJECT FUNDING SOURCES**

### Storm Drain Improvement

| PG | PROJECT | | 2019-20 | | | |
|---|---|---|---|---|---|---|
| | | | Storm Drain Fund | General Government CIP Fund | Other | Unidentified Funding |
| 127 | 3700 | Storm Drain System Deficiency Program | 0 | 0 | 0 | 0 |
| 128 | 3709 | Dempsey Road Storm Drain Replacement | 0 | 0 | 0 | 0 |
| 129 | 3710 | Penitencia Pump Station Improvements | 0 | 0 | 0 | 0 |
| 130 | New | Abbott Pump Station Controls Replacement | 0 | 0 | 0 | 150,000 |
| 131 | New | BART Project - Storm Improvements | 0 | 0 | 0 | 0 |
| 132 | New | California Circle Pump Station | 0 | 0 | 0 | 0 |
| 133 | New | Channel and Lagoon Dredging | 0 | 0 | 0 | 0 |
| 134 | New | Flap Gate Replacement | 0 | 0 | 0 | 0 |
| 135 | New | Minor Storm Drain Projects 2016 | 0 | 0 | 0 | 0 |
| 136 | New | Minor Storm Drain Projects 2018 | 0 | 0 | 0 | 0 |
| 137 | New | Oak Creek Pump Station Upgrade | 0 | 0 | 0 | 1,900,000 |
| 138 | New | Spence Pump Station Improvements | 0 | 0 | 0 | 0 |
| 139 | ***New*** | ***Storm Drain Supervisory Control and Data Acquisition*** | ***0*** | ***0*** | ***0*** | ***375,000*** |
| 140 | New | Storm Drain System Improvements 2018 | 0 | 0 | 0 | 0 |
| 141 | New | Trash Removal Devices | 0 | 0 | 0 | 0 |
| | | **Total Defunding by Funding Source** | **0** | **0** | **0** | **0** |
| | | **Total Funding by Funding Source** | **0** | **0** | **0** | **2,425,000** |
| | | **Subtotal by Funding Source** | **0** | **0** | **0** | **2,425,000** |
| | | **Subtotal by Year** | **2,425,000** | | | |

**NOTES**

(a) New projects listed in Bold Italics.

(b) "Other' are identified on detailed project sheets.

# City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Storm Drain Improvement | **3700** | **Storm Drain System Deficiency Program** | 1 |

**CONTACT:** Steve Erickson [3301]

**PRIORITY:** Rehabilitation of Existing Capital Assets or Systems

**DESCRIPTION**

This project involves the design and construction of storm drain pipeline at various locations, primarily due to insufficient capacity and aging infrastructure. The areas include but are not limited to: Wrigley and Vista Way, Rocky Mountain Avenue, Watson Court, South Park Victoria Drive, Jacklin Road, Traughber Street, Park Hill Drive, Prada Drive, Abbott Avenue, Coyote Street, UPRR near Jurgens, and Sycamore Drive. In some locations, the existing storm drain pipe will be removed and replaced with larger pipe. In other locations, a second parallel pipe will be installed depending conditions of the existing pipe and space constraints with other utilities. Work scope also includes pump station rehabilitation work to electrical and mechanical systems.

**COMMENTS:**

Additional projects and work scope will be programmed based on the new Storm Drain Master Plan and urban runoff program requirements.

**Uncommitted Balance as of 2/28/2015:** $219,906

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 125,000 | 0 | 110,000 | 50,000 | 0 | 0 | 285,000 |
| Administration | 25,000 | 0 | 50,000 | 25,000 | 0 | 0 | 100,000 |
| Surveying | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Inspection | 60,000 | 0 | 40,000 | 100,000 | 0 | 0 | 200,000 |
| Improvements | 490,000 | 0 | 600,000 | 1,325,000 | 0 | 0 | 2,415,000 |
| **Totals** | 700,000 | 0 | 800,000 | 1,500,000 | 0 | 0 | 3,000,000 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Unidentified Funding | 0 | 0 | 0 | 1,500,000 | 0 | 0 | 1,500,000 |
| Storm Drain Fund | 700,000 | 0 | 0 | 0 | 0 | 0 | 700,000 |
| General Government CIP Fund | 0 | 0 | 800,000 | 0 | 0 | 0 | 800,000 |
| **Totals** | 700,000 | 0 | 800,000 | 1,500,000 | 0 | 0 | 3,000,000 |

**FINANCE NOTES**

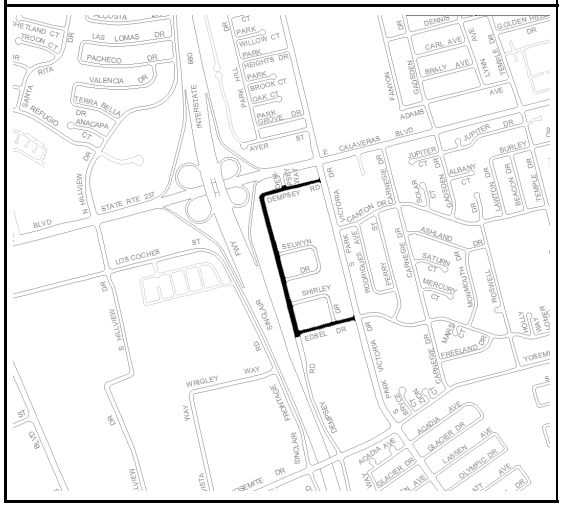
## City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Storm Drain Improvement | **3709** | **Dempsey Road Storm Drain Replacement** | 1 |

**CONTACT:** Michael Boitnott [3315]

**PRIORITY:** Rehabilitation of Existing Capital Assets or Systems

**DIAGRAM**




**DESCRIPTION**

The work includes replacement of three segments of storm drainage piping around the Dempsey Road area and installation of two outfall into Los Coches at Dempsey. Segment one is a 36 inch diameter pipe located on Dempsey Road between South Park Victoria and Los Coches Creek, approximately 1,100 linear feet. Segment two is a 48 inch diameter pipe located on Dempsey Road between Edsel Drive and Los Coches Creek, approximately 1,400 linear feet. Segment three is a 36 inch diameter pipe located on Edsel Drive between South Park Victoria and Dempsey Road, approximately 730 linear feet.

**COMMENTS:**

This work is identified as high priority projects #6 and 7 on Table 8-1 in the 2013 Storm Drain Master Plan. Segments one and two need to be constructed simultaneously with the Dempsey water line replacement project. This work may require an environmental study.

**Uncommitted Balance as of 2/28/2015:** $100,000

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 300,000 | 0 | 0 | 0 | 0 | 0 | 300,000 |
| Administration | 100,000 | 50,000 | 0 | 0 | 0 | 0 | 150,000 |
| Inspection | 0 | 100,000 | 0 | 0 | 0 | 0 | 100,000 |
| Improvements | 0 | 1,450,000 | 0 | 0 | 0 | 0 | 1,450,000 |
| **Totals** | 400,000 | 1,600,000 | 0 | 0 | 0 | 0 | 2,000,000 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| General Government CIP Fund | 0 | 1,200,000 | 0 | 0 | 0 | 0 | 1,200,000 |
| Storm Drain Fund | 400,000 | 400,000 | 0 | 0 | 0 | 0 | 800,000 |
| **Totals** | 400,000 | 1,600,000 | 0 | 0 | 0 | 0 | 2,000,000 |

**FINANCE NOTES**

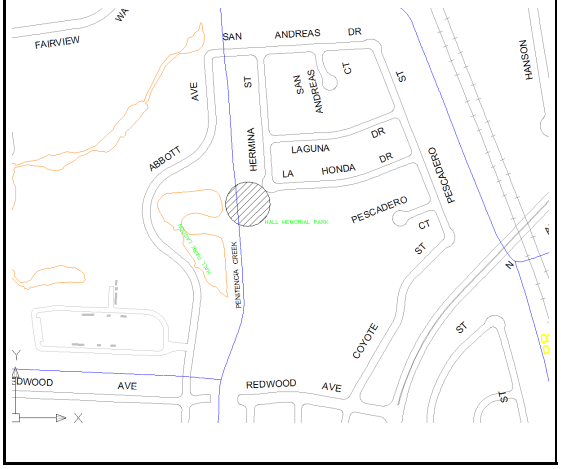
# City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Storm Drain Improvement | **3710** | **Penitencia Pump Station Improvements** | 1 |

**CONTACT:** Steve Erickson [3301]

**PRIORITY:** Major Service Equipment Replacement

**DIAGRAM**




**DESCRIPTION**

This project provides a complete reconstruction of the pump station and wet well, work scope includes: replacement of three diesel engines and pump assemblies, electric jockey pump, station controls and electrical system upgrades. The station is located at Hall Park and provides drainage for approximately 215 acres of residential area (Manor neighborhood.)

**COMMENTS:**

This is the City's oldest storm pump station built in 1955. The Bay Area Air Quality Management District BAAQMD will no longer permit the diesel engines to be replaced in-kind; they will have to be replaced with electric motors and a backup generator. This pump station is approximately 40 years old and the engines and pumps have not been rebuilt or rehabilitated. The Fiat diesel engines and pumps have exceeded their design life and parts are no longer available to even make repairs. The first phase of the project will be to replace some engines and overhaul pumps and drives to extend the reliability of the station.

**Uncommitted Balance as of 2/28/2015:** $221,302

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 0 | 0 | 0 | 500,000 | 0 | 0 | 500,000 |
| Administration | 25,000 | 0 | 0 | 100,000 | 50,000 | 0 | 175,000 |
| Inspection | 0 | 0 | 0 | 0 | 100,000 | 0 | 100,000 |
| Improvements | 0 | 0 | 0 | 0 | 2,250,000 | 0 | 2,250,000 |
| Equipment | 225,000 | 0 | 0 | 0 | 0 | 0 | 225,000 |
| **Totals** | 250,000 | 0 | 0 | 600,000 | 2,400,000 | 0 | 3,250,000 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| General Government CIP Fund | 200,000 | 0 | 0 | 400,000 | 900,000 | 0 | 1,500,000 |
| Storm Drain Fund | 50,000 | 0 | 0 | 200,000 | 0 | 0 | 250,000 |
| Unidentified Funding | 0 | 0 | 0 | 0 | 1,500,000 | 0 | 1,500,000 |
| **Totals** | 250,000 | 0 | 0 | 600,000 | 2,400,000 | 0 | 3,250,000 |

**FINANCE NOTES**

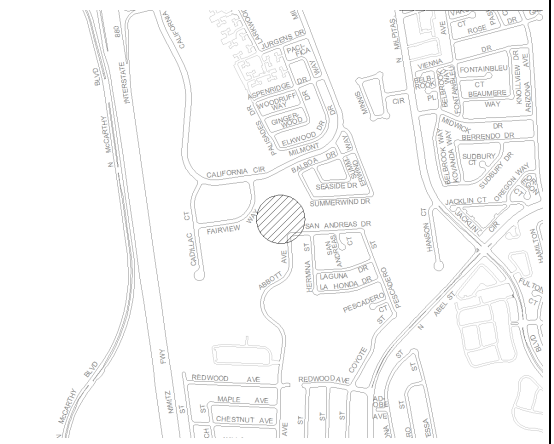
## City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Storm Drain Improvement | **New** | **Abbott Pump Station Controls Replacement** | 1 |

**CONTACT:** Glen Campi [2643]

**PRIORITY:** Rehabilitation of Existing Capital Assets or Systems

**DIAGRAM**




**DESCRIPTION**

Replace pump and level controls at the pump station as the controls have reached the end of their useful life.

**COMMENTS:**

This cost includes design only. Construction costs will be programmed in 2019-20.

**Uncommitted Balance as of 2/28/2015:** $0

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 0 | 0 | 0 | 0 | 85,000 | 0 | 85,000 |
| Administration | 0 | 0 | 0 | 0 | 40,000 | 0 | 40,000 |
| Inspection | 0 | 0 | 0 | 0 | 0 | 25,000 | 25,000 |
| Improvements | 0 | 0 | 0 | 0 | 0 | 125,000 | 125,000 |
| **Totals** | 0 | 0 | 0 | 0 | 125,000 | 150,000 | 275,000 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Unidentified Funding | 0 | 0 | 0 | 0 | 125,000 | 150,000 | 275,000 |
| **Totals** | 0 | 0 | 0 | 0 | 125,000 | 150,000 | 275,000 |

**FINANCE NOTES**

## City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Storm Drain Improvement | **New** | **BART Project - Storm Improvements** | |

**CONTACT:** Steven Machida [3355]

**PRIORITY:** Rehabilitation of Existing Capital Assets or Systems

**DESCRIPTION**

The BART project will cause the relocation of existing storm drain utilities along the BART corridor at its own expense. The City has identified additional storm drain improvements which should be completed as part of the BART utility relocation effort, at the City's cost. These include rerouting storm drain lines on Capitol Avenue, to eliminate localized annual flooding and other enhancements.

**COMMENTS:**

**Uncommitted Balance as of 2/28/2015:** $0

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Administration | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Surveying | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Inspection | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Improvements | 0 | 250,000 | 0 | 0 | 0 | 0 | 250,000 |
| **Totals** | 0 | 250,000 | 0 | 0 | 0 | 0 | 250,000 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Storm Drain Fund | 0 | 250,000 | 0 | 0 | 0 | 0 | 250,000 |
| **Totals** | 0 | 250,000 | 0 | 0 | 0 | 0 | 250,000 |

**FINANCE NOTES**

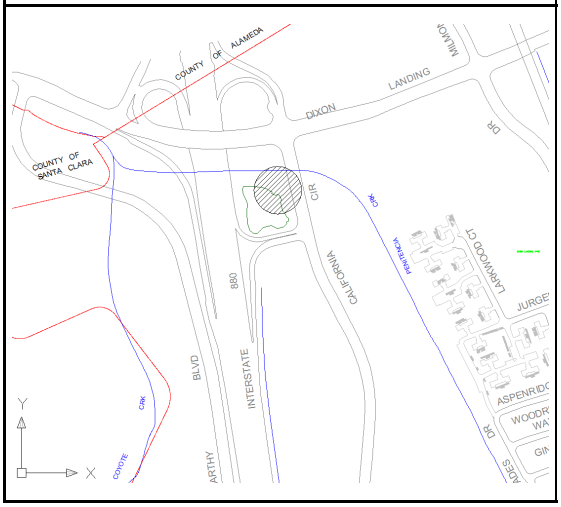
# City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | Estimate Level |
|---|---|---|
| Storm Drain Improvement | **New** **California Circle Pump Station** | 1 |

**CONTACT:** Steve Erickson [3301]

**PRIORITY:** Major Service Equipment Replacement

**DIAGRAM**




**DESCRIPTION**

This project involves replacement of pumps and engines that have reached the end of their useful life and conversion from diesel engines to electric motors.

**COMMENTS:**

**Uncommitted Balance as of 2/28/2015:** $0

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 0 | 0 | 320,000 | 0 | 0 | 0 | 320,000 |
| Administration | 0 | 0 | 100,000 | 0 | 0 | 0 | 100,000 |
| Inspection | 0 | 0 | 80,000 | 0 | 0 | 0 | 80,000 |
| Equipment | 0 | 0 | 1,200,000 | 0 | 0 | 0 | 1,200,000 |
| **Totals** | 0 | 0 | 1,700,000 | 0 | 0 | 0 | 1,700,000 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Unidentified Funding | 0 | 0 | 1,700,000 | 0 | 0 | 0 | 1,700,000 |
| **Totals** | 0 | 0 | 1,700,000 | 0 | 0 | 0 | 1,700,000 |

**FINANCE NOTES**

## City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Storm Drain Improvement | **New** | **Channel and Lagoon Dredging** | 1 |

**CONTACT:** Steven Machida [3355]

**PRIORITY:** Rehabilitation of Existing Capital Assets or Systems

**DESCRIPTION**

This project removes debris and deposited soil from channel and lagoon bottoms to improve flow. The channel is parallel to I-880 and runs approximately 4,800 linear feet (from Redwood Avenue to California Circle). The lagoons include Hidden Lake, Hall and California Circle.

**COMMENTS:**

**Uncommitted Balance as of 2/28/2015:** $0

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 0 | 0 | 0 | 100,000 | 0 | 0 | 100,000 |
| Administration | 0 | 0 | 0 | 80,000 | 0 | 0 | 80,000 |
| Inspection | 0 | 0 | 0 | 70,000 | 0 | 0 | 70,000 |
| Improvements | 0 | 0 | 0 | 1,250,000 | 0 | 0 | 1,250,000 |
| **Totals** | 0 | 0 | 0 | 1,500,000 | 0 | 0 | 1,500,000 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Unidentified Funding | 0 | 0 | 0 | 1,500,000 | 0 | 0 | 1,500,000 |
| **Totals** | 0 | 0 | 0 | 1,500,000 | 0 | 0 | 1,500,000 |

**FINANCE NOTES**

## City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Storm Drain Improvement | **New** | **Flap Gate Replacement** | 1 |

**CONTACT:** Steve Erickson [3301]

**PRIORITY:** Rehabilitation of Existing Capital Assets or Systems

**DESCRIPTION**

This project replaces existing flap gates at creek outfall with check valves to prevent creek flow from entering the City storm drain system.

**COMMENTS:**

This work requires additional funding.

**Uncommitted Balance as of 2/28/2015:** $0

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 0 | 0 | 0 | 45,000 | 45,000 | 0 | 90,000 |
| Administration | 0 | 0 | 0 | 10,000 | 10,000 | 0 | 20,000 |
| Improvements | 0 | 0 | 0 | 70,000 | 70,000 | 0 | 140,000 |
| **Totals** | 0 | 0 | 0 | 125,000 | 125,000 | 0 | 250,000 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Unidentified Funding | 0 | 0 | 0 | 125,000 | 125,000 | 0 | 250,000 |
| **Totals** | 0 | 0 | 0 | 125,000 | 125,000 | 0 | 250,000 |

**FINANCE NOTES**

## City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Storm Drain Improvement | **New** | **Minor Storm Drain Projects 2016** | 1 |

**CONTACT:** Steve Erickson [3301]

**PRIORITY:** Rehabilitation of Existing Capital Assets or Systems

**DESCRIPTION**

This project involves the ongoing analysis and implementation of various minor modifications and improvements to the existing storm drain systems.

**COMMENTS:**

**Uncommitted Balance as of 2/28/2015:** $0

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 0 | 40,000 | 0 | 0 | 0 | 0 | 40,000 |
| Administration | 0 | 10,000 | 0 | 0 | 0 | 0 | 10,000 |
| Improvements | 0 | 50,000 | 0 | 0 | 0 | 0 | 50,000 |
| **Totals** | 0 | 100,000 | 0 | 0 | 0 | 0 | 100,000 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Storm Drain Fund | 0 | 100,000 | 0 | 0 | 0 | 0 | 100,000 |
| **Totals** | 0 | 100,000 | 0 | 0 | 0 | 0 | 100,000 |

**FINANCE NOTES**

## City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Storm Drain Improvement | **New** | **Minor Storm Drain Projects 2018** | 1 |

**CONTACT:** Steve Erickson [3301]

**PRIORITY:** Rehabilitation of Existing Capital Assets or Systems

**DESCRIPTION**

This project involves the ongoing analysis and implementation of various minor modifications and improvements to the existing storm drain systems.

**COMMENTS:**

**Uncommitted Balance as of 2/28/2015:** $0

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 0 | 0 | 0 | 40,000 | 0 | 0 | 40,000 |
| Administration | 0 | 0 | 0 | 10,000 | 0 | 0 | 10,000 |
| Improvements | 0 | 0 | 0 | 50,000 | 0 | 0 | 50,000 |
| **Totals** | 0 | 0 | 0 | 100,000 | 0 | 0 | 100,000 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Unidentified Funding | 0 | 0 | 0 | 100,000 | 0 | 0 | 100,000 |
| **Totals** | 0 | 0 | 0 | 100,000 | 0 | 0 | 100,000 |

**FINANCE NOTES**

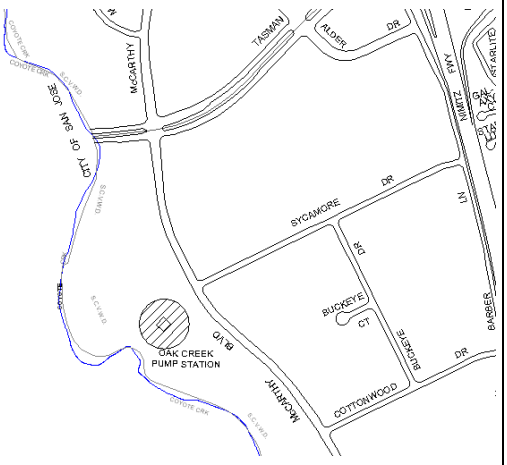
# City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Storm Drain Improvement | **New** | **Oak Creek Pump Station Upgrade** | 1 |

**CONTACT:** Steven Machida [3355]

**PRIORITY:** Major Service Equipment Replacement

**DIAGRAM**




**DESCRIPTION**

This project provides for the replacement of the diesel engines with electric motors. The work also includes wet well modifications and new control panels, as well as other minor items. The pump is located near Sycamore Drive and McCarthy Boulevard and provides drainage for the Oak Creek Industrial Park Area.

**COMMENTS:**

This project is described in the 2013 Storm Drain Master Plan.

**Uncommitted Balance as of 2/28/2015:** $0

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 0 | 0 | 0 | 0 | 200,000 | 0 | 200,000 |
| Administration | 0 | 0 | 0 | 0 | 75,000 | 75,000 | 150,000 |
| Inspection | 0 | 0 | 0 | 0 | 0 | 75,000 | 75,000 |
| Improvements | 0 | 0 | 0 | 0 | 0 | 1,750,000 | 1,750,000 |
| **Totals** | 0 | 0 | 0 | 0 | 275,000 | 1,900,000 | 2,175,000 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Unidentified Funding | 0 | 0 | 0 | 0 | 275,000 | 1,900,000 | 2,175,000 |
| **Totals** | 0 | 0 | 0 | 0 | 275,000 | 1,900,000 | 2,175,000 |

**FINANCE NOTES**

## City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Storm Drain Improvement | **New** | **Spence Pump Station Improvements** | 1 |

**CONTACT:** Steve Erickson [3301]

**PRIORITY:** Rehabilitation of Existing Capital Assets or Systems

**DIAGRAM**

**DESCRIPTION**

This project replaces pump controls and water level indicating system at the pump station that have reached the end of their useful life.

**COMMENTS:**

**Uncommitted Balance as of 2/28/2015:** $0

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 0 | 0 | 0 | 60,000 | 0 | 0 | 60,000 |
| Administration | 0 | 0 | 0 | 5,000 | 0 | 0 | 5,000 |
| Equipment Fund | 0 | 0 | 0 | 80,000 | 0 | 0 | 80,000 |
| **Totals** | 0 | 0 | 0 | 145,000 | 0 | 0 | 145,000 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Unidentified Funding | 0 | 0 | 0 | 145,000 | 0 | 0 | 145,000 |
| **Totals** | 0 | 0 | 0 | 145,000 | 0 | 0 | 145,000 |

**FINANCE NOTES**

## City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Storm Drain Improvement | **New** | **Storm Drain Supervisory Control and Data Acquisition** | 1 |

**CONTACT:** Marilyn Nickel [3347]

**PRIORITY:** Rehabilitation of Existing Capital Assets or Systems

**DESCRIPTION**

A Supervisory Control and Data Acquisition System (SCADA) provides real-time data, such as wet well level and pump operational status to utility systems operators. Currently operators rely on unsophisticated alarms and must drive to sites to evaluate the problem and implement corrective action, such as starting a back-up pump or generator, when the main pumps fail.

**COMMENTS:**

Construction costs will be programmed in a subsequent year.

**Uncommitted Balance as of 2/28/2015:** $0

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 0 | 0 | 0 | 0 | 0 | 300,000 | 300,000 |
| Administration | 0 | 0 | 0 | 0 | 0 | 75,000 | 75,000 |
| **Totals** | 0 | 0 | 0 | 0 | 0 | 375,000 | 375,000 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Unidentified Funding | 0 | 0 | 0 | 0 | 0 | 375,000 | 375,000 |
| **Totals** | 0 | 0 | 0 | 0 | 0 | 375,000 | 375,000 |

**FINANCE NOTES**

## City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Storm Drain Improvement | **New** | **Storm Drain System Improvements 2018** | 1 |

**CONTACT:** Steve Erickson [3301]

**PRIORITY:** Rehabilitation of Existing Capital Assets or Systems

**DESCRIPTION**

This project will provide for the procurement of two trailer mounted emergency generators for use at the storm pump stations (with electric capacity of 750kw and 1000kw.) The work will also include installation of transfer switches at the pump stations to allow switching PG&E power to generator power.

**COMMENTS:**

Typically, the same storms that drops heavy rainfall into the storm drain system also cause electrical service interruptions. The pump stations are inoperable at a time when they are needed the most. Secondly, a major earthquake during winter storms may also take out PG&E power.

**Uncommitted Balance as of 2/28/2015:** $0

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 0 | 0 | 0 | 25,000 | 0 | 0 | 25,000 |
| Administration | 0 | 0 | 0 | 25,000 | 0 | 0 | 25,000 |
| Inspection | 0 | 0 | 0 | 10,000 | 0 | 0 | 10,000 |
| Improvements | 0 | 0 | 0 | 100,000 | 0 | 0 | 100,000 |
| Equipment | 0 | 0 | 0 | 1,000,000 | 0 | 0 | 1,000,000 |
| **Totals** | 0 | 0 | 0 | 1,160,000 | 0 | 0 | 1,160,000 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Unidentified Funding | 0 | 0 | 0 | 1,160,000 | 0 | 0 | 1,160,000 |
| **Totals** | 0 | 0 | 0 | 1,160,000 | 0 | 0 | 1,160,000 |

**FINANCE NOTES**

## City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Storm Drain Improvement | **New** | **Trash Removal Devices** | 1 |

**CONTACT:** Steve Erickson [3301]

**PRIORITY:** Mandatory or Committed Projects

**DESCRIPTION**

This project evaluates locations for trash removal devices within the City's storm water collection system. Proposed work includes design and installation of two devices.

**COMMENTS:**

The State Regional Water Quality Control Board included trash removal requirements from storm water collection systems in the Municipal Regional Permit (MRP) issued to Bay Area cities, including Milpitas. This is one of the ways that implementation requirements with the MRP can be obtained.

**Uncommitted Balance as of 2/28/2015:** $0

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 0 | 0 | 100,000 | 0 | 0 | 0 | 100,000 |
| Administration | 0 | 0 | 50,000 | 0 | 0 | 0 | 50,000 |
| Surveying | 0 | 0 | 20,000 | 0 | 0 | 0 | 20,000 |
| Inspection | 0 | 0 | 30,000 | 0 | 0 | 0 | 30,000 |
| Improvements | 0 | 0 | 150,000 | 0 | 0 | 0 | 150,000 |
| **Totals** | 0 | 0 | 350,000 | 0 | 0 | 0 | 350,000 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Storm Drain Fund | 0 | 0 | 350,000 | 0 | 0 | 0 | 350,000 |
| **Totals** | 0 | 0 | 350,000 | 0 | 0 | 0 | 350,000 |

**FINANCE NOTES**

# City of Milpitas
# 2015-20 CAPITAL IMPROVEMENT PROGRAM
# Previously Funded Projects

| Page | Proj # | Project Name | As Of 2/28/2015 Uncommitted Balance | Total Cost |
|---|---|---|---|---|
| 145 | 2001 | Light Rail Median Landscaping | 4,089,401 | 6,005,000 |
| 146 | 2004 | S. Milpitas Boulevard Extension | 17,000,000 | 17,000,000 |
| 147 | 2005 | Lower Penitencia Creek Pedestrian Bridge | 650,000 | 650,000 |
| 148 | 3401 | Solid Waste Master Plan | 94,824 | 260,000 |
| 149 | 3407 | Midtown Parking Garage | 69,933 | 113,804 |
| 150 | 3408 | MSC Facility Improvements | 560,166 | 1,900,000 |
| 151 | 3410 | Public Works/Police Building Improvements | 22,518 | 300,000 |
| 152 | 3412 | Street Resurfacing Project 2014 | 680,459 | 2,579,288 |
| 153 | 3413 | 2015 Finance System Upgrade | 20,000 | 170,000 |
| 154 | 3701 | Storm Drain Master Plan Update | 35,395 | 350,000 |
| 155 | 3704 | Fuel Tank Improvements | 188,000 | 188,000 |
| 156 | 3706 | Minor Storm Drain Projects 2011-12 | 163,082 | 326,729 |
| 157 | 3707 | Storm Pump Station Improvements 2012 | 28,064 | 28,590 |
| 158 | 4179 | Montague Expwy Widening at Great Mall Pkwy | 1,615,441 | 7,347,450 |
| 159 | 4256 | Abel Street Sidewalk Improvements | 507,613 | 613,836 |
| 160 | 4257 | Signal Mitigation @ McCarthy & Irvine Entrance | 93,500 | 93,500 |
| 161 | 4258 | Calaveras Blvd Widening Project | 173,319 | 173,969 |
| 162 | 4264 | S. Abel Street Resurfacing | 111,743 | 111,745 |
| 163 | 4265 | Bart Extension Coordination and Planning | 568,932 | 1,905,956 |
| 164 | 4268 | Street Resurfacing Project 2013 | 6,645 | 2,000,000 |
| 165 | 4269 | Traffic Management Enhancements 2013 | 60,000 | 60,000 |
| 166 | 4270 | 2014 Road Rehabilitation | 1,940,691 | 2,115,920 |
| 167 | 4272 | Minor Traffic Improvements 2014 | 80,500 | 100,000 |
| 168 | 4274 | I 880 Interchange R/W Closeout | 240,297 | 727,181 |
| 169 | 4275 | Street Resurfacing Project 2015 | 293,776 | 4,250,000 |
| 170 | 4276 | Electrical Vehicle Charging Stations | 40,200 | 40,200 |
| 171 | 4277 | Main Street Pavement Reconstruction | 3,762,892 | 3,996,000 |
| 172 | 5080 | Penitencia Creek Trail Feasibility Study | 39,708 | 40,000 |
| 173 | 5086 | Park Irrigation System Rehabilitation | 23,992 | 400,000 |
| 174 | 5091 | Park Renovation Project 2011 | 31,097 | 277,778 |
| 175 | 5092 | Main Street Park | 349,812 | 350,000 |
| 176 | 5093 | Park Master Plan Improvements - Phase I | 200,000 | 200,000 |
| 177 | 5095 | Park Renovation Project 2013 | 111,425 | 400,000 |
| 178 | 5096 | Pinewood Park Picnic Renovation | 158,927 | 2,000,000 |
| 179 | 5097 | Higuera Adobe Park Picnic and Playground Renovation | 1,987,123 | 2,000,000 |
| 180 | 5098 | Park Irrigation System Repair & Improvement 2014 | 200,080 | 300,000 |
| 181 | 5099 | Park Renovation Project 2015 | 245,999 | 300,000 |
| 182 | 5100 | Sports Center Skate Park & Fields Feasibility Study | 74,712 | 100,000 |
| 183 | 5102 | McCandless Park | 0 | 300,000 |
| 184 | 6079 | Main Sewer Pump Station Site Improvements | 142,058 | 2,302,000 |
| 185 | 6106 | Sewer Replacement Study | 20,761 | 80,000 |
| 186 | 6109 | Sewer Seismic Study | 50,742 | 70,000 |
| 187 | 6110 | Sewer System Hydraulic Modeling | 185,113 | 250,000 |

| Page | Proj # | Project Name | As Of 2/28/2015 Uncommitted Balance | Total Cost |
|---|---|---|---|---|
| 188 | 6114 | Minor Sewer Projects 2011 | 31,349 | 35,000 |
| 189 | 6115 | Sewer System Replacement 11-12 | 1,311,832 | 1,750,000 |
| 190 | 6117 | TASP Sewer Line Replacement | 2,500,000 | 2,500,000 |
| 191 | 6120 | Minor Sewer Projects 2015 | 350,000 | 350,000 |
| 192 | 7070 | Pressure Reducing Valve Replacement | 18,182 | 320,000 |
| 193 | 7102 | Ayer Reservoir & Pump Station Improvements | 391,198 | 1,050,000 |
| 194 | 7108 | Water System Hydraulic Modeling | 120,529 | 200,000 |
| 195 | 7109 | Water System Replacement 08-09 | 580,282 | 700,000 |
| 196 | 7111 | Minor Water Projects 2011 | 37,533 | 95,000 |
| 197 | 7112 | Reservoir Cleaning | 150,000 | 150,000 |
| 198 | 7113 | Turnout Improvements | 150,000 | 150,000 |
| 199 | 7114 | Water Meter Replacement | 44,801 | 75,000 |
| 200 | 7115 | Cathodic Protection Improvements | 97,631 | 725,000 |
| 201 | 7116 | Minor Water Projects 2013 | 11,246 | 150,000 |
| 202 | 7117 | Abel Street Pipeline Extension | 299,555 | 350,000 |
| 203 | 7119 | Sunnyhills Turnout Pressure Reducing Valve | 600,000 | 600,000 |
| 204 | 7120 | Water Supply Blending Study | 83,490 | 100,000 |
| 205 | 7122 | Daniel Court Water Service Replacement | 525,000 | 525,000 |
| 206 | 7123 | Minor Water Projects 2015 | 105,000 | 105,000 |
| 207 | 7124 | Water System Air Relief Modifications 2015 | 350,000 | 350,000 |
| | | **Totals** | **44,676,568** | **73,056,946** |

## City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Streets | **2001** | **Light Rail Median Landscaping** | 1 |

**CONTACT:** Julie Waldron [3314]

**PRIORITY:** Mandatory or Committed Projects

**DIAGRAM**

**DESCRIPTION**

This project involves the design and construction of median landscape improvements on Great Mall Parkway from I-880 to the southern City limits at Capitol Expressway. There are eight separate median islands under the LRT viaduct structure which will be landscaped. The scope also includes construction of a recycled water main line for this project and future Transit Area Specific Plan development project.

**COMMENTS:**

All landscaping will be irrigated with recycled water. This work is included in the cooperative agreement with the Santa Clara Valley Transportation Authority.

**Uncommitted Balance as of 2/28/2015:** $4,089,401

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 150,000 | 0 | 0 | 0 | 0 | 0 | 150,000 |
| Administration | 100,000 | 0 | 0 | 0 | 0 | 0 | 100,000 |
| Inspection | 75,000 | 0 | 0 | 0 | 0 | 0 | 75,000 |
| Improvements | 5,680,000 | 0 | 0 | 0 | 0 | 0 | 5,680,000 |
| **Totals** | 6,005,000 | 0 | 0 | 0 | 0 | 0 | 6,005,000 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| TASP Impact Fees | 2,550,000 | 0 | 0 | 0 | 0 | 0 | 2,550,000 |
| Recycled Water Fund | 1,300,000 | 0 | 0 | 0 | 0 | 0 | 1,300,000 |
| Street Fund | 5,000 | 0 | 0 | 0 | 0 | 0 | 5,000 |
| RDA Fund | 341,000 | 0 | 0 | 0 | 0 | 0 | 341,000 |
| Grants/Reimbursement/Develope | 1,809,000 | 0 | 0 | 0 | 0 | 0 | 1,809,000 |
| **Totals** | 6,005,000 | 0 | 0 | 0 | 0 | 0 | 6,005,000 |

**FINANCE NOTES**

Grant is from VTA ($1,809,000) local funding. Previously this was STIP grant funding earmarked for 237/I-880 interchange landscaping.
City Council 11/15/11 - Budget appropriation of $5000 from Street Fund

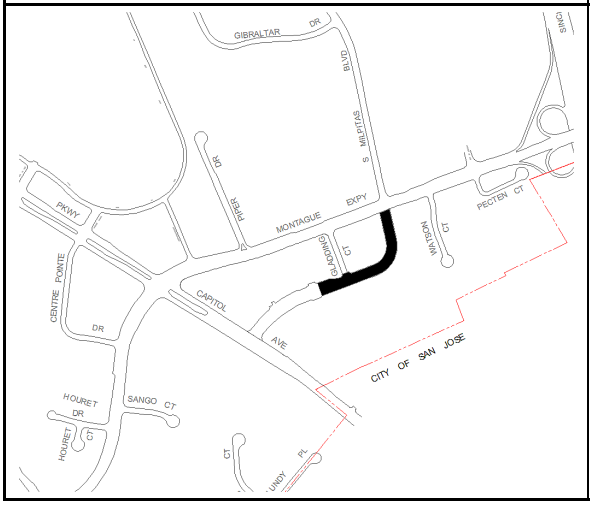
# City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Streets | **2004** | **S. Milpitas Boulevard Extension** | 1 |

**CONTACT:** Steven Machida [3355]

**PRIORITY:** Enhance Economic Development

**DIAGRAM**




**DESCRIPTION**

This project provide for the acquisition of land, design, construction, and administration for extension of S. Milpitas Boulevard including utilities from Montague Expressway to the edge of BART Station frontage. The City entered in to an agreement on August 3, 2010 with the Valley Transportation Agency (VTA) to construct the project for the City in conjunction with the BART project. The BART project will also be responsible for the construction of the remaining portion of the road from the BART Station to Capital Avenue.

**COMMENTS:**

**Uncommitted Balance as of 2/28/2015:** $17,000,000

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Other | 17,000,000 | 0 | 0 | 0 | 0 | 0 | 17,000,000 |
| **Totals** | 17,000,000 | 0 | 0 | 0 | 0 | 0 | 17,000,000 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| TASP Impact Fees | 17,000,000 | 0 | 0 | 0 | 0 | 0 | 17,000,000 |
| **Totals** | 17,000,000 | 0 | 0 | 0 | 0 | 0 | 17,000,000 |

**FINANCE NOTES**

The TASP funds is driven by future development, and projects are paid on a priority and timing based on when funds become available.

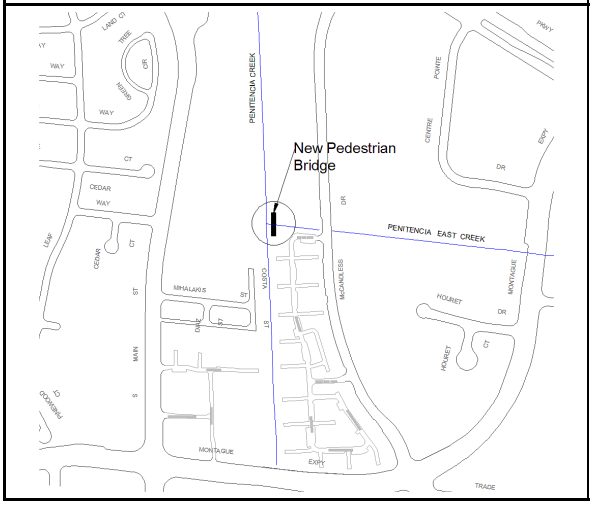
# City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Park Improvement | **2005** | **Lower Penitencia Creek Pedestrian Bridge** | 1 |

**CONTACT:** Steve Erickson [3301]

**PRIORITY:** Improve the Quality of Life

**DIAGRAM**




**DESCRIPTION**

This project provides for the design and construction of a new pedestrian bridge over Lower Penitencia Creek adjacent to McCandless Drive. The new bridge will connect two new levee trails to be constructed by the Harmony and Taylor Morrison development projects.

**COMMENTS:**

The project is required to be coordinated with the Santa Clara Valley Water District as the bridge would be installed within the Districts right-of-way.

**Uncommitted Balance as of 2/28/2015:** $650,000

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 175,000 | 0 | 0 | 0 | 0 | 0 | 175,000 |
| Administration | 50,000 | 0 | 0 | 0 | 0 | 0 | 50,000 |
| Inspection | 25,000 | 0 | 0 | 0 | 0 | 0 | 25,000 |
| Improvements | 400,000 | 0 | 0 | 0 | 0 | 0 | 400,000 |
| **Totals** | 650,000 | 0 | 0 | 0 | 0 | 0 | 650,000 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Grants/Reimbursement/Develope | 500,000 | 0 | 0 | 0 | 0 | 0 | 500,000 |
| Transit Area Plan | 150,000 | 0 | 0 | 0 | 0 | 0 | 150,000 |
| **Totals** | 650,000 | 0 | 0 | 0 | 0 | 0 | 650,000 |

**FINANCE NOTES**

Developer Fees: $250,000 - DR Horton, $250,000 - Integral
City Council 3/17/15 project created.

# City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Community Improvement | **3401** | **Solid Waste Master Plan** | 1 |

**CONTACT:** Marilyn Nickel [3347]

**PRIORITY:** Studies and Analyses

**DESCRIPTION**

This Master Plan will review the impacts of the City's short and long term planned growth and associated solid waste disposal needs. Since the current solid waste contracts expire in 2017, the plan will also review and develop strategies for economical solid waste disposal beyond 2017. Particularly, since Newby Island Landfill off Dixon Landing Road, is scheduled for closure by 2023.

**COMMENTS:**

The City has two existing contracts regarding solid waste disposal. One is for collection and hauling to the Newby Island Landfill and Recyclery for disposal. The second is to reserve capacity at the Newby Island Landfill and Recyclery for Milpitas-generated waste.

**Uncommitted Balance as of 2/28/2015:** $94,824

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Administration | 260,000 | 0 | 0 | 0 | 0 | 0 | 260,000 |
| Inspection | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Improvements | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Equipment | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 260,000 | 0 | 0 | 0 | 0 | 0 | 260,000 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Solid Waste Services Fund | 260,000 | 0 | 0 | 0 | 0 | 0 | 260,000 |
| **Totals** | 260,000 | 0 | 0 | 0 | 0 | 0 | 260,000 |

**FINANCE NOTES**

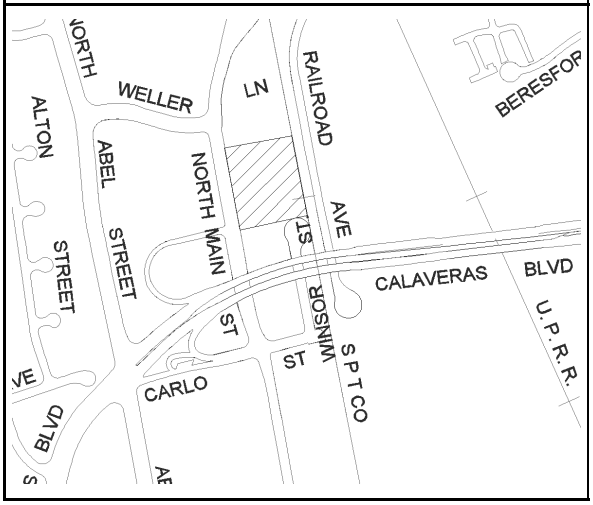
## City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Community Improvement | **3407** | **Midtown Parking Garage** | 1 |

**CONTACT:** Steve Erickson [3301]

**PRIORITY:** Mandatory or Committed Projects

**DIAGRAM**




**DESCRIPTION**

The new Midtown East Parking Garage will consist of a four story structure that will serve the new Library and other Midtown uses. It will be located on Main Street, South and East of the new library. The East Parking Garage will have sufficient space for approximately 280 parking spaces. Special features of the parking garage include: a public display area for the City's restored antique fire truck; attractive vehicle entries/exits; pedestrian entries, including direct entry into the new library; elevators and stairs. The library garage grand opening was successfully held on January 10, 2009.

**COMMENTS:**

Work remaining is the conversion of the existing manual hand crack roll-up doors within the new library and parking garage to a motorized unit, and for the relocation of the fusible link to a location near the new motorized controls for easier access and safer operation, when being reset. Currently, if the fire alarms are actuated during annual testing or other reasons the fire doors close creating a "firewall". The manual hand cranks are located above the ceiling at two locations requiring ladder access.

**Uncommitted Balance as of 2/28/2015:** $69,933

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 20,000 | 0 | 0 | 0 | 0 | 0 | 20,000 |
| Administration | 20,000 | 0 | 0 | 0 | 0 | 0 | 20,000 |
| Surveying | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Inspection | 10,000 | 0 | 0 | 0 | 0 | 0 | 10,000 |
| Land | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Improvements | 63,804 | 0 | 0 | 0 | 0 | 0 | 63,804 |
| Equipment | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 113,804 | 0 | 0 | 0 | 0 | 0 | 113,804 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Library Fund | 113,804 | 0 | 0 | 0 | 0 | 0 | 113,804 |
| **Totals** | 113,804 | 0 | 0 | 0 | 0 | 0 | 113,804 |

**FINANCE NOTES**

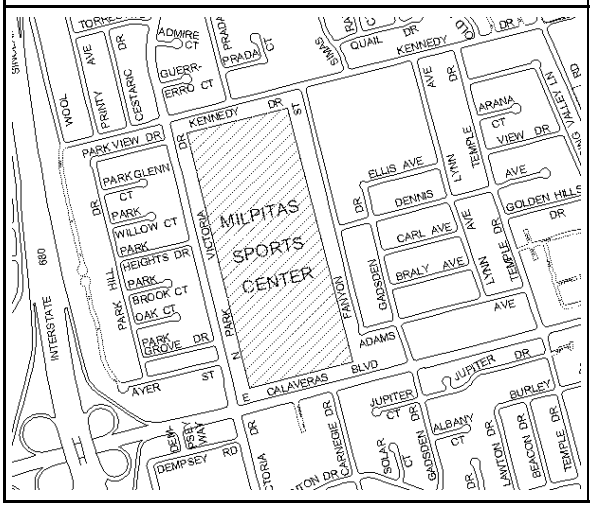
## City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Community Improvement | **3408** | **MSC Facility Improvements** | 1 |

**CONTACT:** Julie Waldron [3314] / Jaime Chew [3369]

**PRIORITY:** Rehabilitation of Existing Capital Assets or Systems

**DIAGRAM**




### DESCRIPTION

This project provides for various improvements to the Milpitas Sports Center facility. The work includes resurfacing the plaster at the three swimming pools and replacement of tile work, lane lines, and other pool elements. The project will reconstruct the Men's and Women's showers/restroom area, replace the locker room flooring and other code related upgrades to the facility.

### COMMENTS:

These pools are heavily used year round and require resurfacing every 5 years. California Health and Safety Code, Section 3106B.3 states that the finished pool shell shall be lined with a smooth waterproof interior finish that will withstand repeated brushing, scrubbing and cleaning procedures. The locker room improvements have been completed and the pool rehabilitation work is now moving forward. This project in conjunction with the MSC Pool Rehabilitation will fund the pool improvements at the Milpitas Sports Center.

**Uncommitted Balance as of 2/28/2015:** $560,166

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 165,000 | 0 | 0 | 0 | 0 | 0 | 165,000 |
| Administration | 90,000 | 0 | 0 | 0 | 0 | 0 | 90,000 |
| Inspection | 55,000 | 0 | 0 | 0 | 0 | 0 | 55,000 |
| Improvements | 1,590,000 | 0 | 0 | 0 | 0 | 0 | 1,590,000 |
| **Totals** | 1,900,000 | 0 | 0 | 0 | 0 | 0 | 1,900,000 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| General Government CIP Fund | 1,300,000 | 0 | 0 | 0 | 0 | 0 | 1,300,000 |
| Midtown Park Fund | 300,000 | 0 | 0 | 0 | 0 | 0 | 300,000 |
| Park Fund | 300,000 | 0 | 0 | 0 | 0 | 0 | 300,000 |
| **Totals** | 1,900,000 | 0 | 0 | 0 | 0 | 0 | 1,900,000 |

### FINANCE NOTES

City Council - 3/4/14 Midyear Budget Appropriation $800,000 from General Government CIP Fund

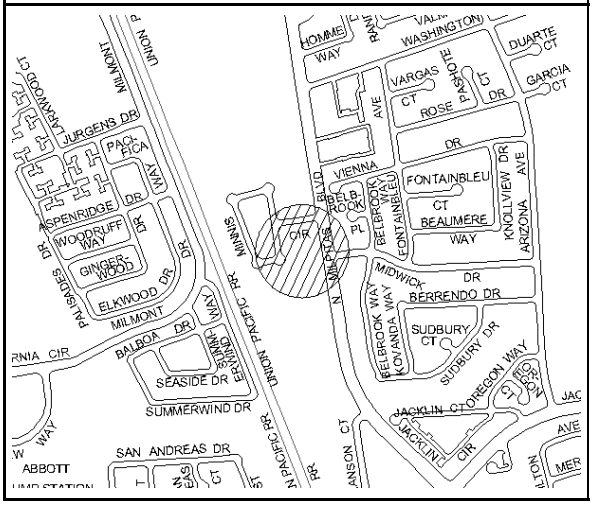
## City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Community Improvement | **3410** | **Public Works/Police Building Improvements** | 1 |

**CONTACT:** Steve Erickson [3301]

**PRIORITY:** Rehabilitation of Existing Capital Assets or Systems

**DIAGRAM**




**DESCRIPTION**

The project provides for the repair of the roof systems and parapet walls, repair and replacement of window systems, removal of the wooden sun shade structure, and exterior patching and painting.

**COMMENTS:**

The Public Works/Police building was constructed in the 1990's, and it is now time for significant repairs. Recently, the exterior parapet walls and roofing systems have developed water leaks that are deteriorating the buildings structure. Several of the aluminum window systems are deteriorated and are in need of repair. Within the last few years, Public Works staff removed the rotted exterior wood shade structures that surround the buildings exterior. The shades remaining along the buildings east face are rotted to the point that they need to be removed.

**Uncommitted Balance as of 2/28/2015:** $22,518

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 50,000 | 0 | 0 | 0 | 0 | 0 | 50,000 |
| Administration | 15,000 | 0 | 0 | 0 | 0 | 0 | 15,000 |
| Inspection | 10,000 | 0 | 0 | 0 | 0 | 0 | 10,000 |
| Improvements | 225,000 | 0 | 0 | 0 | 0 | 0 | 225,000 |
| **Totals** | 300,000 | 0 | 0 | 0 | 0 | 0 | 300,000 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| General Government CIP Fund | 300,000 | 0 | 0 | 0 | 0 | 0 | 300,000 |
| **Totals** | 300,000 | 0 | 0 | 0 | 0 | 0 | 300,000 |

**FINANCE NOTES**

# City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Streets | **3412** | **Street Resurfacing Project 2014** | 1 |

**CONTACT:** Jimmy Nguyen [3318]

**PRIORITY:** Rehabilitation of Existing Capital Assets or Systems

**DESCRIPTION**

This project provides for a variety of pavement resurfacing treatments, from slurry seal to major rehabilitation and reconstruction. Streets are selected for improvements based on the City's Pavement Management System.

**COMMENTS:**

There are over 123 centerline miles of streets that are owned and maintained by the City of Milpitas. An annual funding of $4.5 million is required to maintain the city wide pavement condition index. The project also includes installation of ADA ramps along roads that are reconstructed or receive an AC overlay.

**Uncommitted Balance as of 2/28/2015:** $680,459

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 75,000 | 0 | 0 | 0 | 0 | 0 | 75,000 |
| Administration | 40,000 | 0 | 0 | 0 | 0 | 0 | 40,000 |
| Inspection | 50,000 | 0 | 0 | 0 | 0 | 0 | 50,000 |
| Improvements | 2,414,288 | 0 | 0 | 0 | 0 | 0 | 2,414,288 |
| **Totals** | 2,579,288 | 0 | 0 | 0 | 0 | 0 | 2,579,288 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Transient Occupancy Tax (TOT) | 600,000 | 0 | 0 | 0 | 0 | 0 | 600,000 |
| General Government CIP Fund | 500,000 | 0 | 0 | 0 | 0 | 0 | 500,000 |
| Vehicle Registration Fee | 300,000 | 0 | 0 | 0 | 0 | 0 | 300,000 |
| Gas Tax Fund | 1,100,000 | 0 | 0 | 0 | 0 | 0 | 1,100,000 |
| Grants/Reimbursement/Develope | 79,288 | 0 | 0 | 0 | 0 | 0 | 79,288 |
| **Totals** | 2,579,288 | 0 | 0 | 0 | 0 | 0 | 2,579,288 |

**FINANCE NOTES**

Grant: $34,238 from the Transportation Development Act (TDA) FY 11-12.
Grant: $45,050 from the Transportation Development Act (TDA) FY 12-13.

## City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Community Improvement | **3413** | **2015 Finance System Upgrade** | |

**CONTACT:** Jane Corpus [3125]

**PRIORITY:** Rehabilitation of Existing Capital Assets or Systems

**DESCRIPTION**

This project provides upgrades to keep our Financial system up to date. It is essential that the system be current in order to utilize technology efficiently and effectively. This major system includes General Ledger, Accounts Payable, Cash Collection, Payroll/Human Resources, Job Costing and Purchase Order. In addition, the Finance system also manages Budget Preparation, Business License, Investment Software and Fixed Asset systems.

**COMMENTS:**

The proposed funding is for the system required upgrades, equipment and staff training.

**Uncommitted Balance as of 2/28/2015:** $20,000

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Administration | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Surveying | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Inspection | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Land | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Improvements | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other | 170,000 | 0 | 0 | 0 | 0 | 0 | 170,000 |
| **Totals** | 170,000 | 0 | 0 | 0 | 0 | 0 | 170,000 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Equipment Replacement Fund | 170,000 | 0 | 0 | 0 | 0 | 0 | 170,000 |
| **Totals** | 170,000 | 0 | 0 | 0 | 0 | 0 | 170,000 |

**FINANCE NOTES**

# City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Storm Drain Improvement | **3701** | **Storm Drain Master Plan Update** | |

**CONTACT:** Jeffery Leung [3326]

**PRIORITY:** Rehabilitation of Existing Capital Assets or Systems

**DESCRIPTION**

This project provides an update to the City Storm Drain Master Plan. This update is needed due to land use modifications proposed by Midtown Specific Plan and proposed Transit Area Specific Plan. It is also important to revise and update the Master Plan in order to account for land use changes and capital projects that have taken place in the City since the original Master Plan was published in 2001, and to provide proper environmental documentation. In addition, FEMA is requiring creek levee recertification as a result of the New Orleans levee failures. SCVWD and the City are working to complete these studies by August 2009. The Storm Master Plan will model and analyze citywide existing and proposed storm drain infrastructure, identify system deficiencies and recommend improvements.

**COMMENTS:**

The project will also include updating the storm drain portion of the Financial Utility Master Plan. A Master Grading and Storm Drainage Plan is required by the Transit Area EIR.

**Uncommitted Balance as of 2/28/2015:** $35,395

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 150,000 | 0 | 0 | 0 | 0 | 0 | 150,000 |
| Administration | 20,000 | 0 | 0 | 0 | 0 | 0 | 20,000 |
| Surveying | 30,000 | 0 | 0 | 0 | 0 | 0 | 30,000 |
| Inspection | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Land | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Improvements | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other | 150,000 | 0 | 0 | 0 | 0 | 0 | 150,000 |
| **Totals** | 350,000 | 0 | 0 | 0 | 0 | 0 | 350,000 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Storm Drain Fund | 350,000 | 0 | 0 | 0 | 0 | 0 | 350,000 |
| **Totals** | 350,000 | 0 | 0 | 0 | 0 | 0 | 350,000 |

**FINANCE NOTES**

## City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Storm Drain Improvement | **3704** | **Fuel Tank Improvements** | 1 |

**CONTACT:** Steve Erickson [3301]

**PRIORITY:** Rehabilitation of Existing Capital Assets or Systems

**DESCRIPTION**

This project involves the removal of underground fuel tanks and installation of above ground double walled tanks at Wrigley Ford, Bellew, Penitencia, Berryessa, and Jungens Storm Pump Stations. These are State mandated improvements intended to protect ground water from potential contamination.

**COMMENTS:**

**Uncommitted Balance as of 2/28/2015:** $188,000

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 50,000 | 0 | 0 | 0 | 0 | 0 | 50,000 |
| Administration | 25,000 | 0 | 0 | 0 | 0 | 0 | 25,000 |
| Surveying | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Inspection | 25,000 | 0 | 0 | 0 | 0 | 0 | 25,000 |
| Land | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Improvements | 88,000 | 0 | 0 | 0 | 0 | 0 | 88,000 |
| Equipment | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 188,000 | 0 | 0 | 0 | 0 | 0 | 188,000 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Storm Drain Fund | 153,000 | 0 | 0 | 0 | 0 | 0 | 153,000 |
| RDA Fund | 35,000 | 0 | 0 | 0 | 0 | 0 | 35,000 |
| **Totals** | 188,000 | 0 | 0 | 0 | 0 | 0 | 188,000 |

**FINANCE NOTES**

# City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Storm Drain Improvement | **3706** | **Minor Storm Drain Projects 2011-12** | 1 |

**CONTACT:** Steve Erickson [3301]

**PRIORITY:** Rehabilitation of Existing Capital Assets or Systems

**DESCRIPTION**

This project involves the ongoing analysis and implementation of various minor modifications and improvements to the existing storm drain system. The scope also includes storm drain studies, minor related improvements and regional storm drain fees.

**COMMENTS:**

The Storm Drain Master Plan identifies storm drain improvements that need to secure funding to design and construct improvements that will eliminate nuisance flooding in the City. The current funding source for these improvements is the storm water connection fees. Additional funding is required to design and construct the balance of the projects in the Master Plan. This project will also fund long term maintenance and the plant establishment phase resulting from dredging Wrigley Ford Creek.

**Uncommitted Balance as of 2/28/2015:** $163,082

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 105,000 | 0 | 0 | 0 | 0 | 0 | 105,000 |
| Administration | 10,000 | 0 | 0 | 0 | 0 | 0 | 10,000 |
| Surveying | 30,000 | 0 | 0 | 0 | 0 | 0 | 30,000 |
| Inspection | 5,000 | 0 | 0 | 0 | 0 | 0 | 5,000 |
| Improvements | 151,729 | 0 | 0 | 0 | 0 | 0 | 151,729 |
| Equipment | 25,000 | 0 | 0 | 0 | 0 | 0 | 25,000 |
| **Totals** | 326,729 | 0 | 0 | 0 | 0 | 0 | 326,729 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Storm Drain Fund | 291,729 | 0 | 0 | 0 | 0 | 0 | 291,729 |
| General Government CIP Fund | 35,000 | 0 | 0 | 0 | 0 | 0 | 35,000 |
| **Totals** | 326,729 | 0 | 0 | 0 | 0 | 0 | 326,729 |

**FINANCE NOTES**

City Council 5/1/12- Budget appropriation of $41,729 from the Storm Drain Fund.

## City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Storm Drain Improvement | **3707** | **Storm Pump Station Improvements 2012** | 1 |

**CONTACT:** Steve Erickson [3301]

**PRIORITY:** Rehabilitation of Existing Capital Assets or Systems

**DESCRIPTION**

This project involves the design and construction of major renovations of Wrigley-Ford, McCarthy, Oak Creek, Murphy Ranch, Jurgens, and Abbott Storm Pump Stations. The work scope includes upgrades to the electrical and mechanical systems, also includes miscellaneous work such as, exterior painting and concrete floor coating, etc.

**COMMENTS:**

**Uncommitted Balance as of 2/28/2015:** $28,064

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 10,000 | 0 | 0 | 0 | 0 | 0 | 10,000 |
| Administration | 10,000 | 0 | 0 | 0 | 0 | 0 | 10,000 |
| Improvements | 8,590 | 0 | 0 | 0 | 0 | 0 | 8,590 |
| **Totals** | 28,590 | 0 | 0 | 0 | 0 | 0 | 28,590 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Storm Drain Fund | 28,590 | 0 | 0 | 0 | 0 | 0 | 28,590 |
| **Totals** | 28,590 | 0 | 0 | 0 | 0 | 0 | 28,590 |

**FINANCE NOTES**

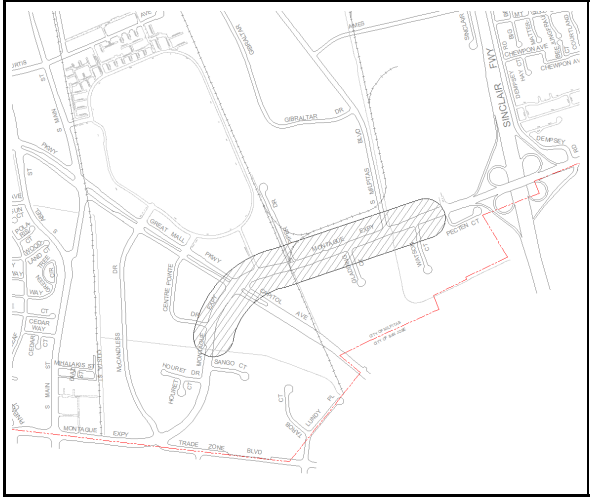
# City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Streets | **4179** | **Montague Expwy Widening at Great Mall Pkwy** | 1 |

**CONTACT:** Steve Chan [3324] / Julie Waldron [3314]

**PRIORITY:** Mandatory or Committed Projects

**DIAGRAM**




**DESCRIPTION**

This project provides a fourth through lane in each direction on Montague Expressway at Great Mall Parkway. It also includes adding one westbound lane on Montague Expressway from Hwy 680 to UPRR rails, however, these limits may be revised due to right of way availability.

**COMMENTS:**

A portion of this project, Phase I, is required as a result of the Cisco Systems development. Phase I is the improvement of the Great Mall Parkway/Capitol intersection from Center Point Drive to the UPRR rails, and is funded 50% by Cisco Systems. Phase I was constructed by VTA in conjunction with their LRT project. The remaining portion of the project, phase II, will "close the gaps" that exist between Phase I and Project 4180 which widened the south side of the expressway from west of Gladding Ct. to I-680.

**Uncommitted Balance as of 2/28/2015:** $1,615,441

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 560,500 | 0 | 0 | 0 | 0 | 0 | 560,500 |
| Administration | 145,000 | 0 | 0 | 0 | 0 | 0 | 145,000 |
| Surveying | 30,000 | 0 | 0 | 0 | 0 | 0 | 30,000 |
| Inspection | 270,000 | 0 | 0 | 0 | 0 | 0 | 270,000 |
| Land | 1,020,000 | 0 | 0 | 0 | 0 | 0 | 1,020,000 |
| Improvements | 5,321,950 | 0 | 0 | 0 | 0 | 0 | 5,321,950 |
| Equipment | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 7,347,450 | 0 | 0 | 0 | 0 | 0 | 7,347,450 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Traffic Impact Fees | 1,261,839 | 0 | 0 | 0 | 0 | 0 | 1,261,839 |
| RDA Fund | 3,300,000 | 0 | 0 | 0 | 0 | 0 | 3,300,000 |
| Grants/Reimbursement/Develope | 2,755,111 | 0 | 0 | 0 | 0 | 0 | 2,755,111 |
| Street Fund | 30,500 | 0 | 0 | 0 | 0 | 0 | 30,500 |
| **Totals** | 7,347,450 | 0 | 0 | 0 | 0 | 0 | 7,347,450 |

**FINANCE NOTES**

Developer Contributions: Cisco - $1,125,000+$62,111 (FY05 Year End Adjustment) + City of San Jose (3Com): $1,568,000 = $2,755,111
Prior Year Other Sources (Traffic Impact Fees): $585,000+$58,596+$329,713 =$973,309.
City Council - Midyear appropriation $288,530 from Traffic Impact Fee Prior Year

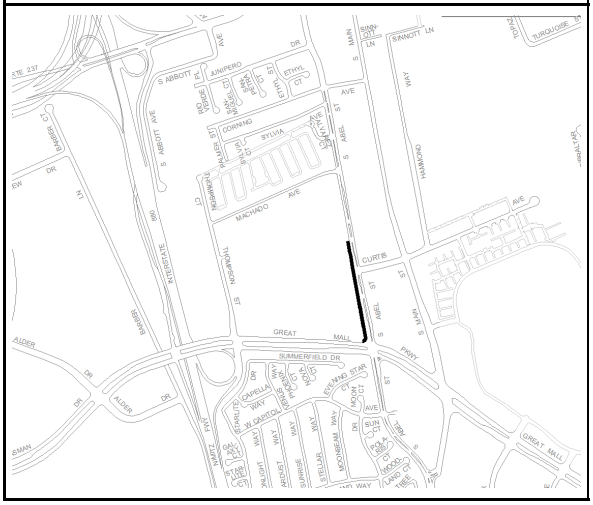
## City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Streets | **4256** | **Abel Street Sidewalk Improvements** | 1 |

**CONTACT:** Steve Erickson [3301] / Michael Boitnott [3315]

**PRIORITY:** Rehabilitation of Existing Capital Assets or Systems

**DIAGRAM**




**DESCRIPTION**

This project rehabilitates the Abel Street sidewalk along the top bank of Penitencia Creek. Work includes erosion control improvements to stabilize the creek bank and sidewalk replacement.

**COMMENTS:**

**Uncommitted Balance as of 2/28/2015:** $507,613

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Administration | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Inspection | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Improvements | 613,836 | 0 | 0 | 0 | 0 | 0 | 613,836 |
| Equipment | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 613,836 | 0 | 0 | 0 | 0 | 0 | 613,836 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Traffic Impact Fees | 613,836 | 0 | 0 | 0 | 0 | 0 | 613,836 |
| **Totals** | 613,836 | 0 | 0 | 0 | 0 | 0 | 613,836 |

**FINANCE NOTES**

Council 2/12/11 - Midyear Budget Appropriation $613,836 from TIF

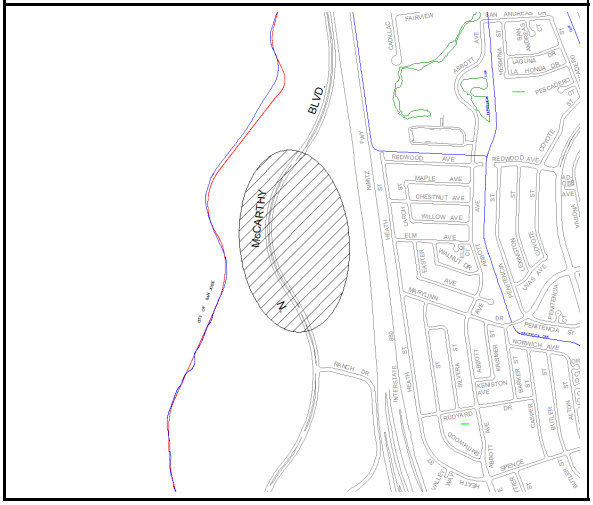
# City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Streets | **4257** | **Signal Mitigation @ McCarthy & Irvine Entrance** | 1 |

**CONTACT:** Steve Chan [3324]

**PRIORITY:** Rehabilitation of Existing Capital Assets or Systems

**DIAGRAM**




**DESCRIPTION**

This project provides for the design and construction of a new traffic signal on McCarthy Blvd. at the Irvine Driveway.

**COMMENTS:**

The State traffic signal warrant criteria is used to determine the warrants for signalization of this intersection.

**Uncommitted Balance as of 2/28/2015:** $93,500

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Administration | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Inspection | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Improvements | 93,500 | 0 | 0 | 0 | 0 | 0 | 93,500 |
| Building | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 93,500 | 0 | 0 | 0 | 0 | 0 | 93,500 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Traffic Impact Fees | 93,500 | 0 | 0 | 0 | 0 | 0 | 93,500 |
| **Totals** | 93,500 | 0 | 0 | 0 | 0 | 0 | 93,500 |

**FINANCE NOTES**

City Council 2/1/11 - Midyear Budget Appropriation $93,500 from TIF

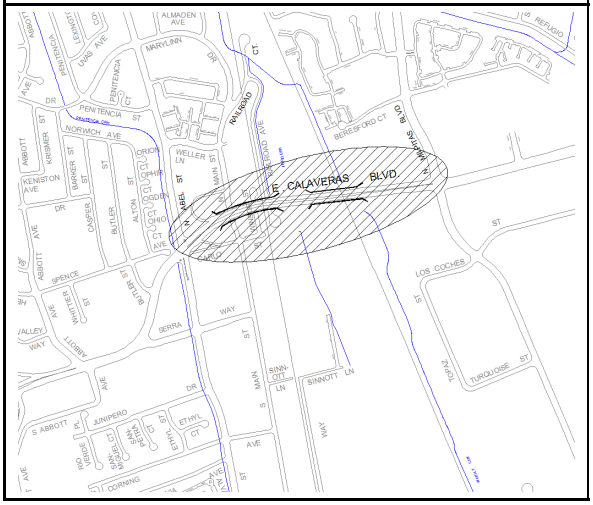
# City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Streets | **4258** | **Calaveras Blvd Widening Project** | 1 |

**CONTACT:** Steve Chan [3324]

**PRIORITY:** Rehabilitation of Existing Capital Assets or Systems

**DIAGRAM**




**DESCRIPTION**

This project will replace the existing roadway bridges between Milpitas Boulevard and Abel Street. These bridge structures were constructed over 40 years ago are reaching their design life. In addition these structures do not have adequate bicycle and pedestrian facilities. The replacement bridge structures will be wider to include 3-lanes, 10 foot sidewalks and 6 foot bike lanes in each direction.

**COMMENTS:**

Calaveras Boulevard is a State Route and the City would be the local sponsor of this project. The City would provide a local funding match generated through Traffic Impact Fees. The total cost is estimate at $75 Million.

**Uncommitted Balance as of 2/28/2015:** $173,319

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Administration | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Improvements | 173,969 | 0 | 0 | 0 | 0 | 0 | 173,969 |
| Building | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 173,969 | 0 | 0 | 0 | 0 | 0 | 173,969 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Traffic Impact Fees | 173,092 | 0 | 0 | 0 | 0 | 0 | 173,092 |
| Grants/Reimbursement/Develope | 877 | 0 | 0 | 0 | 0 | 0 | 877 |
| **Totals** | 173,969 | 0 | 0 | 0 | 0 | 0 | 173,969 |

**FINANCE NOTES**

City Council 2/1/11 - Midyear Budget Appropriation $173,092 from TIF.
City Council 2/7/12 - Midyear Budget Appropriation of $877 from Developer Contribution "D.R. Horton"

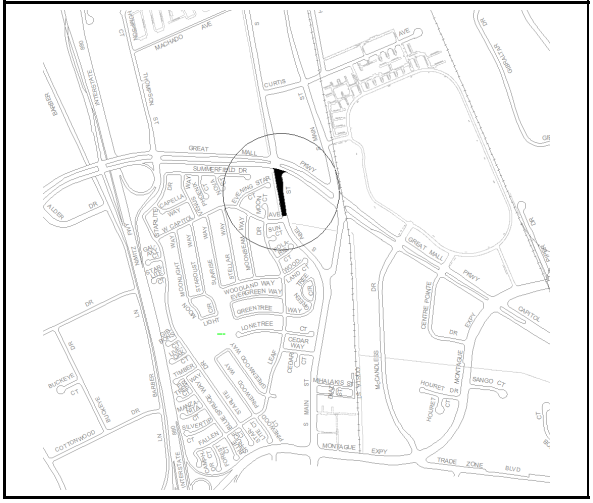
# City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | Estimate Level |
|---|---|---|
| Streets | **4264 S. Abel Street Resurfacing** | 1 |

**CONTACT:** Jimmy Nguyen [3318] / Michael Boitnott [3315]

**PRIORITY:** Rehabilitation of Existing Capital Assets or Systems

**DIAGRAM**



**DESCRIPTION**

This project will provide for an asphalt concrete overlay of S. Abel Street from Great Mall Parkway to Capitol Avenue.

**COMMENTS:**

There are over 123 centerline miles of streets that are owned and maintained by the City of Milpitas.

**Uncommitted Balance as of 2/28/2015:** $111,743

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 20,000 | 0 | 0 | 0 | 0 | 0 | 20,000 |
| Administration | 40,000 | 0 | 0 | 0 | 0 | 0 | 40,000 |
| Improvements | 51,745 | 0 | 0 | 0 | 0 | 0 | 51,745 |
| **Totals** | 111,745 | 0 | 0 | 0 | 0 | 0 | 111,745 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Developer Contributions | 4,158 | 0 | 0 | 0 | 0 | 0 | 4,158 |
| Traffic Impact Fees | 69,787 | 0 | 0 | 0 | 0 | 0 | 69,787 |
| Grants/Reimbursement/Develope | 37,800 | 0 | 0 | 0 | 0 | 0 | 37,800 |
| **Totals** | 111,745 | 0 | 0 | 0 | 0 | 0 | 111,745 |

**FINANCE NOTES**

City Council 2/7/12 - Midyear Budget Appropriation $111,745
Developer fees: Lyons Milpitas $37,800
FY 2008 Traffic Impact Fees interest $22,244
FY 2009 Traffic Impact Fees interest $47,543
Transferred $4,158 from Developer Contribution - CP 4231 Main/Montague Traffic Signal Modification

## City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Streets | **4265** | **Bart Extension Coordination and Planning** | 1 |

**CONTACT:** Steve Erickson [3301]

**PRIORITY:** Mandatory or Committed Projects

**DESCRIPTION**

The Bart extension from Fremont to San Jose will pass through Milpitas and include a BART station in Milpitas. This project includes the coordination and engineering analysis of utilities, Right of Way and other BART design impacts on the City's infrastructure.

**COMMENTS:**

Coordination with the VTA for the design of the future Bart Extension will require substantial resources from the City. Most of the work involves the review of proposals, plans, identifying infrastructure improvements and engineering analysis and development of alternatives to BART proposed improvements.

**Uncommitted Balance as of 2/28/2015:** $568,932

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 50,000 | 0 | 0 | 0 | 0 | 0 | 50,000 |
| Administration | 1,855,956 | 0 | 0 | 0 | 0 | 0 | 1,855,956 |
| Surveying | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Inspection | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Land | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Improvements | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Equipment | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 1,905,956 | 0 | 0 | 0 | 0 | 0 | 1,905,956 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| RDA Fund | 53,065 | 0 | 0 | 0 | 0 | 0 | 53,065 |
| Sewer Fund | 8,591 | 0 | 0 | 0 | 0 | 0 | 8,591 |
| Street Fund | 8,702 | 0 | 0 | 0 | 0 | 0 | 8,702 |
| Water Fund | 8,702 | 0 | 0 | 0 | 0 | 0 | 8,702 |
| Grants/Reimbursement/Develope | 1,826,896 | 0 | 0 | 0 | 0 | 0 | 1,826,896 |
| **Totals** | 1,905,956 | 0 | 0 | 0 | 0 | 0 | 1,905,956 |

**FINANCE NOTES**

City Council 2/7/12 - Midyear Budget Appropriation of $50,000 from the VTA reimbursement agreement.
City Council 2/21/12 - Midyear Budget Appropriation of $233,296 from the VTA reimbursement agreement.
City Council 9/18/12 - Budget appropriation of $393,600 from the VTA reimbursement agreement.
City Council 10/15/13 - Budget appropriation of $500,000 from the VTA reimbursement agreement.
City Council 6/17/14 - Budget appropriation of $650,000 from the VTA reimbursement agreement.

# City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Streets | **4268** | **Street Resurfacing Project 2013** | 1 |

**CONTACT:** Jimmy Nguyen [3318]

**PRIORITY:** Rehabilitation of Existing Capital Assets or Systems

**DESCRIPTION**

This project provides for a variety of pavement resurfacing treatments, from slurry seal to major rehabilitation and reconstruction. Streets are selected for improvements based on the City's Pavement Management System.

**COMMENTS:**

There are over 123 centerline miles of streets that are owned and maintained by the City of Milpitas. An annual funding of $4.5 million is required to maintain the city wide pavement condition index.

**Uncommitted Balance as of 2/28/2015:** $6,645

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 50,000 | 0 | 0 | 0 | 0 | 0 | 50,000 |
| Administration | 10,000 | 0 | 0 | 0 | 0 | 0 | 10,000 |
| Surveying | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Inspection | 30,000 | 0 | 0 | 0 | 0 | 0 | 30,000 |
| Improvements | 1,910,000 | 0 | 0 | 0 | 0 | 0 | 1,910,000 |
| **Totals** | 2,000,000 | 0 | 0 | 0 | 0 | 0 | 2,000,000 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Transient Occupancy Tax (TOT) | 500,000 | 0 | 0 | 0 | 0 | 0 | 500,000 |
| Vehicle Registration Fee | 347,000 | 0 | 0 | 0 | 0 | 0 | 347,000 |
| Gas Tax Fund | 1,153,000 | 0 | 0 | 0 | 0 | 0 | 1,153,000 |
| **Totals** | 2,000,000 | 0 | 0 | 0 | 0 | 0 | 2,000,000 |

**FINANCE NOTES**

City Council 5/1/12 Midyear Budget Appropriation $600,000
Close project at the end of the fiscal year, June 30, 2015.

## City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Streets | **4269** | **Traffic Management Enhancements 2013** | 1 |

**CONTACT:** Steve Chan [3324]

**PRIORITY:** Improve the Quality of Life

**DESCRIPTION**

This project provides for the upgrade and deployment of traffic management equipment used to monitor and control the City's roadway network. Typical improvements include the deployment of traffic signal control equipment and upgrades to the traffic operations center's video monitoring equipment.

**COMMENTS:**

This project also provides resources to pursue grant funding sources to augment the traffic management projects.

**Uncommitted Balance as of 2/28/2015:** $60,000

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Administration | 10,000 | 0 | 0 | 0 | 0 | 0 | 10,000 |
| Inspection | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Improvements | 50,000 | 0 | 0 | 0 | 0 | 0 | 50,000 |
| Other | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 60,000 | 0 | 0 | 0 | 0 | 0 | 60,000 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Street Fund | 60,000 | 0 | 0 | 0 | 0 | 0 | 60,000 |
| **Totals** | 60,000 | 0 | 0 | 0 | 0 | 0 | 60,000 |

**FINANCE NOTES**

## City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Streets | **4270** | **2014 Road Rehabilitation** | 1 |

**CONTACT:** Steve Chan [3324] / Jimmy Nguyen [3318]

**PRIORITY:** Rehabilitation of Existing Capital Assets or Systems

**DIAGRAM**

**DESCRIPTION**

Pavement rehabilitation overlay of local streets at various locations on Abel Street, Dixon Road, and Arizona Avenue. The project also includes the installation of curb ramps and repairing sidewalks to increase accessibility in the neighborhood.

**COMMENTS:**

The City has applied for a $1.65 Million grant from and it is anticipated it will be funded in spring 2014. The grant requires that the City provide an 11.47% local match of participating grant funds. Project design, City administration, and inspection costs are not grant applicable.

**Uncommitted Balance as of 2/28/2015:** $1,940,691

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 60,000 | 0 | 0 | 0 | 0 | 0 | 60,000 |
| Administration | 35,000 | 0 | 0 | 0 | 0 | 0 | 35,000 |
| Inspection | 50,000 | 0 | 0 | 0 | 0 | 0 | 50,000 |
| Improvements | 1,970,920 | 0 | 0 | 0 | 0 | 0 | 1,970,920 |
| **Totals** | 2,115,920 | 0 | 0 | 0 | 0 | 0 | 2,115,920 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Gas Tax Fund | 350,000 | 0 | 0 | 0 | 0 | 0 | 350,000 |
| Grants/Reimbursement/Develope | 1,765,920 | 0 | 0 | 0 | 0 | 0 | 1,765,920 |
| **Totals** | 2,115,920 | 0 | 0 | 0 | 0 | 0 | 2,115,920 |

**FINANCE NOTES**

Grant: $1,652,000 from Surface Transportation Program
City Council (2-3-15) - FY14-15 Midyear appropriation $115,920 from Aspen Village.

## City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Streets | **4272** | **Minor Traffic Improvements 2014** | 1 |

**CONTACT:** Steve Chan [3324]

**PRIORITY:** Rehabilitation of Existing Capital Assets or Systems

**DESCRIPTION**

This project provides for traffic studies, speed surveys, and traffic counts. This project also includes minor traffic improvements that result from community service requests. Typical improvements include roadway markings/signage improvements and the installation of roadway undulators.

**COMMENTS:**

**Uncommitted Balance as of 2/28/2015:** $80,500

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 20,000 | 0 | 0 | 0 | 0 | 0 | 20,000 |
| Administration | 10,000 | 0 | 0 | 0 | 0 | 0 | 10,000 |
| Inspection | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Improvements | 70,000 | 0 | 0 | 0 | 0 | 0 | 70,000 |
| Other | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 100,000 | 0 | 0 | 0 | 0 | 0 | 100,000 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Gas Tax Fund | 100,000 | 0 | 0 | 0 | 0 | 0 | 100,000 |
| **Totals** | 100,000 | 0 | 0 | 0 | 0 | 0 | 100,000 |

**FINANCE NOTES**

## City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Streets | **4274** | **I 880 Interchange R/W Closeout** | 1 |

**CONTACT:** Steve Chan [3324] / Julie Waldron [3314]

**PRIORITY:** Mandatory or Committed Projects

**DIAGRAM**

**DESCRIPTION**

This project will provide final closeout documentation and Right of Way transfer for the three interchanges constructed along I-880 and Dixon Landing Road, State Route 237, and Tasman Drive.

**COMMENTS:**

The interchanges were constructed under three separate CIP projects. The City is working with Caltrans and VTA through a cooperative cost share agreement to closeout these projects and ultimately transfer R/W and ownership to Caltrans.

**Uncommitted Balance as of 2/28/2015:** $240,297

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Administration | 727,181 | 0 | 0 | 0 | 0 | 0 | 727,181 |
| **Totals** | 727,181 | 0 | 0 | 0 | 0 | 0 | 727,181 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Developer Contributions | 148,119 | 0 | 0 | 0 | 0 | 0 | 148,119 |
| Street Fund | 579,062 | 0 | 0 | 0 | 0 | 0 | 579,062 |
| **Totals** | 727,181 | 0 | 0 | 0 | 0 | 0 | 727,181 |

**FINANCE NOTES**

See projects 4039, 4047, and 4170 for details on the construction of each interchange improvement.
Funding for this project came from unexpended balance of projects 4039, 4047, and 4170.

# City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Streets | **4275** | **Street Resurfacing Project 2015** | 1 |

**CONTACT:** Jimmy Nguyen [3318]

**PRIORITY:** Rehabilitation of Existing Capital Assets or Systems

**DESCRIPTION**

This project provides for a variety of pavement resurfacing treatments, from slurry seal to major rehabilitation and reconstruction. Streets are selected for improvements based on the City's Pavement Management System to optimize the pavement condition based on available the budget. There are currently over 123 centerline miles of streets that are owned and maintained by the City of Milpitas. This project will also include citywide replacement of existing curb, gutter and sidewalk, installation of ADA ramps and implementation of Class II bike lanes and Class III bike route facilities as described in the 2009 updated City of Milpitas Bikeway Master Plan.

**COMMENTS:**

The project also includes installation of ADA ramps along roads that are reconstructed or receive an AC overlay. Annually a visual inspection of city sidewalks is conducted to determine and establish a priority list of candidate sites for replacement. An annual funding of $4.5 million is required to maintain the city wide pavement condition index of 70. A PCI of 70 is defined as “good condition” by Metropolitan Transportation Commission (MTC).

**Uncommitted Balance as of 2/28/2015:** $293,776

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 150,000 | 0 | 0 | 0 | 0 | 0 | 150,000 |
| Administration | 100,000 | 0 | 0 | 0 | 0 | 0 | 100,000 |
| Inspection | 100,000 | 0 | 0 | 0 | 0 | 0 | 100,000 |
| Improvements | 3,900,000 | 0 | 0 | 0 | 0 | 0 | 3,900,000 |
| **Totals** | 4,250,000 | 0 | 0 | 0 | 0 | 0 | 4,250,000 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Vehicle Registration Fee | 300,000 | 0 | 0 | 0 | 0 | 0 | 300,000 |
| Water Fund | 225,000 | 0 | 0 | 0 | 0 | 0 | 225,000 |
| Sewer Fund | 225,000 | 0 | 0 | 0 | 0 | 0 | 225,000 |
| Grants/Reimbursement/Develope | 160,015 | 0 | 0 | 0 | 0 | 0 | 160,015 |
| Street Fund | 111,900 | 0 | 0 | 0 | 0 | 0 | 111,900 |
| Traffic Impact Fees | 50,000 | 0 | 0 | 0 | 0 | 0 | 50,000 |
| Transient Occupancy Tax (TOT) | 1,600,000 | 0 | 0 | 0 | 0 | 0 | 1,600,000 |
| Gas Tax Fund | 1,578,085 | 0 | 0 | 0 | 0 | 0 | 1,578,085 |
| **Totals** | 4,250,000 | 0 | 0 | 0 | 0 | 0 | 4,250,000 |

**FINANCE NOTES**

Transportation Development Act (TDA) ($84,506) FY 13-14 grant from the Metropolitan Transportation Commission (MTC)
Transportation Development Act (TDA) ($75,509) FY 14-15 grant from the Metropolitan Transportation Commission (MTC)
Traffic Impact Fee: Brookfield Homes ($50,000)
City Council (2-3-15) - FY14-15 Midyear appropriation to reduce the Street Fund by $23,100 and increase Gas Tax Fund by $23,100.

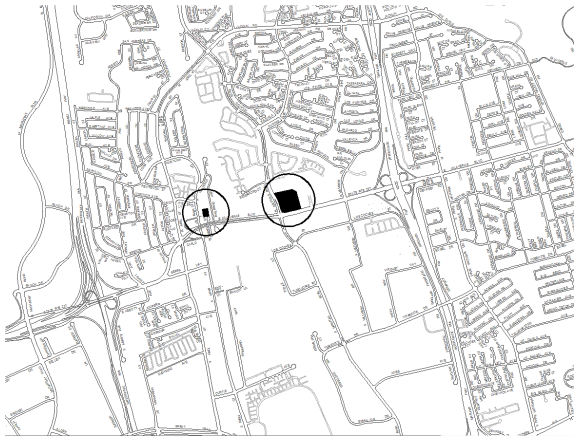
## City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Streets | **4276** | **Electrical Vehicle Charging Stations** | 1 |

**CONTACT:** Steve Chan [3324]

**PRIORITY:** Improve the Quality of Life

**DIAGRAM**



**DESCRIPTION**

The project provides for the installation of two Electric Vehicle EV charging stations to be located at the Civic Center parking lot, and two EV charging stations to located at the Midtown parking garage located next to the Library.

**COMMENTS:**

The City applied for a $40,000 grant for the installation of four EV charging stations, however in April 2015 the Bay Area Air Quality Management District (BAAQMD) only authorized $20,200 for this program. Project design, City administration, and inspection costs are not grant reimbursable.

**Uncommitted Balance as of 2/28/2015:** $40,200

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 5,000 | 0 | 0 | 0 | 0 | 0 | 5,000 |
| Administration | 5,000 | 0 | 0 | 0 | 0 | 0 | 5,000 |
| Inspection | 5,000 | 0 | 0 | 0 | 0 | 0 | 5,000 |
| Improvements | 25,200 | 0 | 0 | 0 | 0 | 0 | 25,200 |
| **Totals** | 40,200 | 0 | 0 | 0 | 0 | 0 | 40,200 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Grants/Reimbursement/Develope | 20,200 | 0 | 0 | 0 | 0 | 0 | 20,200 |
| Gas Tax Fund | 20,000 | 0 | 0 | 0 | 0 | 0 | 20,000 |
| **Totals** | 40,200 | 0 | 0 | 0 | 0 | 0 | 40,200 |

**FINANCE NOTES**

Congestion Management Program Transportation Fund for Clear Air (TFCA) ($40,000) grant FY 14-15 Santa Clara Valley Transportation Authority (VTA) and Bay Area Air Quality Management District (BAAQMD).
City Council 9/2/14 project created.
April 2015, BAAQMD only authorized $20,200 for the program.

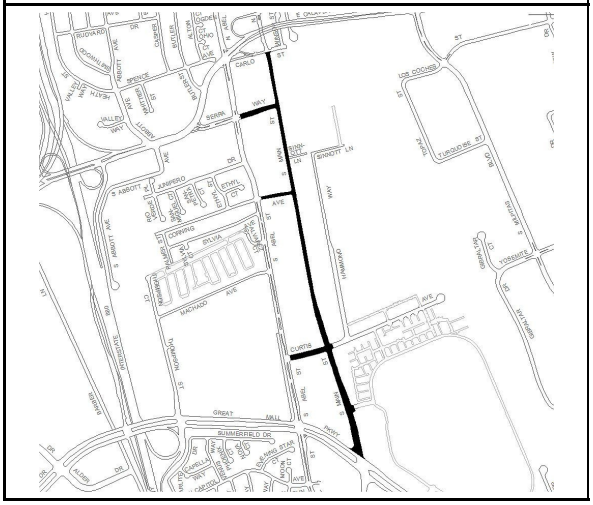
## City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Streets | **4277** | **Main Street Pavement Reconstruction** | 1 |

**CONTACT:** Steve Erickson [3301] / Steve Chan [3324]

**PRIORITY:** Rehabilitation of Existing Capital Assets or Systems

**DIAGRAM**



**DESCRIPTION**

This project provides for the partial reconstruction of Main Street from Carlo to Great Mall Parkway. The project would provide for the replacement of AC pavement and portions of the curb, gutter, and sidewalk.

**COMMENTS:**

This project is funded with proceeds left over from the sale of the 1997 & 2003 RDA bonds.

**Uncommitted Balance as of 2/28/2015:** $3,762,892

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 250,000 | 0 | 0 | 0 | 0 | 0 | 250,000 |
| Administration | 200,000 | 0 | 0 | 0 | 0 | 0 | 200,000 |
| Inspection | 100,000 | 0 | 0 | 0 | 0 | 0 | 100,000 |
| Improvements | 3,446,000 | 0 | 0 | 0 | 0 | 0 | 3,446,000 |
| **Totals** | 3,996,000 | 0 | 0 | 0 | 0 | 0 | 3,996,000 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| 1997 RDA Tax Allocation Bonds | 528,000 | 0 | 0 | 0 | 0 | 0 | 528,000 |
| 2003 RDA Tax Allocation Bonds | 3,468,000 | 0 | 0 | 0 | 0 | 0 | 3,468,000 |
| **Totals** | 3,996,000 | 0 | 0 | 0 | 0 | 0 | 3,996,000 |

**FINANCE NOTES**

City Council 1/6/15 project created.

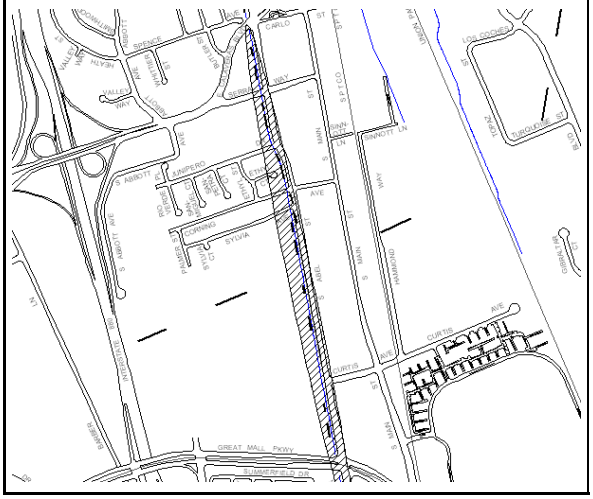
# City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Park Improvement | **5080** | **Penitencia Creek Trail Feasibility Study** | 1 |

**CONTACT:** Adam Petersen [3274]

**PRIORITY:** Improve the Quality of Life

**DIAGRAM**



**DESCRIPTION**

This project provides for a feasibility study of a trail along the Penitencia Creek (lower and east channels) from W. Calaveras Boulevard to the southern City limits. The study would include the review of ADA Accessibility, options for major street crossings, and environmental impact assessment.

**COMMENTS:**

The Project would help in the implement of the Midtown Specific Plan Policy 3.23. The Penitencia Creek Trail is among the top three development priorities set in the Trails Master Plan.

**Uncommitted Balance as of 2/28/2015:** $39,708

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 38,000 | 0 | 0 | 0 | 0 | 0 | 38,000 |
| Administration | 2,000 | 0 | 0 | 0 | 0 | 0 | 2,000 |
| Surveying | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Inspection | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Land | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Improvements | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Equipment | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 40,000 | 0 | 0 | 0 | 0 | 0 | 40,000 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Midtown Park Fund | 40,000 | 0 | 0 | 0 | 0 | 0 | 40,000 |
| **Totals** | 40,000 | 0 | 0 | 0 | 0 | 0 | 40,000 |

**FINANCE NOTES**

Close project at the end of the fiscal year, June 30, 2015.

# City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Park Improvement | **5086** | **Park Irrigation System Rehabilitation** | 1 |

**CONTACT:** Michael Boitnott [3315]

**PRIORITY:** Rehabilitation of Existing Capital Assets or Systems

**DESCRIPTION**

This project provides new central computer irrigation system and updates the irrigation systems at all City parks. This system will also alert staff of broken sprinklers and irrigation lines, by sensing loss of water pressure during operation. Repair response is much quicker, eliminating loss of water and water damage to the park landscaping.

**COMMENTS:**

This project will increase staff efficiency and also provide more efficient watering, resulting in reduced operational costs.

**Uncommitted Balance as of 2/28/2015:** $23,992

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 25,000 | 0 | 0 | 0 | 0 | 0 | 25,000 |
| Administration | 20,000 | 0 | 0 | 0 | 0 | 0 | 20,000 |
| Surveying | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Inspection | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Land | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Improvements | 190,000 | 0 | 0 | 0 | 0 | 0 | 190,000 |
| Equipment | 165,000 | 0 | 0 | 0 | 0 | 0 | 165,000 |
| Other | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 400,000 | 0 | 0 | 0 | 0 | 0 | 400,000 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Park Fund | 400,000 | 0 | 0 | 0 | 0 | 0 | 400,000 |
| **Totals** | 400,000 | 0 | 0 | 0 | 0 | 0 | 400,000 |

**FINANCE NOTES**

Close project at the end of the fiscal year, June 30, 2015.

## City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Park Improvement | **5091** | **Park Renovation Project 2011** | 1 |

**CONTACT:** Julie Waldron [3314]

**PRIORITY:** Health and Safety Projects

**DESCRIPTION**

This project provides for safety and accessibility (ADA) improvements in accordance with the Park Master Plan. Renovations can include replacement of playground equipment, drinking fountains, reconstructing walkways and other park improvements, for safety and accessibility.

**COMMENTS:**

The City obtained a Community Development Block Grant funding in the amount of $77,777.78 for use at Pinewood and Albert J. Augustine Memorial Parks to improve the pathways and add ADA curb ramps.

**Uncommitted Balance as of 2/28/2015:** $31,097

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 25,000 | 0 | 0 | 0 | 0 | 0 | 25,000 |
| Administration | 10,000 | 0 | 0 | 0 | 0 | 0 | 10,000 |
| Surveying | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Inspection | 15,000 | 0 | 0 | 0 | 0 | 0 | 15,000 |
| Improvements | 227,778 | 0 | 0 | 0 | 0 | 0 | 227,778 |
| Other | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 277,778 | 0 | 0 | 0 | 0 | 0 | 277,778 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Park Fund | 200,000 | 0 | 0 | 0 | 0 | 0 | 200,000 |
| Grants/Reimbursement/Develope | 77,778 | 0 | 0 | 0 | 0 | 0 | 77,778 |
| **Totals** | 277,778 | 0 | 0 | 0 | 0 | 0 | 277,778 |

**FINANCE NOTES**

City Council 4/2/13 - Budget appropriation of $77,777.78 from the Community Development Block Grant (CDBG) program.
Close project at the end of the fiscal year, June 30, 2015.

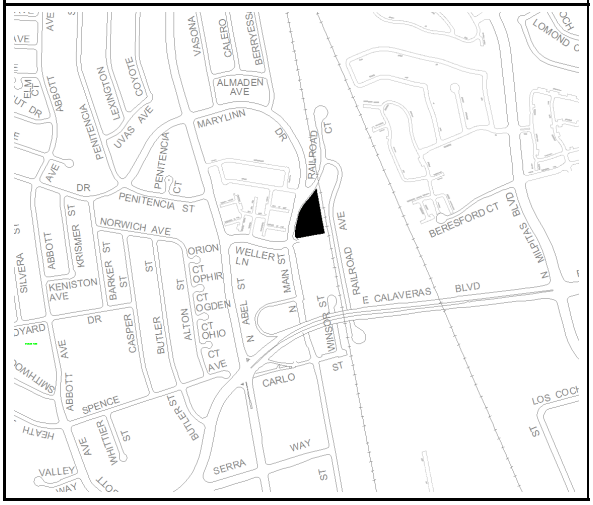
# City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Park Improvement | **5092** | **Main Street Park** | 1 |

**CONTACT:** Steve Erickson [3301]

**PRIORITY:** Improve the Quality of Life

**DIAGRAM**




**DESCRIPTION**

This project provides for the design and construction of a new park on the City owned parcel just north of the Milpitas Library. Improvements will include a large gathering area to accommodate Park's activities such as "Music in the Park", shade structures, landscaping, drainage, hardscape and walkways. This project will also include street modifications to the intersection of Railroad Ave. and Main St., removing the pork-chop island and reconfiguring the south and east curbs of Main St. and Railroad Ave. Pedestrian improvements to the library parking garage are also included.

**COMMENTS:**

An optional historic museum could be added to the park for an additional $1 to $2 million.

**Uncommitted Balance as of 2/28/2015:** $349,812

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 250,000 | 0 | 0 | 0 | 0 | 0 | 250,000 |
| Administration | 100,000 | 0 | 0 | 0 | 0 | 0 | 100,000 |
| Inspection | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Improvements | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Equipment | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Building | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 350,000 | 0 | 0 | 0 | 0 | 0 | 350,000 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Midtown Park Fund | 350,000 | 0 | 0 | 0 | 0 | 0 | 350,000 |
| **Totals** | 350,000 | 0 | 0 | 0 | 0 | 0 | 350,000 |

**FINANCE NOTES**

This project is on hold pending the outcome of the dissolution of the RDA.
Close project at the end of the fiscal year, June 30, 2015.

## City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Park Improvement | **5093** | **Park Master Plan Improvements - Phase I** | 0 |

**CONTACT:** Michael Boitnott [3315]

**PRIORITY:** Improve the Quality of Life

**DESCRIPTION**

This project provides for the design of the first park renovation projects based on the Park Master Plan recommendations, priorities and financing plan.

**COMMENTS:**

**Uncommitted Balance as of 2/28/2015:** $200,000

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 180,000 | 0 | 0 | 0 | 0 | 0 | 180,000 |
| Administration | 20,000 | 0 | 0 | 0 | 0 | 0 | 20,000 |
| Surveying | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Inspection | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Land | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Improvements | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Equipment | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 200,000 | 0 | 0 | 0 | 0 | 0 | 200,000 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Park Fund | 200,000 | 0 | 0 | 0 | 0 | 0 | 200,000 |
| **Totals** | 200,000 | 0 | 0 | 0 | 0 | 0 | 200,000 |

**FINANCE NOTES**

Close project at the end of the fiscal year, June 30, 2015.

## City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Park Improvement | **5095** | **Park Renovation Project 2013** | 1 |

**CONTACT:** Michael Boitnott [3315]

**PRIORITY:** Health and Safety Projects

**DESCRIPTION**

This project provides for safety and accessibility (ADA) improvements in accordance with the Park Master Plan. Renovations can include replacement of playground equipment, drinking fountains, reconstructing walkways and other park improvements, for safety and accessibility.

**COMMENTS:**

This project will also replace the tennis practice wall at Robert E. Browne Park.

**Uncommitted Balance as of 2/28/2015:** $111,425

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 25,000 | 0 | 0 | 0 | 0 | 0 | 25,000 |
| Administration | 10,000 | 0 | 0 | 0 | 0 | 0 | 10,000 |
| Surveying | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Inspection | 15,000 | 0 | 0 | 0 | 0 | 0 | 15,000 |
| Land | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Improvements | 350,000 | 0 | 0 | 0 | 0 | 0 | 350,000 |
| Equipment | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 400,000 | 0 | 0 | 0 | 0 | 0 | 400,000 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Park Fund | 400,000 | 0 | 0 | 0 | 0 | 0 | 400,000 |
| **Totals** | 400,000 | 0 | 0 | 0 | 0 | 0 | 400,000 |

**FINANCE NOTES**

Close project at the end of the fiscal year, June 30, 2015.

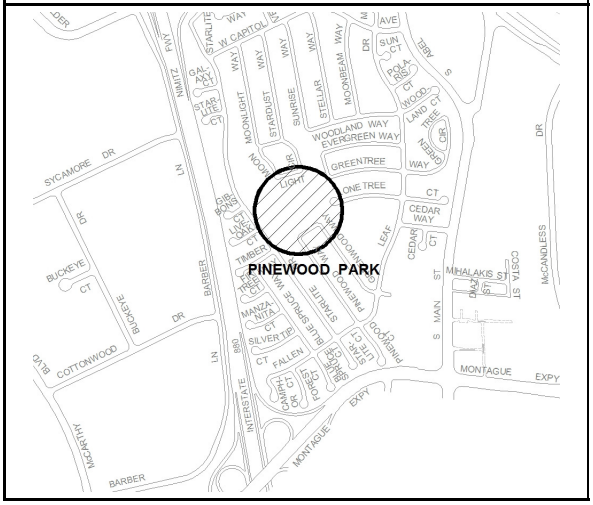
# City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Park Improvement | **5096** | **Pinewood Park Picnic Renovation** | 1 |

**CONTACT:** Michael Boitnott [3315] / Arnold Chu [3312]

**PRIORITY:** Rehabilitation of Existing Capital Assets or Systems

**DIAGRAM**




**DESCRIPTION**

This project provides for the design and construction of renovation improvements for various park elements at Pinewood Park. These include the large picnic area and perimeter landscaping, ADA compliance assessment and improvements, drainage, lighting, walkways, irrigation, and related improvements.

**COMMENTS:**

Pinewood Park is one of the City's oldest and heavily used parks and is in need of major renovation work.

**Uncommitted Balance as of 2/28/2015:** $158,927

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 300,000 | 0 | 0 | 0 | 0 | 0 | 300,000 |
| Administration | 125,000 | 0 | 0 | 0 | 0 | 0 | 125,000 |
| Inspection | 75,000 | 0 | 0 | 0 | 0 | 0 | 75,000 |
| Land | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Improvements | 1,500,000 | 0 | 0 | 0 | 0 | 0 | 1,500,000 |
| Other | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 2,000,000 | 0 | 0 | 0 | 0 | 0 | 2,000,000 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Park Fund | 2,000,000 | 0 | 0 | 0 | 0 | 0 | 2,000,000 |
| **Totals** | 2,000,000 | 0 | 0 | 0 | 0 | 0 | 2,000,000 |

**FINANCE NOTES**

Close project at the end of the fiscal year, June 30, 2015.

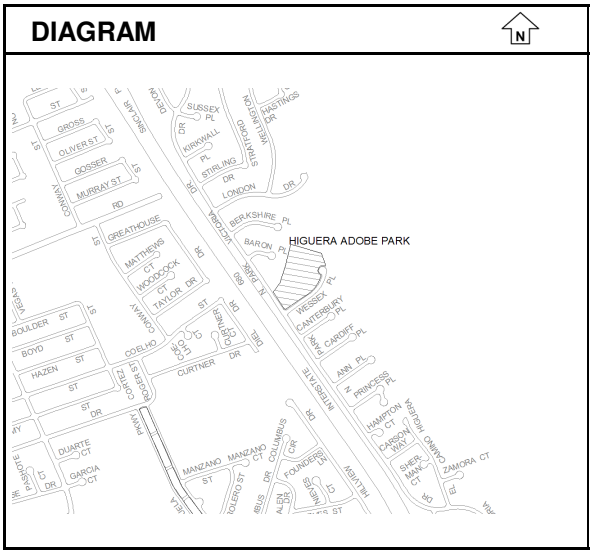
## City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Park Improvement | **5097** | **Higuera Adobe Park Picnic and Playground Renovation** | 1 |

**CONTACT:** Michael Boitnott [3315]

**PRIORITY:** Rehabilitation of Existing Capital Assets or Systems

**DIAGRAM**




**DESCRIPTION**

This project provides for the design and construction of renovation improvements of various park elements at the Higuera Adobe Park. This includes the large picnic area behind the adobe building, playground including shade structures, and surrounding area. The project will evaluate the maintenance to the care takers building, ADA compliance assessment and improvements, drainage, landscaping, walkways and related improvements.

**COMMENTS:**

Higuera Adobe Park is a Historical Site that is heavily used by large groups due to the rental opportunities of the Adobe building.

**Uncommitted Balance as of 2/28/2015:** $1,987,123

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 325,000 | 0 | 0 | 0 | 0 | 0 | 325,000 |
| Administration | 60,000 | 0 | 0 | 0 | 0 | 0 | 60,000 |
| Inspection | 50,000 | 0 | 0 | 0 | 0 | 0 | 50,000 |
| Improvements | 1,565,000 | 0 | 0 | 0 | 0 | 0 | 1,565,000 |
| **Totals** | 2,000,000 | 0 | 0 | 0 | 0 | 0 | 2,000,000 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Midtown Park Fund | 1,000,000 | 0 | 0 | 0 | 0 | 0 | 1,000,000 |
| Park Fund | 1,000,000 | 0 | 0 | 0 | 0 | 0 | 1,000,000 |
| **Totals** | 2,000,000 | 0 | 0 | 0 | 0 | 0 | 2,000,000 |

**FINANCE NOTES**

# City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Park Improvement | **5098** | **Park Irrigation System Repair & Improvement 2014** | 1 |

**CONTACT:** Steve Erickson [3301]

**PRIORITY:** Improve the Quality of Life

**DESCRIPTION**

This project provides for the repair and replacement of park irrigation systems and related equipment in City Parks.

**COMMENTS:**

The City has over 25 parks thru out the City, and many of these have irrigation systems that are over 40 years old. These older systems are not well document, and are problematic to locate to for repair. The systems are inefficient and leak, and there are some that are no longer operational. Irrigation systems that do operate require a significant amount of maintenance to fix continuous line breaks or to adjust worn parts. The project would also provide for restoration of existing landscaping within the park.

**Uncommitted Balance as of 2/28/2015:** $200,080

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 50,000 | 0 | 0 | 0 | 0 | 0 | 50,000 |
| Administration | 30,000 | 0 | 0 | 0 | 0 | 0 | 30,000 |
| Inspection | 20,000 | 0 | 0 | 0 | 0 | 0 | 20,000 |
| Improvements | 200,000 | 0 | 0 | 0 | 0 | 0 | 200,000 |
| **Totals** | 300,000 | 0 | 0 | 0 | 0 | 0 | 300,000 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Park Fund | 300,000 | 0 | 0 | 0 | 0 | 0 | 300,000 |
| **Totals** | 300,000 | 0 | 0 | 0 | 0 | 0 | 300,000 |

**FINANCE NOTES**

## City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Park Improvement | **5099** | **Park Renovation Project 2015** | 1 |

**CONTACT:** Michael Boitnott [3315]

**PRIORITY:** Health and Safety Projects

**DESCRIPTION**

This project provides for safety and accessibility (ADA) improvements in accordance with the Park Master Plan. Renovations can include replacement of playground equipment, drinking fountains, reconstructing walkways and other park improvements, for safety and accessibility.

**COMMENTS:**

This project will also provide for the installation of two LED lights on existing PG&E poles along the park strip between Washington Dr. and Coelho St.

**Uncommitted Balance as of 2/28/2015:** $245,999

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 50,000 | 0 | 0 | 0 | 0 | 0 | 50,000 |
| Administration | 25,000 | 0 | 0 | 0 | 0 | 0 | 25,000 |
| Surveying | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Inspection | 25,000 | 0 | 0 | 0 | 0 | 0 | 25,000 |
| Land | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Improvements | 200,000 | 0 | 0 | 0 | 0 | 0 | 200,000 |
| **Totals** | 300,000 | 0 | 0 | 0 | 0 | 0 | 300,000 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Park Fund | 300,000 | 0 | 0 | 0 | 0 | 0 | 300,000 |
| **Totals** | 300,000 | 0 | 0 | 0 | 0 | 0 | 300,000 |

**FINANCE NOTES**

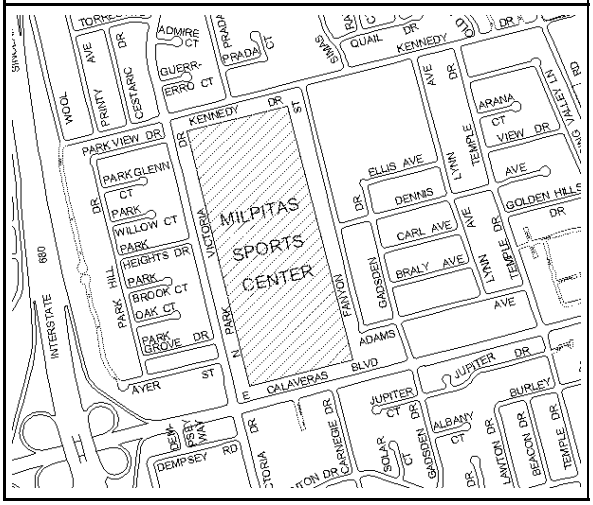
## City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Park Improvement | **5100** | **Sports Center Skate Park & Fields Feasibility Study** | 1 |

**CONTACT:** Steven Machida [3355] / Julie Waldron [3314]

**PRIORITY:** Studies and Analyses

**DIAGRAM**




**DESCRIPTION**

This project will conduct a feasibility study to determine the size and location of the skate park and sports fields. The project will be constructed in phases. One of the two phase of the improvements would include a 12,000 sq.ft. skate structure, lighting, landscaping, drainage, hardscape and amenities. The other phase of the project would include reconfiguring the existing track and football field into a U-13 soccer field and football field and modifying the existing stadium lighting and bleaches to accommodate the relocated fields.

**COMMENTS:**

The sports fields and the skate park will each be a separate project.

**Uncommitted Balance as of 2/28/2015:** $74,712

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 75,000 | 0 | 0 | 0 | 0 | 0 | 75,000 |
| Administration | 25,000 | 0 | 0 | 0 | 0 | 0 | 25,000 |
| Inspection | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Improvements | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 100,000 | 0 | 0 | 0 | 0 | 0 | 100,000 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Park Fund | 100,000 | 0 | 0 | 0 | 0 | 0 | 100,000 |
| **Totals** | 100,000 | 0 | 0 | 0 | 0 | 0 | 100,000 |

**FINANCE NOTES**

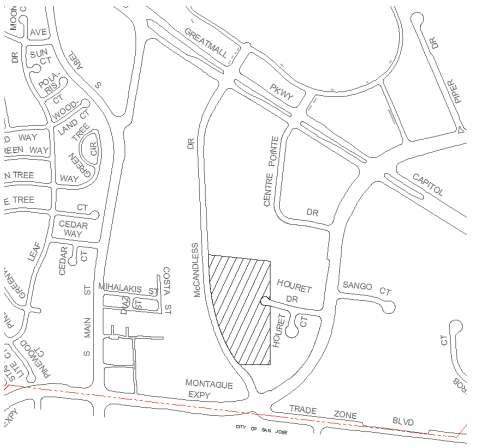
## City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Park Improvement | **5102** | **McCandless Park** | 1 |

**CONTACT:** Adam Petersen [3274] / Steven Machida [3355]

**PRIORITY:** Enhance Economic Development

**DIAGRAM**




**DESCRIPTION**

This project provides for a new public park adjacent a new MUSD elementary school located on McCandless drive in the Transit Area. The park will provide approximately 4 acres of City public park space, which will include play fields, athletic courts, parking, picnic area, play structure, and restrooms.

**COMMENTS:**

The first phase of this project is to coordinate the layout and schematic design of the new park with the adjoining MUSD elementary school to maximize both sites. The cost for construction, design and construction support services will be added once the schematic design phase is completed.

**Uncommitted Balance as of 2/28/2015:** $0

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 250,000 | 0 | 0 | 0 | 0 | 0 | 250,000 |
| Administration | 50,000 | 0 | 0 | 0 | 0 | 0 | 50,000 |
| **Totals** | 300,000 | 0 | 0 | 0 | 0 | 0 | 300,000 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| TASP Impact Fees | 300,000 | 0 | 0 | 0 | 0 | 0 | 300,000 |
| **Totals** | 300,000 | 0 | 0 | 0 | 0 | 0 | 300,000 |

**FINANCE NOTES**

City Council 4/7/15 project created.

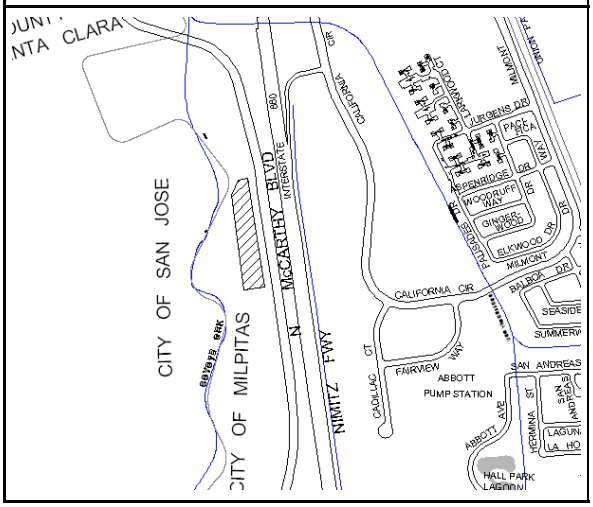
# City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Sewer Improvement | 6079 | Main Sewer Pump Station Site Improvements | 1 |

**CONTACT:** Michael Boitnott [3315]

**PRIORITY:** Rehabilitation of Existing Capital Assets or Systems

**DIAGRAM**




**DESCRIPTION**

This project provides design and construction of drainage, pavement, lighting security and other improvements at the Main Sewer Pump Station (SPS). This project also involves the removal of the existing abandoned facilities, tanks, miscellaneous piping and control panels that were once part of the sewage treatment facility. In addition, this project acquires a 70' wide strip of right-of-way between McCarthy Blvd and the Main Sewer Pump Station, through a no-cost land exchange with adjacent property owner.

**COMMENTS:**

This site will be improved to accommodate the relocated Public Works Corp Yard at Main St., allowing the construction of the new Library project. This site contained several abandoned treatment plant structures. Phase I, completed in 2005, included demolition and removal of abandoned facilities and hazardous materials. The remaining work includes lighting, security improvements canopies for vehicle storage and photo voltaic equipment.

**Uncommitted Balance as of 2/28/2015:** $142,058

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 350,000 | 0 | 0 | 0 | 0 | 0 | 350,000 |
| Administration | 105,000 | 0 | 0 | 0 | 0 | 0 | 105,000 |
| Surveying | 9,000 | 0 | 0 | 0 | 0 | 0 | 9,000 |
| Inspection | 151,000 | 0 | 0 | 0 | 0 | 0 | 151,000 |
| Land | 500,000 | 0 | 0 | 0 | 0 | 0 | 500,000 |
| Improvements | 1,187,000 | 0 | 0 | 0 | 0 | 0 | 1,187,000 |
| Equipment | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 2,302,000 | 0 | 0 | 0 | 0 | 0 | 2,302,000 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Sewer Treatment Fund | 320,000 | 0 | 0 | 0 | 0 | 0 | 320,000 |
| Sewer Fund | 285,000 | 0 | 0 | 0 | 0 | 0 | 285,000 |
| RDA Fund | 145,000 | 0 | 0 | 0 | 0 | 0 | 145,000 |
| 2003 RDA Tax Allocation Bonds | 1,552,000 | 0 | 0 | 0 | 0 | 0 | 1,552,000 |
| **Totals** | 2,302,000 | 0 | 0 | 0 | 0 | 0 | 2,302,000 |

**FINANCE NOTES**

$448,000 2003 TAB removed due to the dissolution of the RDA.

# City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Sewer Improvement | **6106** | **Sewer Replacement Study** | 1 |

**CONTACT:** Marilyn Nickel [3347]

**PRIORITY:** Rehabilitation of Existing Capital Assets or Systems

**DESCRIPTION**

This project involves field determination of the remaining useful life of the following sewer pipes: 360 linear feet of 42 inch RCP crossing I-880 at the Main Lift Station, 490 linear feet of 42 inch RCP at Cadillac Court and I-880, 310 linear feet of 42 inch RCP at Milmont near Penitencia Creek, 5,400 linear feet of 33-42 inch RCP along Milpitas Blvd between Hidden Lakes and Midwick, 90 linear feet of 24 inch RCP at Folsom and Hetch-Hetchy crossing, 1,500 linear feet of 30 inch RCP between Folsom and Escuela, and 170 linear feet of 12 inch RCP at Dempsey. The first priority includes review of the steel forcemain, Balboa Crossing, and the UPRR crossing south of Calaveras.

**COMMENTS:**

The Schaaf and Wheeler 2002 Depreciation Study has estimated the remaining life of the existing sewer infrastructure. This work is to field determine the condition of sewers and verify need to replace those sewers identified as having an estimated useful life ending by 2008. The study will refine the scope of work and costs, and prioritize these projects. The project will also include updating the sanitary sewer portion of the Financial Utility Master Plan.

**Uncommitted Balance as of 2/28/2015:** $20,761

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 65,000 | 0 | 0 | 0 | 0 | 0 | 65,000 |
| Administration | 15,000 | 0 | 0 | 0 | 0 | 0 | 15,000 |
| Surveying | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Inspection | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Land | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Improvements | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Equipment | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 80,000 | 0 | 0 | 0 | 0 | 0 | 80,000 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Sewer Fund | 80,000 | 0 | 0 | 0 | 0 | 0 | 80,000 |
| **Totals** | 80,000 | 0 | 0 | 0 | 0 | 0 | 80,000 |

**FINANCE NOTES**

# City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Sewer Improvement | **6109** | **Sewer Seismic Study** | 1 |

**CONTACT:** Marilyn Nickel [3347]

**PRIORITY:** Studies and Analyses

**DESCRIPTION**

This study includes evaluation of the various soil conditions in Milpitas, and existing sanitary sewer collection system. Recommendations may include new joint construction methods and retrofits at critical sites. The study will also recommend emergency response strategies for Public Works, during and after a major earthquake.

**COMMENTS:**

A substantial portion of the Valley Floor is subject to soil liquefaction during earthquakes. Movement of these pipes will cause pipe joints to pull apart. Large pipe joint displacements may lead to blockages, sinkholes, and sewer overflows, leading to health concerns. Improvement recommendations will be programmed under separate capital improvement projects.

**Uncommitted Balance as of 2/28/2015:** $50,742

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 60,000 | 0 | 0 | 0 | 0 | 0 | 60,000 |
| Surveying | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Inspection | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Land | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Improvements | 10,000 | 0 | 0 | 0 | 0 | 0 | 10,000 |
| Other | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Construction Reserves | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 70,000 | 0 | 0 | 0 | 0 | 0 | 70,000 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Sewer Fund | 70,000 | 0 | 0 | 0 | 0 | 0 | 70,000 |
| **Totals** | 70,000 | 0 | 0 | 0 | 0 | 0 | 70,000 |

**FINANCE NOTES**

# City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Sewer Improvement | **6110** | **Sewer System Hydraulic Modeling** | 1 |

**CONTACT:** Marilyn Nickel [3347]

**PRIORITY:** Studies and Analyses

**DESCRIPTION**

This project provides for ongoing hydraulic modeling of the sanitary sewer system as needed for Public works operations and capacity impacts from new developments.

**COMMENTS:**

Modeling allows verification of existing and future pipe capacity, and capacity reduction due to pipe settlement. Modeling analysis is reimbursed by developers, when analysis is performed to determine project impacts to sewer collection system.

**Uncommitted Balance as of 2/28/2015:** $185,113

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 250,000 | 0 | 0 | 0 | 0 | 0 | 250,000 |
| Administration | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Surveying | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Inspection | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Equipment | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 250,000 | 0 | 0 | 0 | 0 | 0 | 250,000 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Sewer Fund | 250,000 | 0 | 0 | 0 | 0 | 0 | 250,000 |
| **Totals** | 250,000 | 0 | 0 | 0 | 0 | 0 | 250,000 |

**FINANCE NOTES**

## City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Sewer Improvement | **6114** | **Minor Sewer Projects 2011** | 1 |

**CONTACT:** Marilyn Nickel [3347]

**PRIORITY:** Rehabilitation of Existing Capital Assets or Systems

**DESCRIPTION**

This project involves the ongoing analysis, engineering and implementation of various minor modifications and improvements to the existing sewer system which arise during the year.

**COMMENTS:**

**Uncommitted Balance as of 2/28/2015:** $31,349

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 6,000 | 0 | 0 | 0 | 0 | 0 | 6,000 |
| Administration | 3,000 | 0 | 0 | 0 | 0 | 0 | 3,000 |
| Inspection | 3,000 | 0 | 0 | 0 | 0 | 0 | 3,000 |
| Improvements | 23,000 | 0 | 0 | 0 | 0 | 0 | 23,000 |
| **Totals** | 35,000 | 0 | 0 | 0 | 0 | 0 | 35,000 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Sewer Fund | 35,000 | 0 | 0 | 0 | 0 | 0 | 35,000 |
| **Totals** | 35,000 | 0 | 0 | 0 | 0 | 0 | 35,000 |

**FINANCE NOTES**

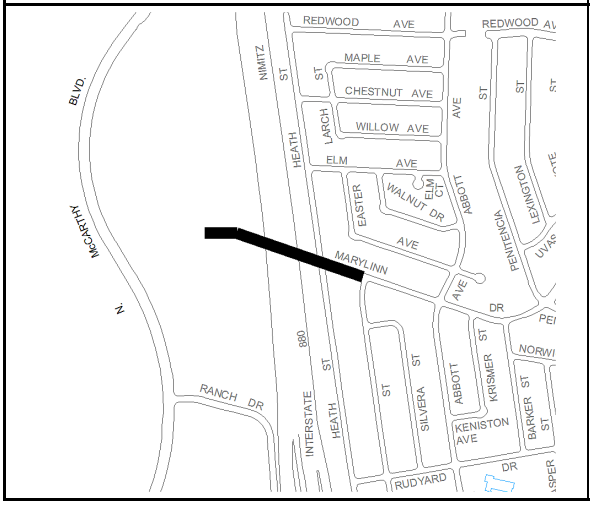
# City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Sewer Improvement | **6115** | **Sewer System Replacement 11-12** | 1 |

**CONTACT:** Michael Boitnott [3315]

**PRIORITY:** Rehabilitation of Existing Capital Assets or Systems

**DIAGRAM**




**DESCRIPTION**

This project provides for the replacement of the highest priority facilities, including upgrades to the Sewer Pump Stations, forecemain, and seismic retrofit work. The replacement prioritization is based on several factors including age, type of pipe material, soil conditions and physical evaluation based on video camera observations.

**COMMENTS:**

This project is combination with project 6116 will replace the existing 27" sewer main that extends along Marylinn Drive and under I-880. The line is required to be realigned to allow the sewer to continue flow during construction of the new line since a temporary bypass could not be achieved. Additionally at the crossing of I-880, Caltrans requires new crossings to be installed perpendicular to the freeway.

**Uncommitted Balance as of 2/28/2015:** $1,311,832

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 260,000 | 0 | 0 | 0 | 0 | 0 | 260,000 |
| Administration | 95,000 | 0 | 0 | 0 | 0 | 0 | 95,000 |
| Surveying | 20,000 | 0 | 0 | 0 | 0 | 0 | 20,000 |
| Inspection | 40,000 | 0 | 0 | 0 | 0 | 0 | 40,000 |
| Improvements | 1,335,000 | 0 | 0 | 0 | 0 | 0 | 1,335,000 |
| Equipment | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 1,750,000 | 0 | 0 | 0 | 0 | 0 | 1,750,000 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Sewer Fund | 1,750,000 | 0 | 0 | 0 | 0 | 0 | 1,750,000 |
| **Totals** | 1,750,000 | 0 | 0 | 0 | 0 | 0 | 1,750,000 |

**FINANCE NOTES**

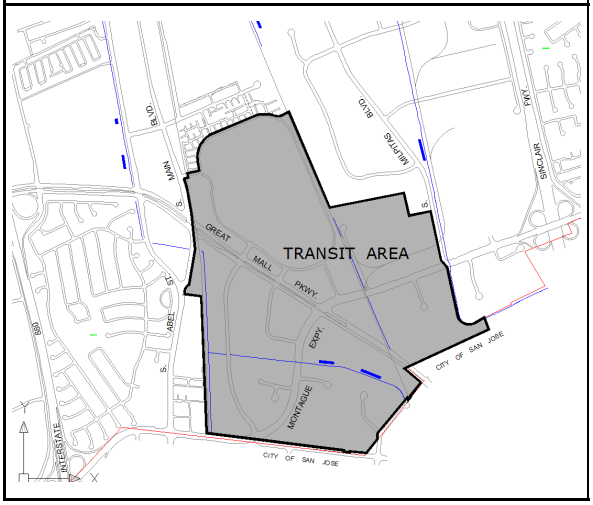
# City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Sewer Improvement | **6117** | **TASP Sewer Line Replacement** | 1 |

**CONTACT:** Steve Erickson [3301]

**PRIORITY:** Rehabilitation of Existing Capital Assets or Systems

**DIAGRAM**




**DESCRIPTION**

This project constructs sewer pipeline upgrade projects 11A-D as described in the 2009 Sewer Master Plan: Project 11A: South Main, North of Great Mall Parkway Project 11B: Great Mall Parkway between South Main and Montague Expressway Project 11C: Montague Expressway Project 11D South Main Street, South of Great Mall Parkway

**COMMENTS:**

The City's sewer collection system is at full capacity within the Transit Area Specific Plan area. Construction of these sewer pipeline upgrades provide sufficient capacity for planned development.

**Uncommitted Balance as of 2/28/2015:** $2,500,000

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 500,000 | 0 | 0 | 0 | 0 | 0 | 500,000 |
| Administration | 25,000 | 0 | 0 | 0 | 0 | 0 | 25,000 |
| Inspection | 25,000 | 0 | 0 | 0 | 0 | 0 | 25,000 |
| Improvements | 1,950,000 | 0 | 0 | 0 | 0 | 0 | 1,950,000 |
| **Totals** | 2,500,000 | 0 | 0 | 0 | 0 | 0 | 2,500,000 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Sewer Fund | 2,500,000 | 0 | 0 | 0 | 0 | 0 | 2,500,000 |
| **Totals** | 2,500,000 | 0 | 0 | 0 | 0 | 0 | 2,500,000 |

**FINANCE NOTES**

The TASP Fund is going to reimburse Developers directly rather than the CIP.

## City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Sewer Improvement | **6120** | **Minor Sewer Projects 2015** | 1 |

**CONTACT:** Steve Erickson [3301]

**PRIORITY:** Rehabilitation of Existing Capital Assets or Systems

**DESCRIPTION**

This project involves the ongoing analysis, engineering and implementation of various minor modifications and improvements to the existing sewer system which arise during the year.

**COMMENTS:**

**Uncommitted Balance as of 2/28/2015:** $350,000

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 50,000 | 0 | 0 | 0 | 0 | 0 | 50,000 |
| Administration | 25,000 | 0 | 0 | 0 | 0 | 0 | 25,000 |
| Surveying | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Inspection | 10,000 | 0 | 0 | 0 | 0 | 0 | 10,000 |
| Improvements | 265,000 | 0 | 0 | 0 | 0 | 0 | 265,000 |
| **Totals** | 350,000 | 0 | 0 | 0 | 0 | 0 | 350,000 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Sewer Fund | 350,000 | 0 | 0 | 0 | 0 | 0 | 350,000 |
| **Totals** | 350,000 | 0 | 0 | 0 | 0 | 0 | 350,000 |

**FINANCE NOTES**

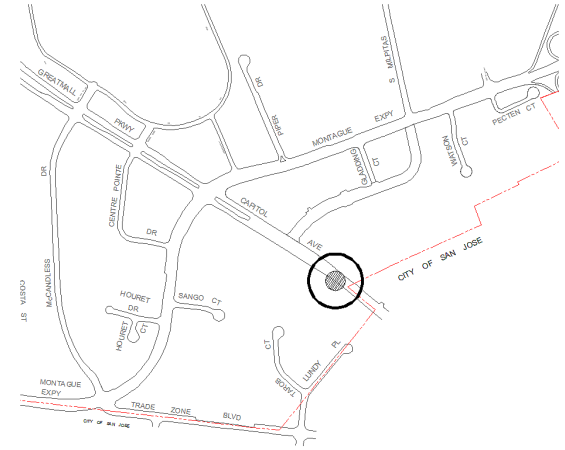
# City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Water | **7070** | **Pressure Reducing Valve Replacement** | 2 |

**CONTACT:** Michael Boitnott [3315]

**PRIORITY:** Rehabilitation of Existing Capital Assets or Systems

**DIAGRAM**




**DESCRIPTION**

This project involves the phased replacement of the existing pressure reducing valves (PRV) within the City's water system. These valves reduce water pressure as water moves from zone 2 to zone 1 in the City's distribution system.

**COMMENTS:**

All of the valves are over 20 years old and now require an extraordinary amount of maintenance. Proper operation of valves is crucial to assure proper delivery pressures for drinking and fire suppression purposes.

**Uncommitted Balance as of 2/28/2015:** $18,182

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 10,000 | 0 | 0 | 0 | 0 | 0 | 10,000 |
| Administration | 11,750 | 0 | 0 | 0 | 0 | 0 | 11,750 |
| Surveying | 10,000 | 0 | 0 | 0 | 0 | 0 | 10,000 |
| Inspection | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Land | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Improvements | 200,000 | 0 | 0 | 0 | 0 | 0 | 200,000 |
| Equipment | 88,250 | 0 | 0 | 0 | 0 | 0 | 88,250 |
| Other | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 320,000 | 0 | 0 | 0 | 0 | 0 | 320,000 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Water Line Extension Fund | 45,000 | 0 | 0 | 0 | 0 | 0 | 45,000 |
| Water Fund | 275,000 | 0 | 0 | 0 | 0 | 0 | 275,000 |
| **Totals** | 320,000 | 0 | 0 | 0 | 0 | 0 | 320,000 |

**FINANCE NOTES**

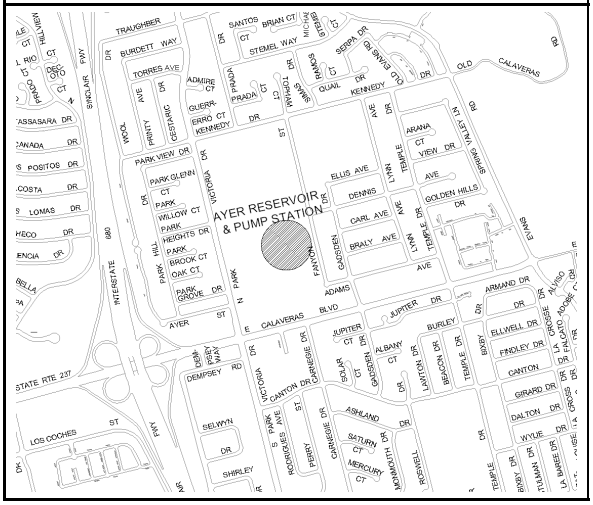
## City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Water | **7102** | **Ayer Reservoir & Pump Station Improvements** | 1 |

**CONTACT:** Michael Boitnott [3315] / Steve Erickson [3301]

**PRIORITY:** Rehabilitation of Existing Capital Assets or Systems

**DIAGRAM**




**DESCRIPTION**

This project provides several improvements to the Ayer Reservoir and Pump Station located behind the Milpitas Sports Center. The overflow structure has settled and needs to be re-plumbed to the sanitary sewer system. Scope also includes sealing concrete floors (in pipe gallery, pump room, and control room), replacing manual hoist with electric, and various electrical and mechanical repairs and/or improvements. The project will also replace or upgrade the electric pumps, control systems, and various seismic improvements.

**COMMENTS:**

The pump station is a critical water supply facility that has been in service for over 15 years. These improvements are required, in order to assure continued reliability. The first phase is replacing the variable frequency drives and rehabilitate/replace pumps and motors.

**Uncommitted Balance as of 2/28/2015:** $391,198

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 180,000 | 0 | 0 | 0 | 0 | 0 | 180,000 |
| Administration | 26,000 | 0 | 0 | 0 | 0 | 0 | 26,000 |
| Surveying | 6,000 | 0 | 0 | 0 | 0 | 0 | 6,000 |
| Inspection | 10,000 | 0 | 0 | 0 | 0 | 0 | 10,000 |
| Land | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Improvements | 828,000 | 0 | 0 | 0 | 0 | 0 | 828,000 |
| Equipment | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 1,050,000 | 0 | 0 | 0 | 0 | 0 | 1,050,000 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Water Fund | 1,050,000 | 0 | 0 | 0 | 0 | 0 | 1,050,000 |
| **Totals** | 1,050,000 | 0 | 0 | 0 | 0 | 0 | 1,050,000 |

**FINANCE NOTES**

March 1, 2011 Council Meeting - Budget Appropriation of $650,000 from the Water Fund.

# City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Water | **7108** | **Water System Hydraulic Modeling** | 1 |

**CONTACT:** Marilyn Nickel [3347]

**PRIORITY:** Studies and Analyses

**DESCRIPTION**

This project provides for miscellaneous hydraulic modeling of the water system, including impacts from new developments. This project also creates the City's first hydraulic model for the recycled water system. This computer model can be used in order to handle and direct field water system operations during an emergency.

**COMMENTS:**

Modeling is also necessary to verify pipe capacity, system pressure analysis and assists in analyzing fire flow pressure with planned water line shut offs. Some costs may be reimbursable by developers.

**Uncommitted Balance as of 2/28/2015:** $120,529

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 200,000 | 0 | 0 | 0 | 0 | 0 | 200,000 |
| Administration | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Surveying | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Inspection | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Land | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Equipment | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 200,000 | 0 | 0 | 0 | 0 | 0 | 200,000 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Recycled Water Fund | 100,000 | 0 | 0 | 0 | 0 | 0 | 100,000 |
| Water Fund | 100,000 | 0 | 0 | 0 | 0 | 0 | 100,000 |
| **Totals** | 200,000 | 0 | 0 | 0 | 0 | 0 | 200,000 |

**FINANCE NOTES**

## City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Water | **7109** | **Water System Replacement 08-09** | 1 |

**CONTACT:** Steve Erickson [3301]

**PRIORITY:** Rehabilitation of Existing Capital Assets or Systems

**DESCRIPTION**

This project provides for the repair or rehabilitation of the highest priority water facilities identified in the 2002 Water Main Replacement Study during the 08-09 fiscal year.

**COMMENTS:**

The first phase of this project is to replace broken valves throughout the distribution system.

**Uncommitted Balance as of 2/28/2015:** $580,282

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 60,000 | 0 | 0 | 0 | 0 | 0 | 60,000 |
| Administration | 45,000 | 0 | 0 | 0 | 0 | 0 | 45,000 |
| Surveying | 20,000 | 0 | 0 | 0 | 0 | 0 | 20,000 |
| Inspection | 40,000 | 0 | 0 | 0 | 0 | 0 | 40,000 |
| Land | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Improvements | 535,000 | 0 | 0 | 0 | 0 | 0 | 535,000 |
| Equipment | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 700,000 | 0 | 0 | 0 | 0 | 0 | 700,000 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Water Fund | 700,000 | 0 | 0 | 0 | 0 | 0 | 700,000 |
| **Totals** | 700,000 | 0 | 0 | 0 | 0 | 0 | 700,000 |

**FINANCE NOTES**

Close project at the end of the fiscal year, June 30, 2015.

# City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Water | **7111** | **Minor Water Projects 2011** | 1 |

**CONTACT:** Steven Machida [3355]

**PRIORITY:** Rehabilitation of Existing Capital Assets or Systems

**DESCRIPTION**

This ongoing project involves the analysis and implementation of various water projects which arise during the year. This project also provides for ongoing modifications and improvements to existing water system including enhancing security at various water facilities.

**COMMENTS:**

This project involves the installation of two new gate valves on the water main, near Brian Court and Santos Court. These valves allow better isolation of the water system during waterline shut-offs. Water shut-offs may occur during routine and emergency repairs of the main water line, fire hydrants, or air and pressure relief valves. The project will also include updating the water portion of the Financial Utility Master Plan.

**Uncommitted Balance as of 2/28/2015:** $37,533

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 5,000 | 0 | 0 | 0 | 0 | 0 | 5,000 |
| Improvements | 90,000 | 0 | 0 | 0 | 0 | 0 | 90,000 |
| **Totals** | 95,000 | 0 | 0 | 0 | 0 | 0 | 95,000 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Water Fund | 95,000 | 0 | 0 | 0 | 0 | 0 | 95,000 |
| **Totals** | 95,000 | 0 | 0 | 0 | 0 | 0 | 95,000 |

**FINANCE NOTES**

# City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Water | **7112** | **Reservoir Cleaning** | 1 |

**CONTACT:** Marilyn Nickel [3347]

**PRIORITY:** Rehabilitation of Existing Capital Assets or Systems

**DESCRIPTION**

This project provides for the periodic interior cleaning of the new City's water system reservoirs.

**COMMENTS:**

The Hillside Reservoirs were last cleaned in 2002-2003 and Valley Floor Reservoirs were cleaned in 2004-05. Reservoirs should be cleaned every five years to eight years.

**Uncommitted Balance as of 2/28/2015:** $150,000

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Administration | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Inspection | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Improvements | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Equipment | 150,000 | 0 | 0 | 0 | 0 | 0 | 150,000 |
| **Totals** | 150,000 | 0 | 0 | 0 | 0 | 0 | 150,000 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Water Fund | 150,000 | 0 | 0 | 0 | 0 | 0 | 150,000 |
| **Totals** | 150,000 | 0 | 0 | 0 | 0 | 0 | 150,000 |

**FINANCE NOTES**

## City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Water | **7113** | **Turnout Improvements** | 1 |

**CONTACT:** Steve Erickson [3301]

**PRIORITY:** Rehabilitation of Existing Capital Assets or Systems

**DESCRIPTION**

This project involves sandblasting and recoating all water system turnout apparatus. It also involves testing and replacement of antiquated valves. There are four turnouts on San Francisco PUC water system and one on the Santa Clara Valley Water District water system. The valves vary in size from 12" to 16".

**COMMENTS:**

**Uncommitted Balance as of 2/28/2015:** $150,000

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 10,000 | 0 | 0 | 0 | 0 | 0 | 10,000 |
| Administration | 5,000 | 0 | 0 | 0 | 0 | 0 | 5,000 |
| Surveying | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Inspection | 10,000 | 0 | 0 | 0 | 0 | 0 | 10,000 |
| Land | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Improvements | 125,000 | 0 | 0 | 0 | 0 | 0 | 125,000 |
| Equipment | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 150,000 | 0 | 0 | 0 | 0 | 0 | 150,000 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Water Fund | 150,000 | 0 | 0 | 0 | 0 | 0 | 150,000 |
| **Totals** | 150,000 | 0 | 0 | 0 | 0 | 0 | 150,000 |

**FINANCE NOTES**

## City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | Estimate Level |
|---|---|---|
| Water | **7114 Water Meter Replacement** | 1 |

**CONTACT:** Jane Corpus [3125] / Steven Machida [3355]

**PRIORITY:** Rehabilitation of Existing Capital Assets or Systems

**DESCRIPTION**

This project will replace 42 water meters located in median islands and planter strips along high traffic roadways. The new meters will be equipped with radio transmitters allowing the meters to be read remotely, removing the need for meters to be directly read.

**COMMENTS:**

**Uncommitted Balance as of 2/28/2015:** $44,801

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 6,000 | 0 | 0 | 0 | 0 | 0 | 6,000 |
| Administration | 12,000 | 0 | 0 | 0 | 0 | 0 | 12,000 |
| Inspection | 4,000 | 0 | 0 | 0 | 0 | 0 | 4,000 |
| Improvements | 53,000 | 0 | 0 | 0 | 0 | 0 | 53,000 |
| **Totals** | 75,000 | 0 | 0 | 0 | 0 | 0 | 75,000 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Water Fund | 75,000 | 0 | 0 | 0 | 0 | 0 | 75,000 |
| **Totals** | 75,000 | 0 | 0 | 0 | 0 | 0 | 75,000 |

**FINANCE NOTES**

# City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Water | **7115** | **Cathodic Protection Improvements** | 1 |

**CONTACT:** Arnold Chu [3312] / Julie Waldron [3314]

**PRIORITY:** Projects Which Avoid Future Additional Costs

**DESCRIPTION**

This project provides an evaluation study and installation of corrosion monitoring station and recommendations for retrofit or anode replacement. The project will also provide for upgrades of deficiencies defined in the evaluation study.

**COMMENTS:**

The soils have been found to be highly corrosive at certain locations in Milpitas. Corrosive soils are detrimental to steel pipes in the water distribution system.

**Uncommitted Balance as of 2/28/2015:** $97,631

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 100,000 | 0 | 0 | 0 | 0 | 0 | 100,000 |
| Administration | 50,000 | 0 | 0 | 0 | 0 | 0 | 50,000 |
| Surveying | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Inspection | 50,000 | 0 | 0 | 0 | 0 | 0 | 50,000 |
| Land | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Improvements | 525,000 | 0 | 0 | 0 | 0 | 0 | 525,000 |
| Equipment | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 725,000 | 0 | 0 | 0 | 0 | 0 | 725,000 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Water Fund | 725,000 | 0 | 0 | 0 | 0 | 0 | 725,000 |
| **Totals** | 725,000 | 0 | 0 | 0 | 0 | 0 | 725,000 |

**FINANCE NOTES**

## City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Water | **7116** | **Minor Water Projects 2013** | 1 |

**CONTACT:** Steve Erickson [3301]

**PRIORITY:** Rehabilitation of Existing Capital Assets or Systems

**DESCRIPTION**

This on-going project involves the analysis and implementation of various water projects which arise during the year. This project also provides for on-going modifications and improvements to existing water system including enhancing security at various water facilities.

**COMMENTS:**

This project involves site improvements at Pinewood Well to be constructed along with the park upgrades

**Uncommitted Balance as of 2/28/2015:** $11,246

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 5,000 | 0 | 0 | 0 | 0 | 0 | 5,000 |
| Administration | 10,000 | 0 | 0 | 0 | 0 | 0 | 10,000 |
| Land | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Improvements | 135,000 | 0 | 0 | 0 | 0 | 0 | 135,000 |
| Equipment | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 150,000 | 0 | 0 | 0 | 0 | 0 | 150,000 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Water Fund | 150,000 | 0 | 0 | 0 | 0 | 0 | 150,000 |
| **Totals** | 150,000 | 0 | 0 | 0 | 0 | 0 | 150,000 |

**FINANCE NOTES**

# City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Water | **7117** | **Abel Street Pipeline Extension** | 1 |

**CONTACT:** Michael Boitnott [3315] / Julie Waldron [3314]

**PRIORITY:** Health and Safety Projects

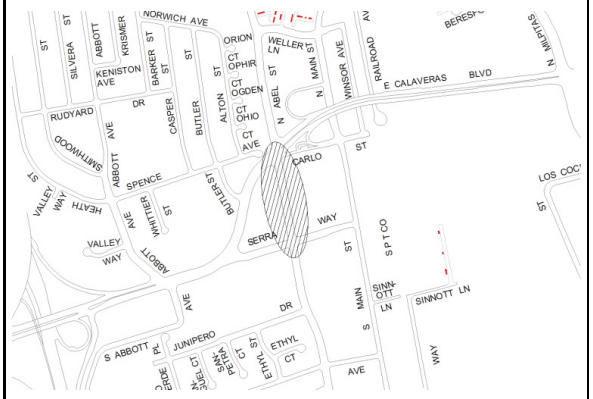
**DESCRIPTION**

This project installs 300 linear feet of 12-inch pipe to connect three "dead-end" pipes, one on Abel Street and two on Carlo Street. This improvement will improve water pressure and water quality through improved system circulation.

**COMMENTS:**

This is identified in Section 6.3.4.4 of the 2009 Water Master Plan Update.

**DIAGRAM**




**Uncommitted Balance as of 2/28/2015:** $299,555

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 50,000 | 0 | 0 | 0 | 0 | 0 | 50,000 |
| Administration | 20,000 | 0 | 0 | 0 | 0 | 0 | 20,000 |
| Surveying | 20,000 | 0 | 0 | 0 | 0 | 0 | 20,000 |
| Inspection | 60,000 | 0 | 0 | 0 | 0 | 0 | 60,000 |
| Land | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Improvements | 200,000 | 0 | 0 | 0 | 0 | 0 | 200,000 |
| Equipment | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 350,000 | 0 | 0 | 0 | 0 | 0 | 350,000 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Water Line Extension Fund | 350,000 | 0 | 0 | 0 | 0 | 0 | 350,000 |
| **Totals** | 350,000 | 0 | 0 | 0 | 0 | 0 | 350,000 |

**FINANCE NOTES**

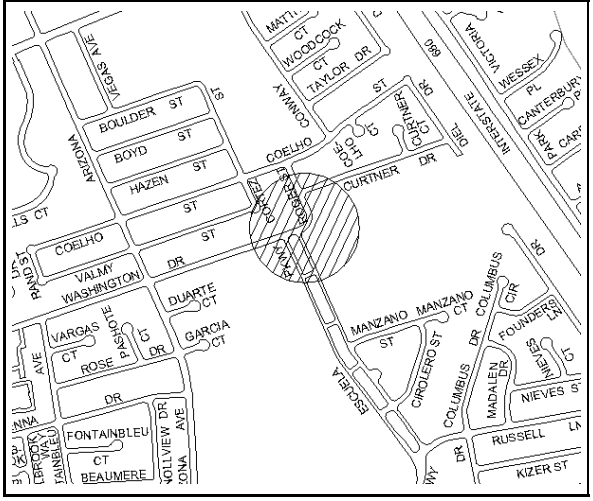
## City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Water | **7119** | **Sunnyhills Turnout Pressure Reducing Valve** | 1 |

**CONTACT:** Marilyn Nickel [3347]

**PRIORITY:** Rehabilitation of Existing Capital Assets or Systems

**DIAGRAM**




**DESCRIPTION**

This project involves the installation of a pressure reducing valve at the Sunnyhills Turnout. This improvement is identified as insert 6.3.4.1 in the 2009 Water Master Plan Update.

**COMMENTS:**

**Uncommitted Balance as of 2/28/2015:** $600,000

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 50,000 | 0 | 0 | 0 | 0 | 0 | 50,000 |
| Administration | 30,000 | 0 | 0 | 0 | 0 | 0 | 30,000 |
| Surveying | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Inspection | 20,000 | 0 | 0 | 0 | 0 | 0 | 20,000 |
| Land | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Improvements | 500,000 | 0 | 0 | 0 | 0 | 0 | 500,000 |
| Equipment | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 600,000 | 0 | 0 | 0 | 0 | 0 | 600,000 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Water Fund | 600,000 | 0 | 0 | 0 | 0 | 0 | 600,000 |
| **Totals** | 600,000 | 0 | 0 | 0 | 0 | 0 | 600,000 |

**FINANCE NOTES**

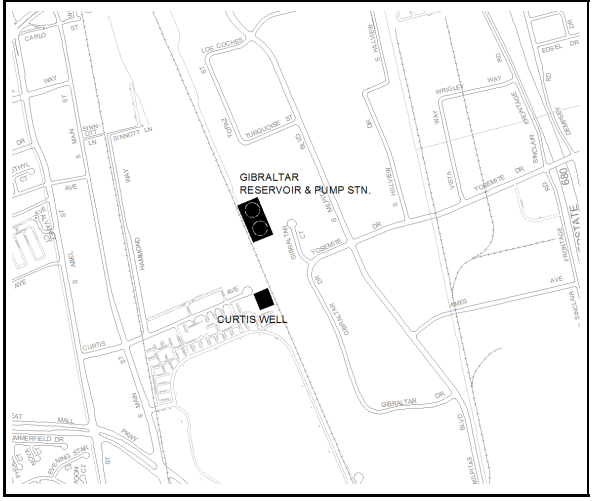
# City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Water | **7120** | **Water Supply Blending Study** | 1 |

**CONTACT:** Marilyn Nickel [3347]

**PRIORITY:** Rehabilitation of Existing Capital Assets or Systems

**DIAGRAM**




**DESCRIPTION**

This project provides an engineering study to analyze the feasibility and cost benefits of connecting the Curtis Avenue ground water well to Gibraltar Reservoir and pump station for the purpose of blending well water with SC VWD and Hetch-Hetchy water, and blending of the two wholesale water supplies.

**COMMENTS:**

Ground water has a higher mineral content, and by mixing with SCVWD and/or Hetch-Hetchy, the water quality can be improved.

**Uncommitted Balance as of 2/28/2015:** $83,490

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 80,000 | 0 | 0 | 0 | 0 | 0 | 80,000 |
| Administration | 20,000 | 0 | 0 | 0 | 0 | 0 | 20,000 |
| Inspection | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Improvements | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Building | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Totals** | 100,000 | 0 | 0 | 0 | 0 | 0 | 100,000 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Water Fund | 100,000 | 0 | 0 | 0 | 0 | 0 | 100,000 |
| **Totals** | 100,000 | 0 | 0 | 0 | 0 | 0 | 100,000 |

**FINANCE NOTES**

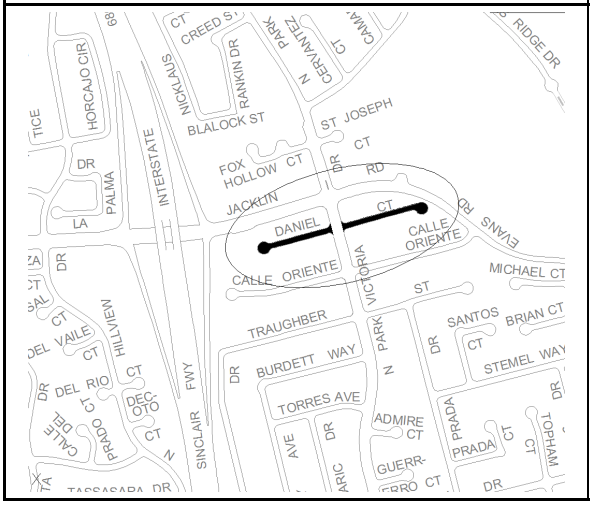
# City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Water | **7122** | **Daniel Court Water Service Replacement** | 1 |

**CONTACT:** Steven Machida [3355]

**PRIORITY:** Rehabilitation of Existing Capital Assets or Systems

**DIAGRAM**




**DESCRIPTION**

This project will replace approximately 1,300 feet of 4-inch cast iron water services with 4-inch PVC services on Daniel Court (east and west of N. Park Victoria)

**COMMENTS:**

The 4-inch water service laterals serving the apartments on Daniel Court have been experiencing numerous breaks over the last few years. To minimize the inconvenience to the residents and reduce the potential liability and water loss, all of the services are scheduled to be replaced with 4-inch PVC pipe.

**Uncommitted Balance as of 2/28/2015:** $525,000

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 100,000 | 0 | 0 | 0 | 0 | 0 | 100,000 |
| Administration | 50,000 | 0 | 0 | 0 | 0 | 0 | 50,000 |
| Inspection | 25,000 | 0 | 0 | 0 | 0 | 0 | 25,000 |
| Improvements | 350,000 | 0 | 0 | 0 | 0 | 0 | 350,000 |
| **Totals** | 525,000 | 0 | 0 | 0 | 0 | 0 | 525,000 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Water Fund | 525,000 | 0 | 0 | 0 | 0 | 0 | 525,000 |
| **Totals** | 525,000 | 0 | 0 | 0 | 0 | 0 | 525,000 |

**FINANCE NOTES**

## City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Water | **7123** | **Minor Water Projects 2015** | 1 |

**CONTACT:** Steve Erickson [3301]

**PRIORITY:** Rehabilitation of Existing Capital Assets or Systems

**DESCRIPTION**

This ongoing project involves the analysis and implementation of various water projects which arise during the year. This project also provides for ongoing modifications and improvements to existing water system including enhancing security at various water facilities. This project provides for the design and construction of site improvements including paint tank reservoir, landscape restoration and other related improvements, approximately 8,000 sq ft of pavement resurfacing at the Minnis Reservoir site.

**COMMENTS:**

**Uncommitted Balance as of 2/28/2015:** $105,000

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 5,000 | 0 | 0 | 0 | 0 | 0 | 5,000 |
| Administration | 5,000 | 0 | 0 | 0 | 0 | 0 | 5,000 |
| Inspection | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Land | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Improvements | 95,000 | 0 | 0 | 0 | 0 | 0 | 95,000 |
| **Totals** | 105,000 | 0 | 0 | 0 | 0 | 0 | 105,000 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Water Fund | 105,000 | 0 | 0 | 0 | 0 | 0 | 105,000 |
| **Totals** | 105,000 | 0 | 0 | 0 | 0 | 0 | 105,000 |

**FINANCE NOTES**

## City of Milpitas
## 2015-20 CAPITAL IMPROVEMENT PROGRAM

| Category | Project | | Estimate Level |
|---|---|---|---|
| Water | **7124** | **Water System Air Relief Modifications 2015** | 1 |

**CONTACT:** Steve Erickson [3301]

**PRIORITY:** Health and Safety Projects

**DESCRIPTION**

This project retrofits existing air relief valves which are currently located below ground level to vaults above ground level. This work is mandated by the California Department of Public Health, under State Code, Title 22, Chapter 16. The purpose of placing valves above ground is to eliminate the possibility of water system contamination by backflow into valves during flooding.

**COMMENTS:**

Approximately 250 sites throughout the City have been identified for retrofitting. 150 of the highest priority sites have been completed.

**Uncommitted Balance as of 2/28/2015:** $350,000

| ESTIMATED COST | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Design | 35,000 | 0 | 0 | 0 | 0 | 0 | 35,000 |
| Administration | 25,000 | 0 | 0 | 0 | 0 | 0 | 25,000 |
| Surveying | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Inspection | 20,000 | 0 | 0 | 0 | 0 | 0 | 20,000 |
| Land | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Improvements | 270,000 | 0 | 0 | 0 | 0 | 0 | 270,000 |
| **Totals** | 350,000 | 0 | 0 | 0 | 0 | 0 | 350,000 |

| FINANCING | Prior Year | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | Total |
|---|---|---|---|---|---|---|---|
| Water Line Extension Fund | 350,000 | 0 | 0 | 0 | 0 | 0 | 350,000 |
| **Totals** | 350,000 | 0 | 0 | 0 | 0 | 0 | 350,000 |

**FINANCE NOTES**

# APPENDIX A

## ESTIMATE LEVEL DESCRIPTIONS

The following are detailed descriptions for each of the three estimate levels used in this document:

**Estimate Level 1** – Conceptual Estimate
This level of estimating is the least accurate and is used when the conceptual idea or plan has been prepared without precise details. Examples of such would be freeway interchanges prior to completion of any plans (and estimates based thereon), projects where final location is unknown and right-of-way or land costs are involved.

**Estimate Level 2** – Detailed Estimate
This level of estimating is based on an approved design plan or conceptual plan which has some level of assurance that the items contained within are complete and acceptable to the approving agency. Examples of this category are most street projects where City staff has prepared estimated based on typical street structural and geometric details, using experienced bid prices. Other examples are water or sewer lines that have bee proposed and identified with estimates in consultant reports.

**Estimate Level 3** – Design Estimate
This is the highest level of estimating and is based on a completed set of design drawings and specifications that are ready for bidding. This level is what could also be called the bid or engineer's estimate.

# APPENDIX B

## ABBREVIATIONS - DEFINITIONS

| | |
|---|---|
| ABAG | Association of Bay Area Governments |
| AC | Asphalt Concrete |
| ADA | Americans with Disabilities Act. |
| CAD | Computer Aided Dispatch |
| CADD | Computer Aided Design and Drafting |
| CDBG | Community Development Block Grant |
| CIP | Capital Improvement Program |
| CRF | Capital Reserve Fund |
| CRS | Community Rating Service |
| CU | Customer |
| DEV | Developer |
| DG | Decomposed Granite |
| DOHS | Department of Health Service |
| EOC | Emergency Operating Center |
| FEMA | Federal Emergency Management Agency |
| GF | General Fund |
| GIS | Geographic Information System |
| GUI | Graphical User Interfaces |
| HR | Human Resources |
| I/I | Infiltration/Inflow |
| LRT | Light Rail Transit |
| MCT | Mobile Computer Terminal |
| MHS | Milpitas Historical Society |
| MSC | Milpitas Sports Center |
| OSA | Office of the State Architect |
| OCR | Optical Character Recognition |
| PF | Park Fund |
| PM | Project Manager |
| PMS | Pavement Management System |
| PRV | Pressure reducing valve |
| R/W | Right-of-Way |
| RDA | Redevelopment Agency |
| RFQ | Request for Qualifications |
| RMS | Records Management System |
| RWQCB | Regional Water Quality Control Board |
| SCADA | Supervisory Control and Data Acquisition |
| SCC | Santa Clara County |
| SCVTA | Santa Clara Valley Transportation Agency |
| SCVWD | Santa Clara Valley Water District |
| SF | Street Fund |
| SP | Sponsor |
| SPS | Sewer Pump Station |
| TA | Traffic Authority |
| TDA | Transportation Development Act |
| WF | Water Fund |
| WLF | Water Line Extension Fund |
| VTA | Santa Clara Valley Transportation Authority |
| COP's | Certificates of Participation |
| TPF | Treatment Plant Fee |
| UPS | Uninterrupted Power Supply |
| Y2K | Year 2000 Compliant |

# APPENDIX C

## PRIORITIZATION DESCRIPTIONS

In order to assist in the review of the various projects, all CIP projects are prioritized using the following categories (listed in priority order):

1. **Mandatory or Committed Projects**
   Mandatory projects are those which the City is legally required to undertake. These include Federal or State mandated activities such as access modifications to public facilities to meet Americans with Disabilities Act requirements, Clean Water Act, etc. Committed projects are those that the City has contracted or partially completed. This can also include projects that have received grants with time restrictions. A funded project that has not yet started, does not necessarily mean that the project is "committed", since the project is still subject to review. If this project is no longer necessary, it can be delayed or deleted and defunded.

2. **Health and Safety Projects**
   Health and Safety projects are those infrastructure improvements needed for health and/or safety reasons. Examples include such projects as sidewalk repair work, installation of traffic signals and signs, modification of park playground equipment to eliminate a hazardous situation and additional lighting in public areas, etc.

3. **Rehabilitation of Existing Capital Assets or Systems**
   These are projects that are required to maintain the City's investment in infrastructure and capital equipment. This includes projects ranging from street resurfacing/reconstruction, to bridge maintenance, water, sewer improvements, facilities rehabilitation, etc.

4. **Major Service Equipment Replacement**
   These are projects involving the replacement of equipment required in the operations of the City services. This would include pumps at storm drainage pump stations, MSC swimming pool pumps and motor replacements.

5. **Projects which Avoid Future Additional Costs**
   This includes those projects which assists the City in reducing and/or eliminating future operating or capital costs. This would include acquisition of image processing equipment for document control, computer networking, replacing existing high maintenance landscaping with drought resistant and low maintenance plantings, automation of maintenance or data gathering activities, etc.

6. **Studies and Analyses**
   This category is for projects that allow the City to examine new approaches for improvements to service delivery, cost savings, capital improvement projects and/or ways to enhance the financial stability of the City. Examples include the Calaveras Plan Line Study and San Jose Parallel Forcemain Study.

7. **Enhance Economic Development**
   This category is for those projects that will attract new businesses or retain existing. Examples include the installation of utilities for future development and fiber optics installation for telecommunications.

8. **Improve the Quality of Life**
   These are projects that allow the City to enhance the City's quality of life, such as landscaping projects, new Sports Center improvements, etc.

**APPENDIX D**
**Previously Funded Projects to be closed as of June 30, 2015**

## Community Improvement Projects

### Parks Projects

| | |
|---|---|
| 5080 | Penitencia Creek Trail Feasibility Study |
| 5086 | Park Irrigation System Rehabilitation |
| 5091 | Park Renovation Project 2011 |
| 5092 | Main Street Park |
| 5093 | Park Master Plan Improvements – Phase I |
| 5095 | Park Renovation Project 2013 |
| 5096 | Pinewood Park Picnic Renovation |

### Streets Projects

| | |
|---|---|
| 4268 | Street Resurfacing Project 2013 |

### Water Projects

| | |
|---|---|
| 7109 | Water System Replacement 08-09 |

## Sewer Projects

## Storm Drain Projects

# *M E M O R A N D U M*

***Office of the City Manager***

**To:** Honorable Mayor and City Council

**From:** Tom Williams, City Manager

Emma Karlen, Assistant City Manager

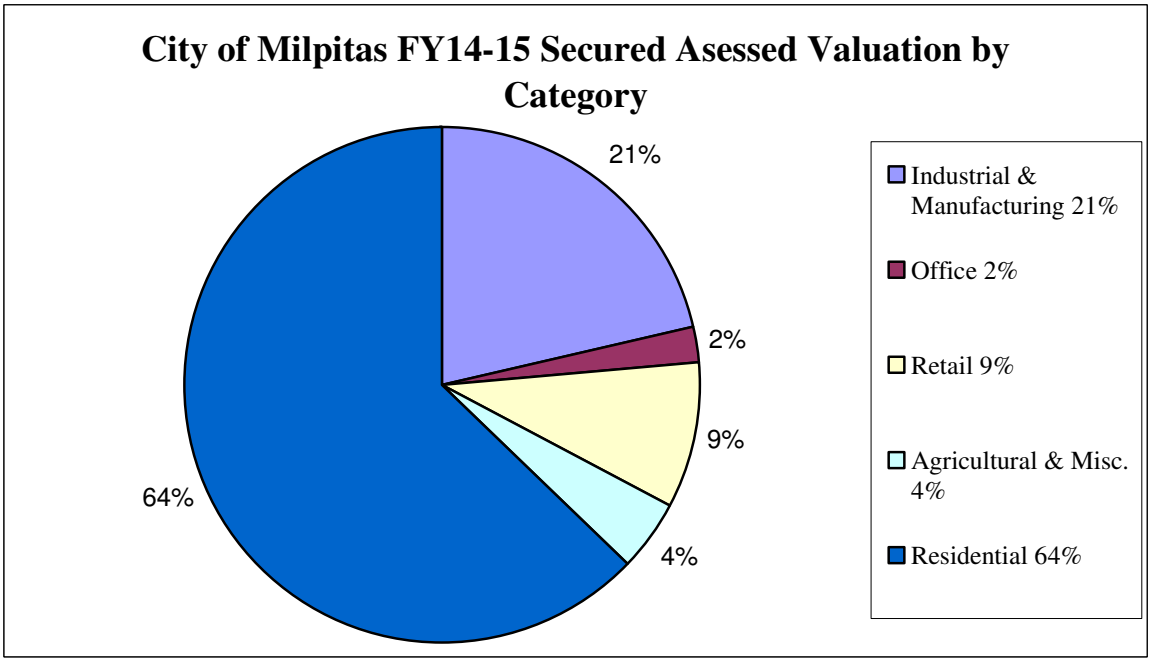
**Subject:** **FY 2015-16 Budget Study Session Follow-Up**

**Date:** April 13, 2015

In response to the questions raised by the City Council during the Budget Study session, the following information is provided:

1) What's the breakdown of residential property values vs. non-residential property values?

Within the City of Milpitas, residential properties account for approximately 64% of the secured assessed valuation while non-residential properties account for the remaining 36%. In recent years, the percentage of residential property values increased from 60% to 64% while non-commercial property values remain stagnant and decreased to 36% of the total secured property values.



It should be noted that the non-residential property values within Santa Clara County experienced an overall increase higher than Milpitas. For example, the property values for office buildings in Santa Clara County increased approximately 89% in 10 years while Milpitas' increased 40%. The property values for retail businesses in Santa Clara County increased 46% in 10 years while Milpitas' increased 26%. It's difficult to pinpoint why the commercial values in Milpitas did not increase as much. It could be due to Proposition 13 that limits the assessed valuation increase of these properties to 2% maximum per year unless there are ownership changes. As communicated by commercial brokers, it could be due to the significant building functional and economic obsolescence. This is related to the older 1970-1980 buildings that are not yet cost effective to either renovate or tear down and redevelop. The cost to do this in combination with the high land values and competition in Silicon Valley make theses older buildings in Milpitas infeasible. However, we are seeing a change as we recover from the recession.

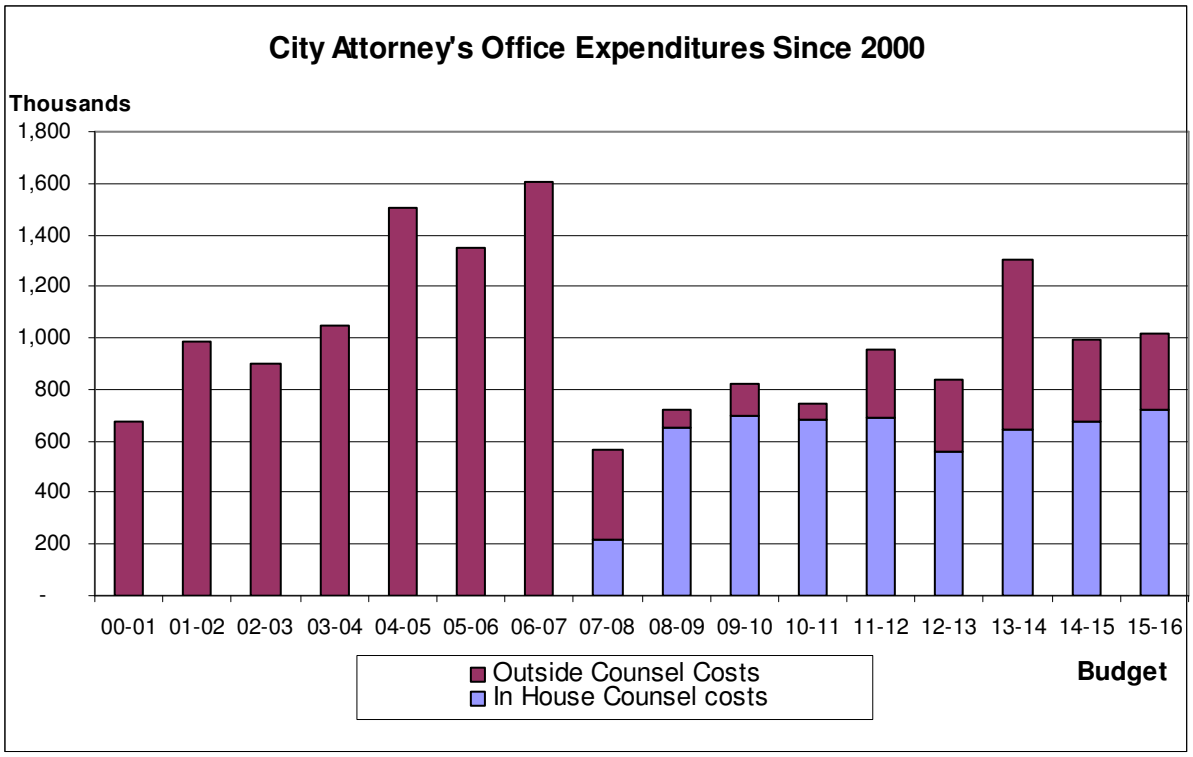
2) Provide historical cost of funding the City Attorney Department and a graph.

The following table shows the cost breakdown for in house counsel services and outside counsel services annually since fiscal year 2000-2001 and the graph shows the trend of funding for the City Attorney Department on page 3.

**Table 1**
**Historical City Attorney Department funding**

| Fiscal Year | In House Counsel costs | Outside Counsel Costs | Total | |
|---|---|---|---|---|
| 00-01 | | 675,154 | 675,154 | |
| 01-02 | | 982,943 | 982,943 | |
| 02-03 | | 897,287 | 897,287 | |
| 03-04 | | 1,046,486 | 1,046,486 | * |
| 04-05 | | 1,501,801 | 1,501,801 | * |
| 05-06 | | 1,352,562 | 1,352,562 | * |
| 06-07 | | 1,602,912 | 1,602,912 | * |
| 07-08 | 213,627 | 354,459 | 568,086 | |
| 08-09 | 650,632 | 73,100 | 723,732 | |
| 09-10 | 701,667 | 118,000 | 819,667 | |
| 10-11 | 681,163 | 64,106 | 745,269 | |
| 11-12 | 693,684 | 257,664 | 951,348 | |
| 12-13 | 559,918 | 279,237 | 839,155 | |
| 13-14 | 644,871 | 658,193 | 1,303,064 | ** |
| 14-15 | 676,604 | 318,955 | 995,559 | |
| 15-16 | 723,240 | 295,800 | 1,019,040 | *** |

Notes:
* City Hall construction litigation
** RDA dissolution and litigation
*** The proposed Deputy Attorney has not been added to the draft 15-16 budget yet




3) The cost of each proposed reorganization/reclassification is as follows:

a) In January 2015, the City Council approved a resolution to establish the Public Works Director and City Engineering as two separate positions. The annual salary and benefits cost for each position is approximately $260,000. Since the two positions were previously combined as one position, the fiscal impact is an additional $260,000 annually. The proposal is to reorganize Engineering and Public Works into two separate departments.

b) The reorganization of the Recreation Services Manager to report to the City Manager's office directly instead of to the Human Resources Department has no fiscal impact.

c) The reclassification of a 40-hour Fire Battalion Chief and the Fire Marshal to Deputy Fire chiefs will cost $10,392. The Fire Marshal is already paid at the Deputy Fire Chief level therefore the additional cost will only apply to reclassification of the 40-hour Battalion Chief.

d) The top pay range and related benefits difference between a Senior Code Enforcement Officer and a Code Enforcement Program Supervisor is approximately $37,000 annually. It is not anticipated that the reclassified Code Enforcement Program Supervisor will be paid at the top range in FY 15-16.

# List of Attachments for Public Hearing Item No. 2

# Vesting Tentative Map, Conditional Use Permit, Site Development Permit at 450 Montague Expressway

**Conduct a Public Hearing and Adopt a Resolution to Approve Vesting Tentative Map, Conditional Use Permit and Site Development Permit for a 489 Units Development on 10.47 Acres in Two Structures Subject to Conditions of Approval at 450 Montague Expressway (Staff Contact: Darryl Boyd, 408-586-3287)**

## Attachments:

Memo to City Council, responding to questions from April 21, 2015 Council Meeting. Memo from Lennar dated April 29, 2015

2A – Planning Commission Staff Report, 3/25/2015

2B – Adopted Planning Commission Resolution No. 15-003, March 25, 2015

2C – Planning Commission Meeting Minutes, 3/25/2015

2D – Initial Study and Categorical Exemption

2E – Plan Set *(separate book / item)*

2F – Parks, Recreation and Cultural Resources Commission (PRCRC) material, 2/2/2015

2G – Parks, Recreation and Cultural Resources Commission (PRCRC) material, 3/2/2015

2H – Three Layout Design Figures

2I – Draft City Council Resolution

2J – Three (3) Letters of Support for Project

2K – Correspondence Recommending One Park Name

# *MEMORANDUM*

***Planning & Neighborhood Services Department***

**To:** **Mayor & City Council**

**Through:** **Tom Williams, City Manager**

**From:** Bill Ekern, Interim Director

**Subject:** **450 Montague Expressway Supplemental Information**

**Date:** April 28, 2015

The questions raised by the Mayor and Council at the public hearing on April 21, 2015 are most appropriately responded to in writing, and with sufficient time for the City Council to review the responses to be clear about the proposed project prior to its meeting on May 5, 2015. The Council's questions focused on the quantitative analysis of public benefits, issues associated with deviations from the Transit Area Specific Plan (TASP) standards and guidelines, and an understanding of the open space concepts proposed by the project.

**Public Benefits**

As noted by staff and the report to Council, the TASP allows for exceptions from the applicable development standards and design guidelines under the review of a conditional use permit. Exceptions cannot be granted for use, floor area ratio, density and park land requirement regulations. Two findings are required for granting such exceptions:

1. The exceptions meet the design intent identified within the Zoning District and/or Specific Plan and do not detract from the overall architectural, landscaping and site planning integrity of the proposed development.

2. The exceptions allow for a public benefit not otherwise obtainable through the strict application of the specified standard.

The developer, staff and Planning Commission agreed on seven identifiable public benefits listed below. At the April 21, 2015 meeting, the Mayor and Council requested an analysis of the value of these public benefits. Because they are outside of the standards, they should be considered as true benefits to the community. The design and construction of the Penitencia Creek Bridge, the Pedestrian Bridge over Montague Expressway, public parks and linear parks/trails are included in the TASP Basic Infrastructure Program. The funding for those improvements is incorporated in the current TASP Development Impact Fee of $32,781 per residential unit. The extension of Milpitas Blvd. from Capitol Avenue to Penitencia Creek is not a part of the TASP Financing program and is the joint proportional responsibility between the proposed project and future development of 730 and 750 Capitol Avenue properties.

The project's public benefit is in the direct financial value of the items listed in this memorandum, as well as the intangible benefit of advancing the construction of the physical improvements. The project is required to pay the TASP development impact fees that were set at a level to fund the basic infrastructure program as included in the adopted *2014 Transit Area Development Impact Fee Update*. The payment of the required TASP development impact fees, approximately $16,030,000, constitutes the project's standard obligation under the TASP and Zoning Code. The established impact fees are intended to cover the design costs normally associated with each specific infrastructure improvement. In this case, the project has committed to provide approximately $1,834,000 in additional financial resources, above and beyond the impact fees, to manage and complete the performance of discrete work tasks that will facilitate the construction of the Penitencia Creek Bridge and Montague Expressway Pedestrian Bridge.

Engineering and Planning staff independently evaluated the likely monetary value of the seven items and vetted the developer's evaluation. The public benefit estimates are based on the project cost estimates included in the adopted *2014 Transit Area Development Impact Fee Update* prepared by Economic & Planning Systems. The cost of preparing construction drawings and specifications can only be estimated using a standard percentage because the specific scopes of work for the feasibility studies and design work have not yet been prepared. In addition, the review and coordination with a myriad of outside agencies is unpredictable. However, under the recommended project conditions, the developer must fund the entire work, regardless of such outside issues.

Construction costs can only be estimated in today's dollars, but the contribution to actual construction will be escalated appropriately to the anticipated construction date. The shelf life of plans and specifications is tied to regulatory codes and to the changing world around each project. The basic concepts of a project's design will remain valid for a significant time, but the details must be finalized only when the project goes for bid.

Finally, it is important to note again that the intangible benefits to the community are that the ability to construct these critical infrastructure pieces is accelerated because of the developer's financial contribution. The performance of discrete work items avoids the delay in waiting for full funding of a City capital improvement project. Completion of these design elements will better enable the owners of the properties at 730 and 750 Capitol Avenue to proceed with the planned sales of their properties to developers because there will be better definition of the implications of improvements on their properties. The uncertainties as to cost, alignment and timing greatly affect these property owners' ability to finalize the sale of their land for development.

| | | |
|---|---|---|
| 1. | Feasibility Study for Milpitas Blvd. Extension and Penitencia Creek Bridge: | $ *129,000* |
| 2. | Construction Drawings & Cost Estimates for Penitencia Creek Bridge: | $ 270,000 |
| 3. | Construction Drawings for Milpitas Blvd. Extension from Capitol: | $ 80,000 |
| 4. | Cost Estimates for Milpitas Blvd. Extension: | $ 20,000 |
| 5. | 53% of Construction Costs for Milpitas Blvd. Extension: | $ 414,000 |
| 6. | Feasibility Study for Pedestrian Bridge over Montague Expressway: | $ *525,000* |
| 7. | Construction Drawings and Cost Estimates for Montague Pedestrian Bridge: | $1,050,000 |
| **Total** Estimated Cost to Developer: | | $2,488,000 |

| | |
|---|---|
| *TASP Credit/Reimburseable per applicant's request* | *$ 654,000* |
| **NET Public Benefit** | **$1,834,000** |

**TASP Concept Plans**

The interior road layout in the TASP anticipated cul-de-sacs interior to the property stemming from the extension of Milpitas Boulevard. This concept is not viable given the timing of this development within this sub-area of the Plan prior to the development of 730 Capitol Ave. accordingly; the developers proposed that all roadways necessary for the project be built on site. This proposed configuration provides the opportunity, as the other properties along Capitol Avenue develop, to build a reasonable and usable internal circulation system that will support both emergency vehicle needs, as well as the publics.

The developer's design and funding support for the Milpitas Extension enables that project to move further ahead in likely timing for construction. The construction of the extension will be of significant value to the traffic circulation supporting the BART station.

**Open Space Issues**

The project meets the TASP park requirements. The need for public benefit is due to the relocation of the public parkland as shown in TASP Figure 3-6. The project is required to provide a total of 4.3 acres of open space and approximately 2.5 acres of publicly accessible parkland based on a population of 1,233 residents. The 1.8 acres of open space can be comprised of a combination of common and private open space, such as courtyards, recreation centers, balconies, porches or roof decks. Any parkland obligation not fulfilled by land dedication and improvements, can be met with the payment of in-lieu fees. The project proposes about 1.5 acres of public parkland with the dedication and improvement of Parks A and B and the Linear Park. The project is required to provide the necessary public access easements over private property prior to the approval of the first Final Map.

The developers requested relief from the Zoning Code requirement to provide all of the Building One apartment balconies as part of the private open space. Rather than build balconies on units facing Capitol Avenue with the concomitant noise of traffic, light rail, and BART trains, the developers propose to enclose the forty square feet of balcony within the building envelop. Based on staff research, there is no per square foot cost difference between the two types of space. So there is no public benefit, but there is likely some benefit to the apartment tenants with the additional indoor living space.

The TASP Public Parks, Spaces and Trails Diagram (Figure 3-6) anticipates a 2.51-acre public park adjacent to Penitencia Creek spread across the project site and the 730 and 750 Capitol Avenue properties. Through meetings with the Parks, Recreation and Cultural Resources Commission and Planning Commission, the concept of constructing two publicly accessible park spaces on the project site, slightly relocated away from the Creek, was reviewed and supported. As noted by staff at the Council meeting, placing the park open space closer to the housing is a tradeoff between clear access to a single, discrete park that is isolated from the adjacent residents, and parks that may feel more private than public.

Staff believes that the most critical element of good park design is public safety. The proposed locations create spaces that are safer and consequently more likely to be used on a regular and routine basis. Staff will work with the developers to design clear and inviting routes and signage into these public spaces, so they will meet the City's goals of more public open space. Staff will also assure that the final design of the park spaces is reviewed by and approved by the Parks, Recreation and Cultural Resources Commission.

As a matter of housekeeping, the City Council must also determine the name(s) of the public park spaces. Reiterating the information from the previous meeting, the names recommended for Council consideration are:

- J.W. Johnson
- Captain Calvin Valpey
- O.H.P. Vennum
- Charles Beverson

cc: City Council
City Manager
City Clerk

LENNAR

April 29, 2015

Darryl Boyd
City of Milpitas
Planning and Neighborhood Services Dept.
455 E Calaveras Blvd
Milpitas, CA

**RE: 450 MONTAGUE – CONTINUED CITY COUNCIL HEARING**

Dear Darryl,

Thank you for your help in presenting our project to the City Council on April 21st. As you know, the Councilmembers had asked several questions regarding our proposed project that we did not have a chance to fully respond to before our hearing was continued due to the audio/visual failure. The following letter is our response to their questions and we will further address them at our hearing on May 5, 2015.

The questions that we had heard during the hearing were:

1. **Why is the applicant asking to not provide balconies on 55 of the 489 total proposed units?**

**Response:** Lennar is asking to not provide the private open space/balconies on 55 of the studio and junior one bedroom apartments located in the apartment building for the following reasons:

- The removal of the balconies will allow for more habitable space within the smaller units that are located in the apartment building. By not having a balcony, the layout for these units will allow for a larger living and bedroom area which the residents will be able to utilize more fully compared to a balcony.

- The majority of the units without balconies will be located along Montague Expressway and Capitol Avenue. Both frontages are large busy streets that serve thousands of vehicles every day. In addition our project also faces the VTA light rail line along Capitol Avenue. Studies have shown the balconies in these areas will not be fully used by the future residents as a result of the noise and urban environment along these street frontages.

- The removal of the balconies along Montague and Capitol also is a significant component of the proposed architecture. The spacing and configuration of the balconies allows for a varied and interesting architectural aesthetic to occur along our project's public interface. If every unit had an associated balcony, the overall architecture and theme of the building would be diminished and the overall uniqueness and interest would be greatly reduced.

- Although these 55 units will lack balconies, our proposed project will offer over 20,000 square feet of outdoor gathering and amenity space that is easily accessible. This outdoor space will contain BBQ areas, outdoor gaming areas, a pool and spa area, outdoor fitness areas, and ample seating and gathering areas. This 20,000 square feet of space is in addition to the 1.5 acres of public parks that we will be providing on site.

2. **Why is the applicant asking to have the underground garage extend more than 5' above grade (the max allowed in the TASP)?**

**Response:** Lennar is proposing to have some portions of the underground garage extend up to 6' in

some locations. The main reason for this deviation is that the property is located in a FEMA flood zone area. As our design team worked with the flood zone regulations and building code, the additional one foot extension is required in some areas to address the structural and foundation design and base flood elevations required of the building. It should also be noted that the garage structure will not visible along the street interfaces. The garage structure will be concealed by unit stoop entries, landscaping planters, and in ground landscaping at all public interfaces.

**3. Will the project contain electric vehicle charging stations?**

**Response:** Yes, Lennar intends to provide at least fifty electric vehicle charging stations throughout the project.

**4. Why is Park A and Park B located where they are?**

**Response:** Park A is designed and programmed to primarily be a kids' play area with adult fitness surrounding it. The concept is for adults to be able to exercise while they watch their children play. In considering that children will be the primary users of this park we wanted to locate the park in an area of the project that has as many eyes on the park as possible for safety and security. In addition we wanted the park to be away from busy streets to provide additional safety and security for the children. Although Park A is not located adjacent to the linear park next to the creek, we will be providing a generous pedestrian and bike path, similar in layout to the linear creek park, that will lead from the linear park directly to Park A. The path will contain both highly visible signage and way finding for the greater community to access Park A.

Park B will be located adjacent to a future street that will have direct access to Capitol Avenue, the VTA light rail station, and the future BART station. Similar to Park A we did not want to locate Park B directly next to a busy street or thoroughfare (Montague or Capitol), and instead have located it as close to the public realm as possible. Park B is designed to have more open play and general gathering opportunities and will be visible from Capitol Ave. The community will be able to gather, recreate, and find shaded seating within the park. We will also be providing a pedestrian and bike path that will link Park A to Park B and Park B to the linear park. Similar to Park A, we will be providing signage and way finding for the community to easily access Park B.

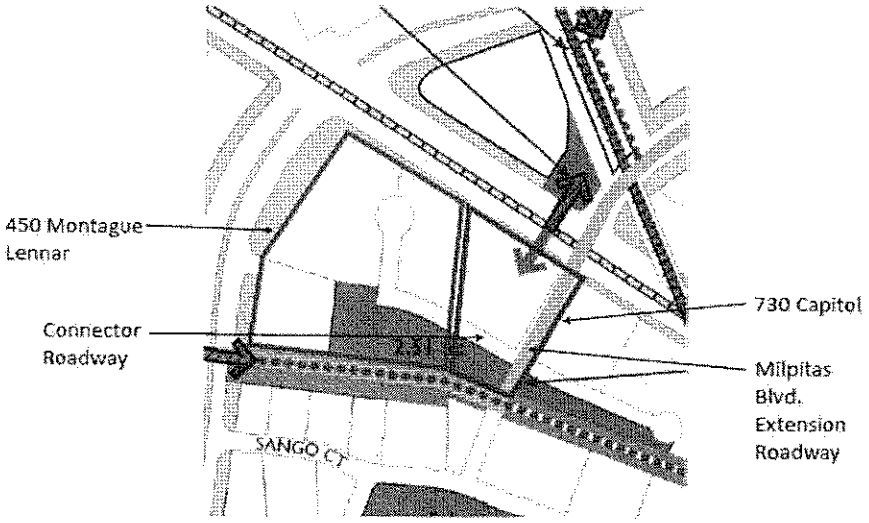
The overall layout and design for our parks is in accordance with best practices for park planning in an urban setting. It should also be noted that all of the parks located within our project will be open to the public and will be privately maintained. In addition, the park design and locations have been reviewed and approved by the Park Recreation and Cultural Resources Commission (PRCRC) on both Feb. 1, 2015 and on March 2, 2015.

**5. Why is the roadway network proposed not the same as shown in the specific plan/TASP?**

**Response:** As shown in the TASP and in the exhibit below, the roadway network that serves our project is depicted by a roadway that bisects and cuts through our neighboring property (730 Capitol) and ends with a cul-de-sac on our property. In the early stages of our project both Lennar and Staff discussed the concern that as shown in the TASP, our property could not be developed until 730 Capitol was developed and the new roadway, Milpitas Blvd. Extension, was constructed and operational. The roadways as shown in the TASP did not allow our property, 450 Montague, to be redeveloped as an independent project and would have to rely on 730 Capitol to build the roadway. It should be noted that 730 Capitol currently is not actively being redeveloped.

Also the roadway connecting our property to Milpitas Blvd. Extension was shown in the TASP as being located midway through 730 Capitol's property. The location of this roadway made the ability for 730 Capitol to redevelop very difficult at best as the roadway eliminated the ability to create efficient building footprints on the property.

As a result of these challenges, both Staff and Lennar designed the current circulation and roadway plan which still maintains the spirit of the TASP roadway layout and allows our project to be developed as a standalone viable project.




**6. Please clarify the project's public benefits as a result of the requested revisions and variance.**

**Response:** Lennar has been working with Staff and its consultants to develop a total dollar amount associated with the public benefits that the project is offering. The project will be contributing 100% of the associated TASP impact fees which total almost $16 million. In addition to the $16 million fee contribution, the project will also provide almost $1.5 million in public benefit over and above the base impact fee amount. The public benefit estimate is based on cost estimates from Lennar's Civil Engineer, Carlson, Barbee, and Gibson (CBG). The scope of the public benefits that the project will provide over and above the fee contributions will be:

- Milpitas Blvd Extension feasibility, design, and construction drawings including cost estimates
- Penitencia Creek Bridge feasibility, design, and construction drawings including cost estimates
- Funding 53% of the total cost to construct Milpitas Blvd Extension
- Montague pedestrian bridge feasibility, design, and construction drawings including cost estimates
- Dedication of private land to accommodate future Montague pedestrian bridge crossing
- Design and installation of recycled water main line along Capitol Ave

Staff has prepared its own public benefit analysis and we are of the understanding that their value estimate is similar to one discussed above. We believe that these public benefits will be a significant step in bringing several public/community elements of the TASP to reality.

It is our goal that this letter helps to clarify the questions from Council. We believe that our project's public benefits will fully mitigate these minor revisions to the TASP and design guidelines. Staff will confirm the total project public benefit, and our estimate (provided by our Civil Engineer) shows the benefit to be $1.5 million, which is over and above the standard TASP fees for the project. Please let us know if there is anything we can do to help prepare for our hearing on the 5th. Thanks again for all of the help.

Sincerely,

Kevin Ma
VP Development, Northern California
Lennar Multifamily Communities, LLC

Cc:
Tyler Wood, Lennar
Chad Kiltz. Lennar
Bill Ekern, City of Milpitas

2A

# MILPITAS PLANNING COMMISSION
# STAFF REPORT

**March 25, 2015**

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**APPLICATION:** **LENNAR 450 MONTAGUE – 450 Montague – Site Development Permit No. SD14-0017, Conditional Use Permit UP14-0024, and Vesting Tentative Map No. MT14-0004 -** A request to allow development of 489 dwelling units on 10.47 acres (46.7 dwellings/acre) with 351 Units in one five story building with amenities located over the centralized garage and 138 units in stacked flat units with associated on-site parking and landscaping.

**RECOMMENDATION:** **Staff recommends that the Planning Commission Conduct a Public Hearing and adopt Resolution No. 15-003 Recommending the City Council Approve Site Development Permit No. SD14-0017, Conditional Use Permit UP14-0024, and Vesting Tentative Map No. MT14-0004 subject to the conditions of approval.**

**LOCATION:**

| | |
|---|---|
| Address/APN: | 450 Montague Expressway (APNs: 86-037-004, -019, -020, and -021) |
| Area of City: | Northeast Corner of the Montague Expressway and East Capitol Avenue Intersection. |

**PEOPLE:**

| | |
|---|---|
| Project Applicant: | Lennar Multifamily Communities |
| Property/Business Owner: | Milpitas Montague LLC, c/o Lyon Capitol Ventures (4901 Birch Street, Newport Beach, California 92660); Uffda LLC (400 E. Montague Expressway, Milpitas, CA 95035 |
| Project Planner: | Shaunn Mendrin, Senior Planner |

**LAND USE:**

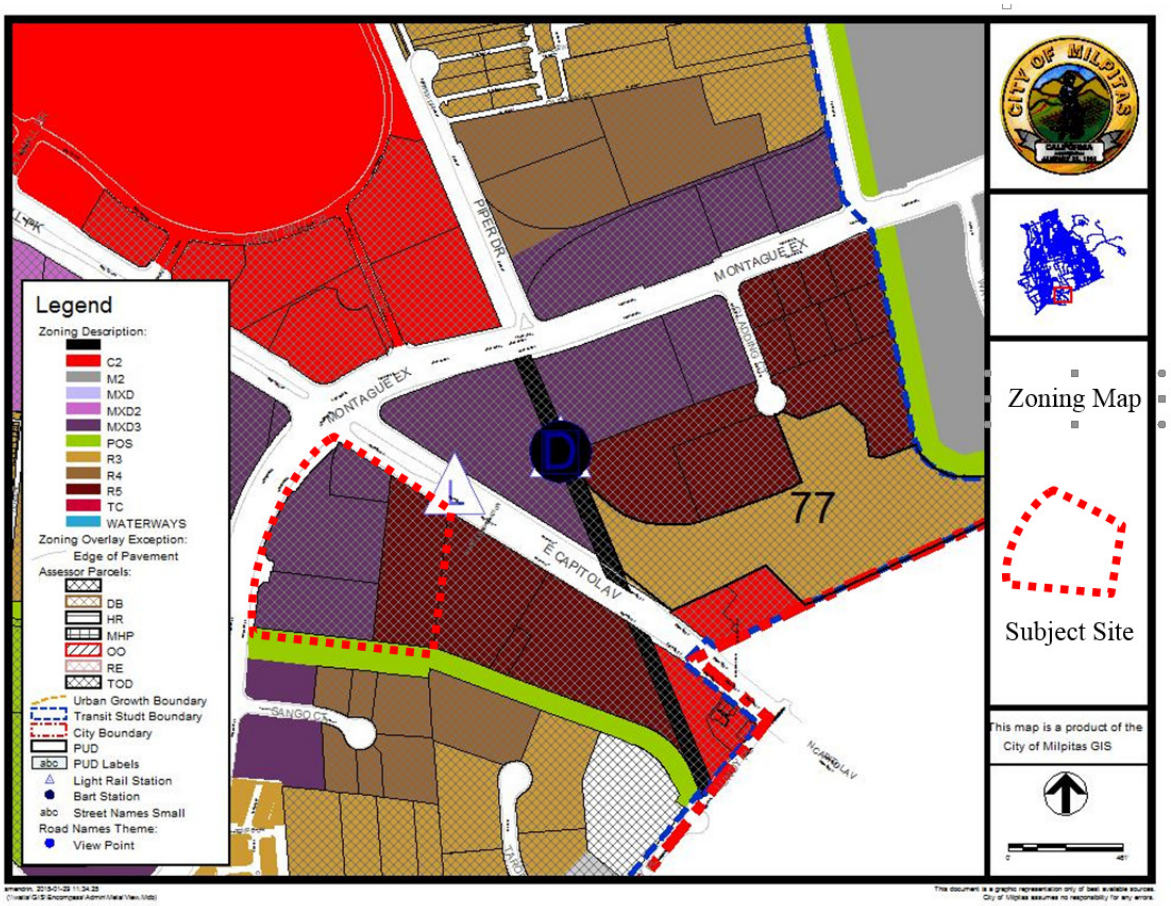
| | |
|---|---|
| General Plan Designation: | Boulevard Very High Density Mixed Use (BVMU)/Urban Residential (UR) |
| Zoning District: | Mixed Use Very High Density (MXD3)/ Urban Residential (R5) |
| Overlay District: | Site and Architectural (-S) and Transit Oriented Development (-TOD) |

**ENVIRONMENTAL:** Categorically Exempt pursuant to Sections 15168(c)(2) of the California Environmental Quality Act (CEQA).

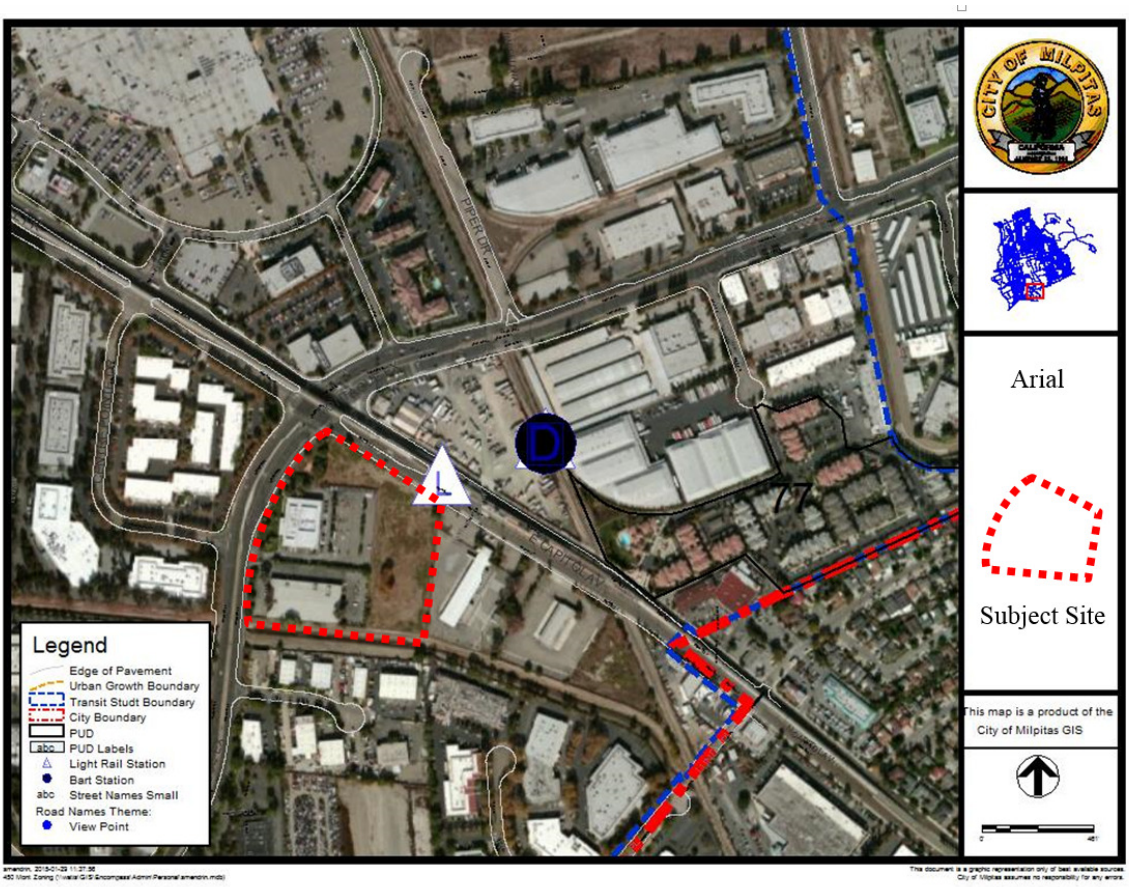
## EXECUTIVE SUMMARY

The applicant is requesting a Site Development Permit, Conditional Use Permit and Vesting Tentative Map to allow the development of 489 dwelling units in one five-story building and seventeen staked flat townhouse buildings. The project would also include the development of two parks, a linear park, on-site parking, landscaping and other associated landscape improvements. The project applicant will also fund the development of construction drawings for the Milpitas Boulevard Extension and vehicular/pedestrian bridge over Penitencia Creek and the Pedestrian Bridge over Montague Expressway connecting to Centrepoint. The approval of this permit will rescind and replace previously approved entitlements for 474 dwelling units and associated improvements formerly approved for Lyon Communities on the same site (Site Development Permit No. SD12-0009, Conditional Use Permit UP12-0024, and Tentative Map No. MT12-0005).

**Map 1**
**Project Site-Zoning Map**



## Map 2
## Project Site




## Context Pictures – View from Montague

**Context Picture – View from Corner of Montague and E Capitol**

**Context Picture – View E Capitol**

## BACKGROUND

On June 3, 2008, the City Council adopted the Transit Area Specific Plan. The Plan encompasses 437 acres and promotes the development of 7,109 dwelling units, 287,075 square feet of retail space, 993,843 square feet of office space and industrial. The plan includes development standards, goals and policies guiding development within the plan area. Because of the physical characteristics of the area, including major streets, railroads and creeks, the plan also established sub-districts with specific goals and policies to accommodate those unique characteristics.

On December 18, 2012, the City Council adopted Resolution No. 8216 approving Site Development Permit No.SD12-0009, Conditional Use Permit No. UP12-0025 and Tentative Map No. MT12-0005 for the development of 474 residential units located at the subject site.

On October 23, 2014, an application was submitted by Lennar Multi-Family Communities to amend and replace the prior the entitlements to allow for the development of one five story building with 351 dwelling units located over a podium with two levels of parking below and 138 stacked flat townhouses with associated landscaping and site improvements. The project also includes the development of two park areas (A, B and a Linear Park Trail parallel to Penitencia Creek and improvements to the existing maintenance road along the creek). The proposed project is located within the Trade Zone-Montague Sub-District of the Transit Area Specific Plan. The sub-district is located near the future BART station and the existing VTA Light Rail Station.

***The Application***

The project proposed by Lennar Multi-Family requires Planning Commission and City Council review pursuant to Section 57 of the Milpitas Zoning Code and consideration of the following Planning Applications:

- *Site Development Permit:* to allow the development of 489 dwelling units, site design and landscaping.
- *Conditional Use Permit:* to allow for deviations from the Transit Area Specific plan in regards to driveway access, park space configuration and underground garage structure height, and exception from Zoning Code requirements for private open space and to allow tandem parking spaces.
- *Major Vesting Tentative Map:* to allow the subdivision of the land for condominium purposes.

## PROJECT DESCRIPTION

***Overview***

The project is located on four parcels totaling 10.47 acres along East Capitol Avenue and Montague Expressway. The subject property is located within the Transit Area Specific Plan and is partially zoned Mixed Use Very High Density and Urban Residential with Transit Oriented Development with Site and Architectural Overlays. A vicinity map and context photos of the subject site are included on the previous pages.

The project includes two housing products types. First, is a 351 unit five-story building (Building 1) located over a partially submerged two-story parking garage. Building 1 will include a central podium level open space with landscaping and pool for the residents. The second product is a 138 Stacked Flat housing units ranging from three to four stories and all have garages at the ground floor (see Attachment C). The project proposes to deviate from the Transit Area Specific Plan's circulation component, park reconfiguration, and the amount of the garage that extends above the grade for Building 1. Thus, the project is required to demonstrate a public benefit (see discussion below).

In addition, the project proposes to dedicate approximately one acre of parkland and they will design and construct this area for park purposes. The project will also design and construct a linear trail on-site parallel to Penitencia Creek and they will also construct the multiuse trail along East Penitencia creek on the maintenance road from Montague Expressway to the eastern

boundary of the project connecting to a sidewalk leading up to Park B for the interim. The next developments to the east will extend the trail to the east to Lundy Place.

### *Location and Context*

The project is located on the southeast corner at the intersection of Montague Expressway and East Capitol Avenue within the Tradzone/Montague Subdistrict. The site is approximately 10 acres and is currently occupied by two vacant industrial buildings of approximately 20,000 square feet located in the southwest corner of the site. The remainder of the site is vacant with various types trees on the site. All existing site improvement and vegetation will be removed and replaced with the proposed project, site improvements and landscaping.

## PROJECT ANALYSIS

### *General Plan and Zoning Conformance*

The General Plan Designation for this site is Boulevard Very High Density Mixed Use (BVMU) for the parcels abutting Montague Expressway and Urban Residential (URR) for the parcel abutting East Capitol Avenue. These designations were identified as appropriate land uses during the development of TASP due to the proximity to the existing VTA station and future BART station. These designations require a minimum density of 41 dwelling units per acre and it does allow for retail space at the ground floor (although it is not required in this area). The intent of this designation is to locate high density residential adjacent to local mass transit options such as VTA and BART. The proposed project is consistent with the General Plan and TASP land use designations and densities. In addition, the project is consistent with the Zoning Designations of Very High Density Mixed Use (MXD3) and Urban Residential (R5) which reflect the General Plan land use designations.

### *Architectural & Site Design*

The project's architecture represents a contemporary style that is consistent with the design guidelines of the TASP. The proposed architecture is a contemporary vernacular that uses modern interpretations on traditional forms. For example, the large protruding bay elements provide a modern industrial feel in combination with the contrasting color palate and stone materials. The colors and materials provide a base to the building and pedestrian scale at the street level. The corner elements have been enhanced with storefront glazing to provide a visually large leasing and amenities area and the second lobby on Montague has been enhanced to establish the entry. Staff has included several conditions requiring minor refinements to the architecture, which some have been addressed in the submittal before you tonight. The additional changes are intended to refine the quality of the building and to establish a stronger base for the structures. The proposed site layout is consistent with the TASP in that the street and trail frontages comply with TASP sections and details.

***Development Standards***

The table below demonstrates how the project is consistent with the development standards of the Very High Density Mixed Use (MXD3) and Urban Residential (R5) zoning districts.

**Table 1:**
**Summary of Development Standards**

| | Zoning Ordinance/TASP | Proposed |
|---|---|---|
| Density (Min/Max) | 41-75 units/acre | 46.7 units/acre |
| Setbacks (Minimum)<br>Capitol Avenue | 49’ | 49’ |
| Montague Expressway<br>East<br>South | 45’<br>20’<br>20’ | 45’<br>41’<br>25’ |
| Building Height (Maximum) | 12 stories | 5 stories |
| Parking (Minimum) | 668 residential + 121 guest = 780 | *834 spaces (272 Tandem)** |
| Maximum encroachment into setbacks by patios, stoops, etc. | ± 6’ | *6’* |
| Open Space | Min 40 sq. ft. for balconies and Min of 50 sq. ft. for patios | *Short 16% for some studios and 1 bedroom units on Capitol Ave.* * |
| * Indicates a Conditional Use Permit is required to allow the proposed deviations. | | |

The proposed project is generally consistent with Development Standards noted above with the approval of a Conditional Use Permit (CUP) as allowed by Code. The following discussion will provide an overview of the project and highlight those elements that require consideration of a Conditional Use Permit.

***Parking***

Parking for the project complies with the Milpitas Municipal Code, which is a minimum of 780 parking spaces for the entire project based on the bedroom count and parking type (individual garage versus parking structure). The following table summarizes the parking required and provided for the project:

**Table 2**
**Parking Summary**

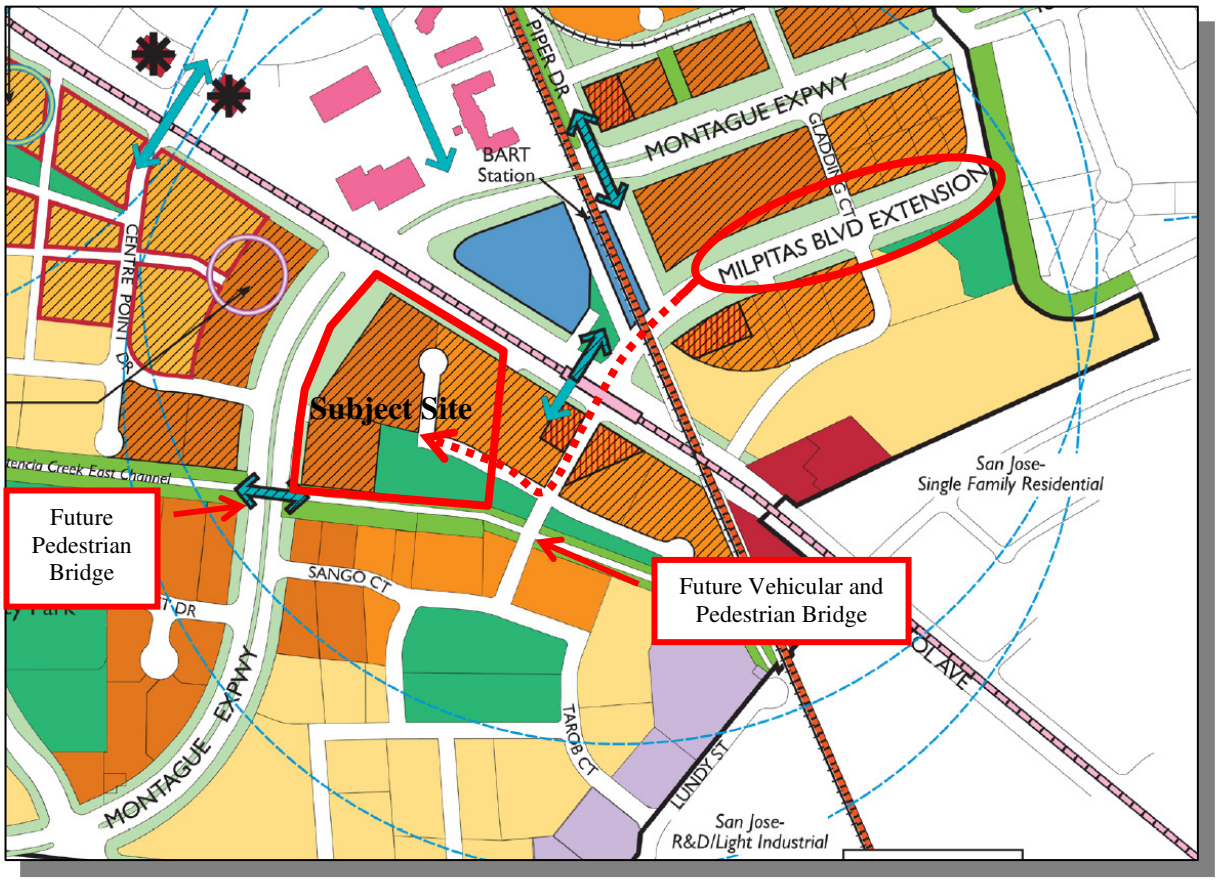
| **5-Story Rental Building** | | | |
|---|---|---|---|
| **Unit Type** | **Number of Units** | **Spaces Provided** | **Parking Ratio** |
| Studios | 45 | 384 | 1.09 |
| 1BR | 202 | | |
| 2BR | 104 | | |
| ***Total*** | ***351*** | | |
| **Tandem Parking Allowed (75% of total required parking)** | | 128 | 25% |
| **Guest Parking (15% of residential parking)** | | 67 | 15% |
| **Total**<br>***Total Required by Code*** | | **579**<br>***510*** | 1.45 |
| | | | |
| **Stacked Flat Units** | | | |
| **Unit Type** | **Number of Units** | **Spaces Provided** | **Parking Ratio** |
| 2BR | 42 | 126 | 1.95 |
| 3BR | 92 | | |
| 4BR | 4 | | |
| ***Total*** | ***138*** | | |
| **Tandem Parking Allowed (50% of total required parking)** | | 144<br>(63) | 53%*<br>(50%) |
| **Guest Parking (20% of residential parking)** | | 52 | 23% |
| **Total**<br>***Total Required by Code*** | | **270**<br>***268*** | 1.95 |
| ** See discussion below about parking* | | | |

Parking is provided in the parking structure under Building 1 and private garages in the Staked Flat units and open on-site spaces. The project includes tandem spaces which has different requirements for structured parking vs. private garage. The amount proposed in Building 1 is below the maximum allowed of 75% of the total required parking. However, the Stacked Flats exceed the maximum allowed of 50%, with a total of 53%. The project meets the requirements for the remaining parking for the residential units and guest parking. The total parking provided on site meets the minimum required. A Conditional Use Permit is required to allow the use of tandem parking spaces, which has been discussed below under the CUP discussion.

### *Access & Circulation*

The site is accessed through two main accesses points from Montague Expressway and East Capitol Avenue. The site will also be accessed from the future Milpitas Boulevard extension and frontage road paralleling Penitencia Creek. The access from both Montague and Capitol will be right in and right out as a temporary measure until the Milpitas Boulevard Extension is constructed. Once constructed, both entry points will be right in only and access out of the site will be focused through the new Milpitas Boulevard Extension. The podium building garage will be partially submerged and will have to distinct levels and access points. The lower level will be accessed from the ramp off of Drive Isle 1 (near the Montague side) and the second level will be accessed off Street B. Pedestrian circulation will be provided around the perimeter of the site with the installation of new sidewalks and landscape. In addition, pedestrians will be able to walk through the site to the two public parks through the pedestrian trail adjacent to the creek, connecting paseos through the site and on-site sidewalks.

**FIGURE 1**
**TASP Area and Future Improvements**




### *Landscaping & Open Space Design*

The proposed project site will result in the removal of several existing trees that will be replaced at a two to one ratio as per the Zoning Code. The landscape improvements will establish the pedestrian realm along Montague Expressway and East Capitol Avenue by adding in a wide planter bed, wide sidewalk and street trees. In addition, the project will include a pedestrian walking trail on the subject site parallel to the trail. Open space will include two parks, with one located in the center of the site with a tot-lot and the second will be located on the east edge of the site adjacent to the five-story building. Additional open space, including a pool, will be located on the podium level for residents of the larger building. In addition, most units will provide private balconies, except for a few units located on the larger building (see CUP discussion below). There are two linkages from the linear park to the interior of the site. The site will be irrigated with reclaimed water for all common areas except for the podium plantings and pool. These two areas will require an Exception from the Urgency Ordinance (No. 240.2) by the City Council (see discussion below). The landscape palate is consistent with the TASP and staff has included some minor refinements to the planting plan to deter skate boarding on planter walls and enhancement of the overall plant palate. Staff notes that the proposed park location is different than what is noted in the TASP and has included a discussion under the CUP section of the report below.

***Urgency Ordinance (240.2) Exception Request***

On August 26th, 2014, the City Council adopted Urgency Ordinance No. 240.2, which implemented water use restrictions. Specifically as it relates to this project, the Urgency Ordinance prohibited the use of potable water for the installation of new landscape unless it is served by Reclaimed Water (5.07). Section 5.08 of the Urgency Ordinance allows the City Council to grant exceptions as needed. The subject site will be extending the reclaimed water line from Centere Point to the west side of the proposed Milpitas Boulevard Extension, which will be used on the site perimeter and all common areas. Reclaimed water is not allowed to be used on the podium level in the five-story building and for the proposed pool. Staff is in support of the proposed exception since the potable water use will be for small raised planter beds which are consistent with the Water Efficient Landscape Ordinance and for the proposed pool which will serve as a great amenity for the 351 residents in the main building.

***Grading, Drainage and Stormwater***

The proposed project will require grading to allow for the construction of the garage, streets and pad for the staked flat units. Site drainage will be treated through a combination of Low Impact Development (LID) measures, which include bio-treatment planters and some mechanical filtration units. These are allowed for projects with higher densities located near mass transit.

***Utilities***

The site will be served by City water and sewer and San Jose reclaimed water. All other utilities will be either underground or may be relocated to accommodate new utilities or site improvements. The site does have two PG&E electrical distribution towers which cannot be placed underground and will remain in place and they may be relocated later by the County to accommodate improvements to Montague Expressway. The actual timeframe has not been

determined as of yet. The proposed trees under these utilities have been vetted with PG&E and are an acceptable species due to the mature growth height of the tree (Red Maple).

***Climate Action Plan Conformance***

The proposed project includes numerous measure identified in the CAP including waste reduction, bikeways, water conservation, recycled water and green building. The project will be achieving 80 Build it Green points through the implementation of several measures which will be further refined during the development of the construction drawings.

***Conditional Use Permit***

According to the TASP, exceptions to the TASP standards are allowed through a Conditional Use Permit. In addition to the standard findings for a CUP, the following two additional findings must be met:

> *The deviation from the Transit Area Specific Plan standard meets the design intent identified within the Specific Plan and does not detract from the overall architecture landscaping and site planning integrity of the proposed development.*
>
> *The deviation from the Transit Area Specific Plan standard allows for a public benefit not otherwise obtainable through the strict application of the zoning standard.*

The TASP is a conceptual land use document designed in 2008 and it is being implemented at a faster rate as we near the opening of the future BART station. The document also acknowledged that there may be some deviations from the plan as they relate to development standards and it established a process for consideration. The proposed project includes the following deviations from the adopted plan:

- *Driveway access on Montague Expressway and East Capitol Avenue.*
  The TASP street network requires vehicular access to the proposed project from the Milpitas Boulevard extension. However, the Milpitas Extension has not been constructed and it is located on land not owned or controlled by the applicant. The extension will be constructed at a future date when the adjacent property is redeveloped. In the interim, staff is proposing to allow a temporary right turn access from East Capitol Avenue until the Milpitas Boulevard Extension has been constructed.

- *Underground garage extending more than 5 feet above grade.*
  The TASP limits the amount of an underground garage that may extend above the grade to 5 feet. The proposed garage does extend up to 6 feet in some places on the site, which is a result of the site topography. The project uses raised planters planter beds and site landscaping to shield these elements from view which reduces the visual impacts of these sections.

- *Roadway Network Change*
  The TASP originally laid out a road network for these properties front on E Capitol Avenue based on the projected layout of the plan. Since the construction of the BART station, a major high pressure gas line was relocated in the middle of the block further limiting the development area of 730 E Capitol Avenue. Since that time, the road network has been adjust to push the east west road further to the south to parallel Penitencia Creek and the linear park. This location has been reviewed internally and it still achieves the same goal of an internal road network to remove traffic off of Montague and Capitol.

- *Park Location*
  The TASP also called out for a larger park location closer to Penitencia Creek for the 450 Montague site. The applicant proposed the park at a more internal location to better benefit the site. The parks will still be open to the public and they will be required to provide way finding signage. Furthermore, staff has presented the proposed park locations to the Park, Recreation and Cultural Resources Commission for their input and possible names for the park. The following provides an overview of the PRCRC comments:

  *Park Recreation and Cultural Resources Commission (PRCRC)*

  Staff presented the proposed park layout and design to the Parks, Recreation and Cultural resources Commission (PRCRC) on Monday, February 1, 2015. Staff reviewed the proposed layout, park elements and requested that the PRCRC provide names for the City Council to consider for the parks. The applicants Landscape Architect presented additional information about the proposed project and answered questions. The PRCRC was receptive to the park and recommended the City Council approve the design and recommended that the Council decide on one of the four names including; J.W. Johnson, Captain Calvin Valpey, O.H.P. Vennum and Charles Beverson for Park A (being West) and Park B (being East). The staff report and minutes have been included in Attachment E.

  Staff brought the proposed park layout back to the PRCRC on March 2, 2015 due to change in the location of the Emergency Vehicle Access, relocation of the trash enclosure and removal of a connecting paseo. The PRCRC was also receptive of the change and comfortable with the additional conditions that staff included. The staff report and minutes are included in Attachment F.

In addition to the TASP Conditional Use Permit allowances, the Zoning Code also requires approval of a Conditional Use Permit for deviations from code provisions for the following:

Tandem parking: The Zoning Code allows the uses of tandem parking spaces with the approval of a Conditional Use Permit. The Zoning Code allows a maximum of 75% for structured garage spaces and 50% for private garages. The proposed development includes 128 tandems spaces in the structured garage (25%) and 144 spaces in private garages (53%). The amount proposed for the Stacked Flats is slightly above the maximum allowed. Staff is in support of the slightly higher number since the proposed product type (one level unit) is one that is not commonly built in the area. This type of unit provides housing opportunities for a larger age group range of residents. Each

building will have a main lobby and elevator to each floor. Each garage space has a private entrance into the building leading to the main lobby and elevator. In addition, the site is in close proximity to the Light Rail and the future BART station; therefore staff is in support of the proposal. In addition, staff has added a Condition of Approval requiring the applicant to enter into an agreement with VTA for the Residential Eco Pass program. This will allow residents to receive the Eco Passes (or Clipper Cards) at a discounted rate due to the developments proximity to VTA Light Rail and BART.

Private Open Space: The Zoning code requires a minimum of 40 square feet for balconies and 50 square feet for patios for all development. The applicant is proposing that the 55 units do not have balconies in Building 1. They are a mix of studios and junior one bedrooms. Their justification is that site will be providing ample outdoor spaces for residents in this will also allow for more livable space in each unit, which is needed in smaller units. The project will have podium open space and the two parks and trail on the site.

***Public Benefit***

Since the project is requesting a Condition Use Permit through the TASP, the project is required to provide a public benefit at part of the development. Staff has worked with the applicant to design several important components related to the subject site and the remaining site to the east. You may refer to Figure 1 in the report, which identifies these elements. The applicant has agreed to the following:

- Fund a Feasibility Study for the Milpitas Avenue Extension Vehicular and Pedestrian Bridge that will span Penitencia Creek and eventually connect to Sango Court.
- Prepare Construction Drawings for the proposed bridge once the Feasibility Study has been vetted through the City and the Santa Clara Valley Water District and other require agencies.
- Fund the design and construction drawings for the Milpitas Avenue Extension from E Capitol Avenue to the new bridge.
- Provide cost estimates for the construction of the Milpitas Avenue Extension.
- Contribute 53% of the total costs for the construction of the Milpitas Avenue Extension.
- Fund a Feasibility Study for the new Pedestrian Bridge over Montague Expressway near Penitencia Creek.
- Prepare Construction drawings and cost estimates for the construction of the new Pedestrian Bridge.

Overall, the applicant will be providing a substantial amount of funding to design several key elements within the TASP, which are key elements for these several parcels.

***Major Vesting Tentative Map***

A Major Vesting Tentative Map is required to allow the subdivision of land to allow the creation of 18 building lots for the residential structures. Seventeen of the lot will be created for condominium units in the Staked Flats. The map will also allow Building 1 to be sold off separately to the Rental Division of Lennar. Staff has included a condition requiring the recordation of a Density Averaging Agreement prior to recordation of the Final Map, this acknowledges that the development has been considered as a whole for density calculations and

that no changes in the number of units may change. The requested map is consistent with the General Plan, TASP and Zoning Code in regards to lots sizes and allowable densities.

## FINDINGS FOR APPROVAL

Staff has included Findings for Approval in Attachment A for reference. Staff found that the development is consistent with the General Plan, Zoning Code and TASP Goals and Polices. In addition, the project is providing a substantial public benefit by designing several key circulation elements for this subdistrict.

## ENVIRONMENTAL REVIEW

The Planning Division conducted an initial environmental assessment of the project in accordance with the California Environmental Quality Act (CEQA). The project is exempt from further environmental review pursuant to Section 15168(c)(2) of the CEQA Guidelines because of its consistency with the certified EIR for the Transit Area Specific Plan adopted on June 3, 2008 by the City Council (See Attachment B).

## PUBLIC COMMENT/OUTREACH

Staff provided public notice the application in accordance with City and State public noticing requirements. At the time of writing this report, there have been no inquiries from the public. A notice was published in the Milpitas Post on January 30, 2015. (Two Fridays before the meeting) In addition, 124 notices were sent to owners and occupants within 1,000 feet of the project site. A public notice was also provided on the project site, on the City's Website, www.ci.milpitas.ca.gov, and posted at City Hall.

## CITY COUNCIL REVIEW

This project requires review by the City Council and is tentatively scheduled on the April 21, 2015 Council agenda.

## CONCLUSION

The project represents a high quality, high density compact project near the future BART station. The project would anchor a prominent intersection in the TASP. While the project includes some deviations the project's public benefits will outweigh the exceptions.

## RECOMMENDATION

STAFF RECOMMENDS THAT the Planning Commission:

1. Open and Close Public Hearing; and
2. Adopt Resolution No. 15-003 Recommending that the City Council approve the proposed project Site Development Permit No. SD14-0017, Conditional Use Permit No. UP14-0024, And Tentative Map No. MT14-0004 for the Lennar residential project located at 450 Montague Expressway based on the finding and subject to the Conditions of Approval in Exhibit 1.

## ATTACHMENTS

A: Resolution 15-003
B: Initial Study and Categorical Exemption
C: Plan Set
D: Parks, Recreation and Cultural Resources Commission, Packet and Draft Minutes February 2, 2015
E: Parks, Recreation and Cultural Resources Commission, Packet and Draft Minutes March 2, 2015

**RESOLUTION NO. 15-003**

**A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF MILPITAS RECOMMENDING THE CITY COUNCIL APPROVAL OF SITE DEVELOPMENT PERMIT NO. SD14-0017, CONDITIONAL USE PERMIT UP14-0024, AND TENTATIVE MAP NO. MT14-0004 FOR THE LENNAR RESIDENTIAL PROJECT LOCATED AT 450 MONTAGUE EXPRESSWAY**

**WHEREAS**, on October 23, 2014, an application was submitted by Lennar Communities to allow the development of 489 dwelling units on 10.47 acres (46.70 dwellings/acre) in a multi-story building and staked flat units building with three and four stories located at 450 Montague Expressway (APNs: 86-037-004, -019, and -020) zoned Mixed Use Very High Density/Urban Residential with Transit Oriented Development & Site and Architectural Overlays (MXD3/R5-TOD-S) within the Transit Area Specific Plan; and

**WHEREAS**, the Planning Division completed an environmental assessment for the project in accordance with the California Environmental Quality Act (CEQA), and the Planning Commission recommended that the City Council determine this project exempt and that it is consistent with the TASP EIR approved on June 3, 2008; and

**WHEREAS**, on March 25, 2015, the Planning Commission held a duly noticed public hearing on the subject application, and considered evidence presented by City staff, the applicant, and other interested parties and unanimously recommended approval to the City Council of the project; and

**NOW THEREFORE**, the Planning Commission of the City of Milpitas hereby finds, determines and resolves as follows:

1. The Planning Commission has considered the full record before it, which may include but is not limited to such things as the staff report, testimony by staff and the public, and other materials and evidence submitted or provided to it. Furthermore, the recitals set forth above are found to be true and correct and are incorporated herein by reference.

2. The project is exempt pursuant to Section 15168(c) (2) of the CEQA Guidelines because staff determined that the project is consistent with the certified EIR for the Transit Area Specific Plan adopted on June 3, 2008 by the City Council; and

3. The project is consistent with the Milpitas Zoning Ordinance in that the project site meets the density and land use requirements.

4. The project is consistent with the Milpitas General Plan in that the project meets the density and land use requirements.

5. The project conforms to the intent and the specific requirements of the Transit Area Specific Plan, including the Development Standards and Design Guidelines in that the project creates a high density residential project, and a component of public open space with trail.

6. Site Development Permit (Section XI-10-57-03(F))

a. The layout of the site and design of the proposed buildings, structures and landscaping are compatible and aesthetically harmonious with adjacent and surrounding development.

As detailed in the staff report and herein, the proposed Project is consistent with this finding because the proposed development is of a higher quality architecture located adjacent to the new BART station and existing VTA station. The proposed project will implement the TASP streetscape along all frontages and install parks and trails as identified in the TASP. Although there will not be any other residential building immediately adjacent to the site, it will be the first on the block and will act as an important anchor for the intersection.

b. The project is consistent with the Milpitas Zoning Ordinance.

The proposed Project is consistent with this finding because the site located in TASP and consistent with required density and requested a Conditional Use permit for minor deviations from the TASP as allowed in the TASP. The remaining portions of the development are consistent with setbacks open spaces and other development standards. The table below indicates the project setbacks, height, parking and density.

**Table 1:**
**Summary of Development Standards**

| | **Zoning Ordinance/TASP** | **Proposed** |
|---|---|---|
| Density (Min/Max) | 41/75 units/acre | 46.7 units/acre |
| Setbacks (Minimum) | | |
| Capitol Avenue | 49' | 49' |
| Montague Expressway | 45' | 45' |
| East | 20' | 41' |
| South | 20' | 25' |
| Building Height (Maximum) | 12 stories | 5 stories |
| Parking (Minimum) | 668 residential + 121 guest = 780 | *834 spaces (272 Tandem)** |
| Maximum encroachment into setbacks by patios, stoops, etc. | ± 6' | *6'* |
| Open Space | Min 40 sq. ft. for balconies and Min of 50 sq. ft. for patios | *Short 16% for some studios and 1 bedroom units on Capitol Ave.* * |
| * Indicates a Conditional Use Permit is required to allow the proposed deviations. | | |

Parking for the project complies with the Milpitas Municipal Code, which is a minimum of 780 parking spaces for the entire project based on the bedroom count and parking type (individual garage versus parking structure). The following table summarizes the parking required and provided for the project:

**Table 2**
**Parking Summary**

| **5-Story Rental Building** | | | |
|---|---|---|---|
| **Unit Type** | **Number of Units** | **Spaces Provided** | **Parking Ratio** |
| Studios | 45 | 317 | 1.10 |
| 1BR | 202 | | |
| 2BR | 104 | | |
| ***Total*** | ***351*** | | |
| **Tandem Parking Allowed (75% of total required parking)** | | 128 | 25% |
| **Guest Parking (15% of residential parking)** | | 67 | 15% |
| **Total** | | **512** | |
| ***Total Required by Code*** | | ***511*** | |
| | | | |
| **Stacked Flat Units** | | | |
| **Unit Type** | **Number of Units** | **Spaces Provided** | **Parking Ratio** |
| 2BR | 42 | 126 | 1.09 |
| 3BR | 92 | | |
| 4BR | 4 | | |
| ***Total*** | ***138*** | | |
| **Tandem Parking Allowed (50% of total required parking)** | | 112 | 50% |
| **Guest Parking (20% of residential parking)** | | 52 | 23% |
| **Total** | | **322** | |
| ***Total Required by Code*** | | ***269*** | |

Parking is provided in the parking structure under Building 1 and private garages in the Staked Flat units and open on-site spaces. The project includes tandem spaces which has different requirements for structured parking vs. private garage. The amount proposed in Building 1 is below the maximum allowed of 75% of the total required parking at 25%. The Stacked Flats are at

the maximum allowed of 50%. The project meets the requirements for the remaining parking for the residential units and guest parking. The total parking provided on site meets the minimum required. A Conditional Use Permit is required to allow the use of tandem parking spaces, which has been discussed in the Conditional Use Permit Section.

c. The project is consistent with the Milpitas General Plan and TASP.

The proposed Project is consistent with this finding as discussed previously in the staff report, and because the approved use is allowed in the TASP and it is consistent with the minimum density. The project furthers the goals and policies of the land use element by further implementing the project residential units within the TASP.

d. Specifically, the project supports the following General Plan principles and policies:

| **Guiding Principles and Implementing Policies** | | **Consistency Finding** |
|---|---|---|
| *2.a-G-2:* | *Maintain a relatively compact urban form.* | **Consistent** |
| *2.a-G3:* | *Provide for a variety of housing types and densities that meet the needs of individuals and families.* | **Consistent** |
| *2.a-G-5* | *A park-like setting will be created by a series of local parks, school sites, trails, and a greenway system laced throughout all living areas.* | **Consistent** |
| *2.a-G-7* | *When considering development proposals, seek "community benefit", such as upgrading infrastructure facilities, constructing new infrastructure facilities, and funding contributions to programs.* | **Consistent** |
| *2.a-I-1* | *New developments should not exceed the building intensity limits established in the General Plan.* | **Consistent** |
| *2.a I-2* | *Promote development within the incorporated limits which acts to fill-in the urban fabric rather than providing costly expansion of urban services into outlying areas.* | **Consistent** |
| *2.a-I-8* | *Establish redevelopment projects to secure funds that can be used to attract commercial, industrial, and residential development in order to eliminate blight and improve an area.* | **Consistent** |

| Guiding Principles and Implementing Policies | | Consistency Finding |
|---|---|---|
| *2.a 1-31* | *Develop the Transit area, as shown on the Transit Area Plan, as attractive, high density, urban neighborhoods with a mix of land uses around the light rail stations and the future BART station. Create pedestrian connections so that residents, visitors, and workers will walk, bike, and take transit. Design streets and public spaces to create a lively and attractive street character, and a distinctive identity for each sub-district.* | **Consistent** |
| *2.a 1-32* | *Require development in the Transit area to conform to the adopted design guidelines/requirements contained in the Transit Area Plan.* | **Consistent** |
| *2.b-I-3* | *Provide housing opportunities in Milpitas by meeting the City's regional fair-share housing obligations.* | **Consistent** |

7. Conditional Use Permit Amendment (Section XI-10-57-04-(F)(1&2)

a. The proposed use, at the proposed location will not be detrimental or injurious to property or improvements in the vicinity nor to the public health, safety, and general welfare.

The proposed project is located with the Transit Area Specific Plan and is consistent with the Goals, Policies and Development Standards of the TASP. The project will improve the property frontages by installing new sidewalks, street trees, street lights and landscaping to enhance the area and to provide safe pedestrian access around the site. The requested deviations from the TASP development standards and Zoning Code standards have been found to be acceptable by staff as noted in the staff report. Overall, the development will improve the site and enhance the intersection of Montague Expressway and E Capitol Avenue.

b. The proposed use is consistent with the Milpitas General Plan; and

See discussion above.

c. The proposed use is consistent with the Milpitas Zoning Ordinance.

In addition to the TASP Conditional Use Permit allowances, the Zoning Code also requires approval of a Conditional Use Permit for deviations from code provisions for the following:

- Tandem parking: The Zoning Code allows the uses of tandem parking spaces with the approval of a Conditional Use Permit. The Zoning Code allows a maximum of 75% for structured garage spaces and 50% for private garages. The proposed development includes 128 tandems spaces in the garage (25%) and 112 spaces in private garages (50%). The proposed tandem spaces are within the maximums allowed. In addition, this type of unit provides housing opportunities for a larger age group range of residents. Each building will have a main lobby and elevator to each floor. Each garage space has a private entrance into the building leading to the main lobby and elevator. The site is in close proximity to the Light Rail and the future BART station; therefore staff is in support of the proposal. In addition, staff has added a Condition of Approval requiring the applicant to enter into an agreement with VTA for the Residential Eco Pass program. This will allow residents to receive the Eco Passes (or Clipper Cards) at a discounted rate due to the developments proximity to VTA Light Rail and BART.

- Private Open Space: The Zoning code requires a minimum of 40 square feet for balconies and 50 square feet for patios for all development. The applicant is proposing that the 55 units do not have balconies in Building 1. They are a mix of studios and junior one bedrooms. Their justification is that site will be providing ample outdoor spaces for residents in this will also allow for more livable space in each unit, which is needed in smaller units. The project will have podium open space and the two parks and trail on the site.

  Based on the analysis above, staff recommends support of the requested deviations through the Conditional Use Permit process.

d. The proposed use is consistent with the Specific Plan.

The TASP is a conceptual land use document designed in 2008 and it is being implemented at a faster rate as we near the opening of the future BART station. The document also acknowledged that there may be some deviations from the plan as they relate to development standards and it established a process for consideration through a Conditional Use Permit. The proposed project includes the following deviations from the adopted plan:

- *Driveway access on Montague Expressway and Capitol Expressway.* The proposed project is only able to be accessed from Montague and Capitol Expressway since the Milpitas Extension has not been constructed and it is located on land not controlled by the applicant. The access for both driveway will be right in and right out with the driveway on Capitol being reduced to right in only once the Milpitas Extension has been constructed.

- *Underground garage extending more than 5 feet above grade.*

The TASP limits the amount of an unground garage that may extend above the grade to 5 feet. The proposed garage does extend more than 5 feet in some places on the site, which is a result of the site topography. The project uses raised planters planter beds and site landscaping to shield these elements from view which reduces the visual impacts of these sections.

- *Park Location*
  The TASP also called out for a larger park location closer to Penitencia Creek for the 450 Montague site. The applicant proposed the park at a more internal location to better benefit the site. The parks will still be open to the public and they will be required to provide way finding signage. Furthermore, staff has presented the proposed park locations to the Park, Recreation and Cultural Resources Commission for their input and possible names for the park. The following provides an overview of the PRCRC comments:

  *Park Recreation and Cultural Resources Commission (PRCRC)*

  Staff presented the proposed park layout and design to the Parks, Recreation and Cultural resources Commission (PRCRC) on Monday, February 1, 2015. Staff reviewed the proposed layout, park elements and requested that the PRCRC provide names for the City Council to consider for the parks. The applicants Landscape Architect presented additional information about the proposed project and answered questions. The PRCRC was receptive to the park and recommended the City Council approve the design and recommended that the Council decide on one of the four names including; J.W. Johnson, Captain Calvin Valpey, O.H.P. Vennum and Charles Beverson for Park A (being West) and Park B (being East). The staff report and minutes have been included in Attachment E.

  Staff brought the proposed park layout back to the PRCRC on March 2, 2015 due to change in the location of the Emergency Vehicle Access, relocation of the trash enclosure and removal of a connecting paseo. The PRCRC was also receptive of the change and comfortable with the additional conditions that staff included. The staff report and minutes are included in Attachment F.

The requested TASP deviations can be supported as they can and will be mitigated with the development or future roadway improvements. The proposed use, at the proposed location will not be detrimental or injurious to property or improvements in the vicinity or to the public health, safety, and general welfare in that project will improve the area.

The deviation from the Transit Area Specific Plan Standard meets the design intent identified within the Specific Plan and does not detract

from the overall architectural, landscaping and site planning integrity of the proposed development in that the streetscape treatment to the access off of Montague Expressway and E Capitol will be consistent with the TASP standards as conditioned.

The deviation from the Transit Area Specific Plan Standard allows for a public benefit not otherwise obtainable through the strict application of the Zoning Standard in that the project will provide the following:

- Fund a Feasibility Study for the Milpitas Avenue Extension Vehicular and Pedestrian Bridge that will span Penitencia Creek and eventually connect to Sango Court.
- Prepare Construction Drawings for the proposed bridge once the Feasibility Study has been vetted through the City and the Santa Clara Valley Water District and other require agencies.
- Fund the design and construction drawings for the Milpitas Avenue Extension from E Capitol Avenue to the new bridge.
- Provide cost estimates for the construction of the Milpitas Avenue Extension.
- Contribute 53% of the total costs for the construction of the Milpitas Avenue Extension.
- Fund a Feasibility Study for the new Pedestrian Bridge over Montague Expressway near Penitencia Creek.
- Prepare Construction drawings and cost estimates for the construction of the new Pedestrian Bridge.

8. Major Tentative Map Findings (Section XI-1-20.01)

   a. The tentative subdivision map is consistent with the Milpitas General Plan

   As discussed in detail in the staff report and herein, the subdivision map complies with the TC Zoning District and to the development standards of the General Plan. The proposed Project type, density and size are all consistent with the Town Center General Plan Land Use Designation.

9. The Planning Commission recommends the City Council to approve Site Development Permit No. SD14-0017, Conditional Use Permit No. UP14-0024, and Tentative Map No. MT14-0004 for the Lennar Residential Project at 450 Montague Expressway, subject to the above findings, and the Conditions of Approval attached hereto as Exhibit 1.

**PASSED AND ADOPTED** at a regular meeting of the Planning Commission of the City of Milpitas on March 25, 2015:

_____

Chair

**TO WIT:**

**I HEREBY CERTIFY** that the following resolution was duly adopted at a regular meeting of the Planning Commission of the City of Milpitas on March 25, 2015 and carried by the following roll call vote:

| COMMISSIONER | AYES | NOES | ABSENT | ABSTAIN |
|---|---|---|---|---|
| Sudhir Mandal | ✓ | | | |
| Lawrence Ciardella | ✓ | | | |
| Hon Lien | ✓ | | | |
| Rajeev Madnawat | | | ✓ | |
| Ray Maglalang | ✓ | | | |
| Zeya Mohsin (Alternate) | | | ✓ | |
| Demetress Morris | ✓ | | | |
| Gurdev Sandhu | | | ✓ | |

## EXHIBIT 1

## CONDITIONS OF APPROVAL
## SITE DEVELOPMENT PERMIT NO. SD14-0017, CONDITIONAL USE PERMIT UP14-0024, TENTATIVE MAP NO. MT14-0004 AND EXCEPTION TO URGENCY ORDINANCE 204.2 FOR THE LENNAR RESIDENTIAL PROJECT INCLUDING A 5-STORY PODIUM BUILDING WITH 351 DWELLING UNITS AND 138 CONDOMINIUM STAKED FLAT UNITS LOC ATED AT 450 MONTAGUE EXPRESSWAY.

### GENERAL CONDITIONS

1. General Compliance. The applicant and owner, including all successors in interest (collectively "Permittee") shall comply with each and every condition set forth in this Permit. This DEVELOPMENT PERMIT NO. SD14-0017, CONDITIONAL USE PERMIT UP14-0024, TENTATIVE MAP NO. MT14-0004 (collectively "Permit") shall have no force or effect and no building permit shall be issued unless and until all things required by the below-enumerated precedent conditions have been performed or caused to be performed and this Resolution has been recorded by the Permittee with the Santa Clara County's Recorder Office and a copy shall be provided to the Planning Department. (P)

2. Effective Date. Unless there is a timely appeal filed in accordance with the Milpitas Zoning Code, the date of approval of this Permit is the date on which the decision-making body approved this Permit.

3. Acceptance of Permit. Should Permittee fail to file a timely appeal within twelve (12) calendar days of the date of approval of this Permit, inaction by Permittee shall be deemed to constitute each of the following:
   a. Acceptance of this Permit by Permittee; and
   b. Agreement by the Permittee to be bound by, comply with, and to do all things required of or by Permittee pursuant to all of the terms, obligations, and conditions of this Permit.

4. Modifications to project. Any deviation from the approved site plan, floor plans, or other approved submittal shall require that, prior to the issuance of building permits, the Permittee shall submit modified plans and any other applicable materials as required by the City for review and obtain the approval of the Planning Director or Designee. If the Planning Director or designee determines that the deviation is significant, the Permittee shall be required to apply for review and obtain approval of the Planning Commission or City Council, in accordance with the Zoning Ordinance. (P)

5. Previous Planning Application: Previously approved Planning Applications for a Site Development Permit No. SD12-0009, Conditional Use Permit UP12-0024, and Tentative Map No. MT12-0005 to allow the development of 474 dwelling units on 7.98 acres (59 dwellings/acre) in a multi-story building located at 450 Montague Expressway (APN: 86-037-004, -020, and -021) shall be rescinded and replaced completely with the adoption of this Resolution. **(P)**

6. Conditions of Approval. As part of the issuance of building permits, the Permittee shall include within the first four pages of the working drawings for a plan check, a list of all conditions of approval imposed by the final approval of the project. **(P)**

7. Written Response to Conditions. The Permittee shall provide a written response to the Conditions of Approval indicating how each condition has been addressed with the building permit application submittal. **(ALL)**

8. Permit Expiration. Pursuant to Section XI-10-64-06 of the Milpitas Zoning Code, this Permit shall become null and void if the activity permitted by this Permit is not commenced within two (2) years from the date of approval, or for a project submitted with a tentative map, within the time limits of the approved tentative map. Pursuant to Section XI-10-64.06(B) of the Milpitas Zoning Code, an activity permitted by this Permit shall be deemed to have commenced when the project:
   a. Completes a foundation associated with the project; or
   b. Dedicates any land or easement as required from the zoning action; or
   c. Complies with all legal requirements necessary to commence the use, or obtains an occupancy permit, whichever is sooner. **(P)**

9. Time Extension. Pursuant to Section XI-10-64.07 of the Milpitas Zoning Code, unless otherwise provided by State law, Permittee shall have the right to request a one-time extension of the Permit if the request is made in writing to the Planning Division prior to the expiration date of the approval. **(P)**

10. Project Job Account. If Permittee's project job account is at any time delinquent or below the required deposit amount, City will not continue to review or process the application until Permittee's private job account is paid in full and the required deposit has been made. Additionally, prior to the issuance of any building permit or occupancy permit, as applicable, Permittee shall pay in full the project account balance and establish a remaining balance of at least twenty-five percent (25%) of the required initial deposit. **(P)**

11. Notice. Pursuant to California Government Code Section 66020, any protest filed in court relating to the imposition of fees, dedication, reservations, or other exactions to be imposed on the development project shall be filed within ninety (90) days after the date of the adoption of this Resolution. This provision serves as notice from the local agency to the Permittee that the ninety (90) day period in which the Permittee may file a protest has begun under California Government Code Section 66020(d)(1). **(P)**

12. Cost and Approval. Permittee shall fully complete and satisfy each and every condition set forth in this Resolution and any other condition applicable to the project to the sole satisfaction of the City. Additionally, Permittee shall be solely responsible and liable for the cost to satisfy each and every condition. Permittee shall pay all required fees and charges to City at the rate in effect at time of building permit issuance, or, the rate in effect when the fees and charges are due and paid in full to City. There is no vesting of any fees or charges with the adoption of this Resolution. **(P)**

13. Conditions. Each and every condition set forth in this Exhibit shall apply to the project and continue to apply to the project so long as the Permittee is operating the project under the permits and approvals in this Resolution.

14. Compliance with Laws. The construction, use, and all related activity authorized under this Permit shall comply with all applicable local, state, and federal laws, rules, regulations, guidelines, requirements, and policies. (CA/P)

Indemnification. To the fullest extent permitted by law, Permittee shall indemnify, defend with counsel of the City's choosing, and hold harmless City, its City Council, its boards and commissions, officials, officers, employees, and agents from and against any and all claims, demands, obligations, damages, actions, causes of action, suits, losses, judgments, fines, penalties, liabilities, costs and expenses (including without limitation, attorney's fees, disbursements and court costs) of every kind and nature whatsoever which may arise from or in any manner relate (directly or indirectly) to (i) City's approval of the project, including but not limited to, the approval of the discretionary permits, maps under the Subdivision Map Act, and/or the City's related determinations or actions under the California Environmental Quality Act, and (ii) Permittee's construction, operation, use, or related activity under this Permit. This indemnification shall include, but not be limited to, damages awarded against the City, if any, costs of suit, attorneys' fees, and other expenses incurred in connection with such claim, action, causes of action, suit or proceeding whether incurred by applicant, City, and/or the parties initiating or bringing such proceeding. Permittee shall indemnify the City for all of City's costs, attorneys' fees, and damages which City incurs in enforcing the indemnification provisions set forth in this condition. Permittee shall pay to the City upon demand or, as applicable, to counsel of City's choosing, any amount owed pursuant to the indemnification requirements prescribed in this condition.

15. Revocation, Suspension, Modification. This Permit may be suspended, revoked, or modified in accordance with Section XI-10-63.06 of the Milpitas Zoning Code.

16. Severability. If any term, provision, or condition of this Permit is held to be illegal or unenforceable by the Court, such term, provision, or condition shall be severed and shall be inoperative, and the remainder of this Permit shall remain operative, binding, and fully enforceable. **(P)**

17. Permittee shall develop the approved project in conformance with the approved plans approved by the Planning Commission on March 25, 2015, in accordance with these Conditions of Approval. Any deviation from the approved site plan, elevations, materials, colors, landscape plan, or other approved submittal shall require that, prior to the issuance of building permits, the Permittee shall submit modified plans and any other applicable materials as required by the City for review and obtain the approval of the Planning Director or Designee. If the Planning Director or designee determines that the deviation is significant, the owner or designee shall be required to apply for review and obtain approval of the City Council or City Council, as applicable, in accordance with the Milpitas Zoning Code. **(P)**

18. Compliance with Fire Department and CA Fire Code. The Project shall comply with the requirements of the Milpitas Fire Department and the CA Fire Code. Changes to the site plan and/or building(s) requires review and approval by the Fire Department. **(F)**

19. CEQA REVIEW (2008 TASP FEIR & 2015 INITIAL: STUDY) : The project shall be subject to all applicable mitigation measures identified with the adopted 2008 TASP DEIR and FEIR (SCH# 2006032091) and those carried over into the 2015 Initial Study that was prepared for the project. The Permittee shall include a written response to the Mitigations identified in the

2015 Initial Study Document with the building permit submittal indicating how each mitigation has been addressed. **(P)**

20. Climate Action Plan Compliance. Prior to issuance of any building permit, the Permittee shall provide a final version of the Appendix C of the Climate Action Plan (CAP). The applicant shall clearly demonstrate compliance with the CAP. **(P)**

21. Project Phasing Plan: The Permitee shall submit a separate project phasing plan to the Building Department for review. The phasing plan shall be consistent with all construction timing conditions contained within the approval and address access, public safety, fire safety and solid waste access during construction. The Permitte shall contact the Building Department for complete building permit submittal requirements. **(ALL)**

22. Garage Parking for the Stacked Flats: The garages spaces for the stacked flats shall be maintained and available for parking for two cars at all times. In addition, the upper panel of the garage doors shall be maintained with clear glass to allow for visual inspection by the property management or Home Owners Association (HOA), this shall be noted in the CC&Rs. The property manager or HOA shall be responsible for enforcement of parking in private garages. **(P)**

23. On-Site Security: The Permittee shall provide 24 hour security of the site to ensure that no additional vandalism occurs on the site until the existing buildings have been demolished and the entire site is secured. The applicant shall keep the site clean and free of debris. (P)

**PROJECT SPECIFIC CONDITIONS**

24. Construction Timing: Building Permit for no more than 69 of the staked flat units may be issued before issuance of the podium structure building permit (building 1). No more than 103 of the staked flats may receive occupancy before completion of the podium for the apartment building and occupancy has been received for the first phase. The actual numbers of the stacked flats may vary slightly to accommodate the building type and phasing plan subject to review and approval by the Director of Planning and Neighborhood Services. **(ALL)**

25. Architectural Details. Prior to issuance of any building permit, the following shall be demonstrated in the construction plans for the project:
    a. The stucco texture for the walls of the building shall be of sand 20/30 finish.
    b. The stucco for all trim features around windows and doors shall be a trowel smooth finish.
    c. The plans shall clearly demonstrate a 1.5"-2" inch recess for all windows located in stucco wall faces. The applicant may propose alternatives to achieve the recess subject to review by the Planning Director.
    d. The Cementitious Panels shall be mounted in a manner that is clean and consistent with the architectural style. The applicant shall provide a mock-up for staff review and approval prior building permit issuance.
    e. The raised planter beds located around the podium building shall be consistent with the masonry veneer (color and texture) located at the leasing lobby and second entrance.
    f. The white bay elements on building 1-foot shall be reduced in height by 1 foot.

g. The exterior material for the white bay elements shall be further refined to enhance the elements by using a smooth three coast hand troweled stucco surface.
h. Final details for the balcony railings for both product types shall be provided to Planning Division for review and approval. The railings shall be a high quality material and provide architectural interest.
i. The entry elements for Stacked Flats Buildings B and E (6-Plex) shall be further enhanced with the use of specimen trees adjacent to the entry and enhance entry awning.

All architectural conditions shall be reviewed and approved by the Director of Planning and Neighborhood Services prior to issuance of building permits for any construction. **(P)**

26. Landscape/Hardscape. Prior to issuance of any building permit, the following shall be demonstrated in the construction plans for the project:
    a. All benches and low walls shall be constructed with a patterned inset to discourage skateboarding.
    b. The plant material palate shall be enhanced to include additional seasonally fragrant plants. The landscape plan legend shall clearly identify fragrant plant species.
    c. Plantings around the trash enclosure shall be enhanced to include climbing vines on the enclosure and taller evergreen screening such as Fern Pine (Podocarpus).
    d. An alternate plant for Seqouia Sempervrens will need to be included in the building permit set. This species will not grow with reclaimed water.
    e. Raised planter beds around the staked flats shall be covered in a material that is complimentary to the development.
    f. Exposed CMU or split faced CMU is not allowed. All CMU will need to be treated appropriately to compliment the buildings and site. **(P)**

27. Public Parks: Both public parks and associated amenities shall be fully constructed and accepted by City before the 75% occupancy of the development. **(P)**

28. Creek Trail Connection: The trail shall provide a connection (along the private property) to the adjacent site to the east (730 E Capitol). The pedestrian path will need to extend along the side of the trash enclosure to the EVA and consistent with TASP Figure 3-6. In addition, the Permittee shall install a new decomposed granite trail along the creek on the maintenance road. That Permittee shall be responsible for all permitting required from the SCVWD and other agencies. **(P)**

29. Mechanical Venting: All horizontal mechanical venting shall be located on the balconies of each unit or a return wall. If neither option is available, then venting shall be directed through chase to the roof. All vent covers on the exterior shall be the minimum size needed, painted to match the building and be clearly indicated on the architectural elevations. Venting for the on-demand water heaters shall be a high quality material (see Taylor Morrison on McCandless) and may be located above the garage doors for the staked flats and on the balconies in Building 1 if used. The Permittee may propose some alternatives to achieve the goal of screening all mechanical venting, the applicant shall submit a proposal for review by the Planning Director. **(P)**

30. Signs: The Permittee shall submit project identification signs for the review by the Planning Division prior to any Building Permit issuance. **(P)**

31. Density Averaging Agreement: Prior to Final Map approval, the Permitee shall be required to enter into a Density Averaging Agreement. The Density Averaging Agreement shall be signed by the Permittee and recorded prior to approval of the Final map. **(P)**

32. County Transportation Approval: The Permitee shall obtain final approval from the County Transportation Department prior to issuance of building permits for any site improvement adjacent to County right of way. **(P)**

33. Santa Clara Valley Water District (SCVWD): The Permitee shall obtain final approval from the SCVWD for trail improvements on along the creek maintenance road. Final approval and construction shall be completed prior to final occupancy for the last phase in the development (the Phasing Plan shall clearly denote this requirement). **(P)**

34. Public Improvements. Prior to final map approval, the Permittee shall obtain design approval and bond for all necessary public improvements along Capitol Avenue and Montague Expressway including but not limited to the following:
    a. Right of Way. The Permittee shall dedicate all necessary rights-of-way and public easements to the City for the proposed public sidewalk improvements and utilities to the satisfaction of the City Engineer.
    b. Frontage Improvements. Prior to final map approval, Permittee shall submit improvement plans for the frontage improvements along Montague Expressway and Capitol Avenue including curbs, gutters, sidewalks, pavement, striping, hardscape, streetlights, landscaping, trees, irrigation, and utilities in conformance with the Transit Area Specific Plan, City Standard Drawings and guidelines to the satisfaction of the Planning Director and the City Engineer.
    c. Pedestrian Creek Trail. Prior to final approval or building permit issuance, the Permittee shall submit improvement plans for the Pedestrian Creek Trail. The trail shall be designed to drain away from the Penitencia Creek. All run-off from impervious surface shall be treated prior to discharge to the creek or the public storm drain system. Permittee shall submit written approval from the Santa Clara Valley Water District for the trail plans.
    d. Utility Relocation. Underground utilities (such as joint trench conduit, utility boxes, etc.) shall be relocated and adjusted as necessary to accommodate the approved frontage sections to the satisfaction of the Planning Director and the City Engineer.
    e. Occupancy. All public improvements shall be installed and accepted prior to the issuance of the first Certificate of Occupancy. **(E)**

35. Onsite Improvements.

    a. Plan Set Coordination. Permittee shall coordinate all plans showing landscape, utility, and hardscape improvements in order to resolve conflicts. **(ALL)**

    b. Modifications to the Site Plan. Any modifications to the site plan shall require an amendment to the tentative map unless otherwise directed by the Planning Director and the City Engineer.

    c. Storm Water Control Plan (SWCP). Prior to building permit issuance, the Permittee shall revise the SWCP to increase the amount of LID treatment within the project boundary.

Credit for Special Project status will not be applied until all LID treatment opportunities are exhausted on the site to the satisfaction of the City Engineer. All changes shall be reflected on the SWCP report and plan sheet. The treatment summary sheet shall be updated.

d. Interim Bioretention Treatment. Permittee shall maintain the interim 100% LID treatment facility located on the future Building 18 site until issuance of the building permit for the superstructure of Building 1.

e. Utility Meter Layout. The Permittee shall include a detail in the Site Improvement plan set showing the size, dimensions, and layout of all utility meters and associated appurtances. The layout design shall comply with all separation and access requirement.

f. Building Permit Issuance. The Permittee shall follow the floodplain removal protocol outlined in the project's floodplain analysis. Construction permits will not be issued until each milestone in the analysis is achieved.

g. Floodproofing. The Permittee shall provide a separate floodproofing report describing the floodproofing for all structures that are not removed from the Special Flood Hazard Area. The report shall demonstrate compliance with NFIP Regulations and technical bulletins. The report shall include the floodproofing of mechanical equipment, elevator shaft and equipment, and utilities. Floodproofing details shall also be included in the site improvement plan set and on the floodplain management sheet.

h. Site Improvement Plan Set. Prior to anybuilding permit issuance, the Permittee shall submit a complete site improvement plan set, including but not limited to a separate plan sheet for floodplain management, storm water control, emergency vehicle access, and solid waste handling.

i. Retaining Wall at Street B. The Permittee shall revise the design of the retaining wall to allow for the capture/conveyance of runoff received at the property line. **(E)**

36. Transportation & Traffic Engineering.

a. Emergency Vehicle Access (EVA). The Permittee shall provide a 26' Emergency Vehicle Access easement along Street B on the subject site. **(P/E)**
b. Temporary Right-Out Access to Capital Avenue. Right-out vehicular access on to Capital Avenue is authorized on a temporary basis until the West Leg of S. Milpitas Boulevard Extension (WLSMBE) and the private street along Penitencia Creek are constructed and open to the public. Upon the acceptance of WLSMBE, right-out access to Capital Avenue shall be revoked and the Permittee, and all successors in ownership, shall design and construct all on-site and off-site improvements necessary to restrict the vehicular access on to Capital Avenue to the satisfaction of the City Traffic Engineer. Prior to building permit issuance, the Permittee shall include the design of the ultimate vehicular access to Capital Avenue in the construction documents submitted for onsite and offsite approvals. The Permittee shall provide full disclosure of the temporary right-out access on Capital Avenue to all future residents, tenants, and home owners/property management associations of this

development. This condition and all associated exhibits shall be included in the Conditions, Covenants, and Restrictions (CC&R) for both associations. **(E)**

c. Right-Out Access to Montague Expressway. Prior to final map approval, the Permittee shall obtain Santa Clara County Roads and Airports' (County) approval of the final access design for right-in and right-out vehicular access to Montague Expressway. If County approval is not obtained, the Permittee shall revise the site plan and amend the tentative map to the satisfaction of the Planning Director and the City Engineer. **(E)**

d. Montague Expressway Pedestrian Bridge Overcrossing & Land Dedication: The Permittee shall be responsible for the design, construction drawings and land dedication to accommodate the Montague Expressway Pedestrian Bridge Overcrossing as identified in the TASP. The following items shall be required:
   i) Conceptual Design Study: The Permittee shall submit conceptual designs for the pedestrian overcrossing over Montague Expressway adjacent to Penitencia Creek prior to Final Map Approval. The Conceptual Design shall include studies, survey information and three bridge design alternatives for architectural design. The applicant shall also coordinate with the County during the development of the design document.
   ii) Construction Drawings: The Permittee shall submit 30% construction drawings prior to First Occupancy and Final Construction drawings by 75% occupancy of the project. The final construction documents shall include all studies, reports, estimates, easements, and dedications required to complete the design and shall be submitted to the City for review and approval. Final construction drawings shall not commence until the conceptual design is approved by the City and the Santa Clara County Roads and Airports. The City Engineer and Planning Director may grant additional time to satisfy this condition due to coordination with outside agencies. The Permitee shall request changes in the timeline in writing and included a revised project schedule for review and approval. The Permittee shall dedicate all land and easements required to construct, access, and maintain the overcrossing structure and landing.
   iii) TASP Credit: The pedestrian overcrossing over Montague Expressway is an identified Transit Area Specific Plan (TASP) item and costs for the design and construction drawings will be credited through the TASP Fee Structure. Fee credit will not be provided until all items above have been completed and all supporting documentation verifying all associated costs. All costs shall be tracked separately from the Penitencia Creek Bridge costs. Final credit will be subject to City review of all materials provided. Prior to Final Map Approva, a separate Fee Credit shall be entered into between the parties. **(P/E)**

e. West Leg of S. Milpitas Boulevard Extension (WLSMBE). The construction of WLSMBE is a required improvement for the ultimate circulation of the 450 Montague Expy, 730 E Capital, and 750 E Capital developments. The design of WLSMBE shall include the design of the East Penitencia Creek Vehicular/Pedestrian Crossing and all related utility relocations. The roadway dedication, design, permitting, and construction of WLSMBE and all associated designs, studies, reports, permits and improvements are a shared cost between the three developments and the costs are distributed in proportion to each development's land area. The Permittee shall comply with the following:

i) East Penitencia Creek Vehicular/Pedestrian Crossing Feasibility Study. Prior to Final Map Approval, the Permitee shall submit a study analyzing:

(1) the feasibility of a vehicular/pedestrian bridge across East Penitencia Creek,
(2) the feasibility of alternative crossings, and
(3) a final recommendation based on cost, design, constructability, schedule, permitting (including CEQA), and maintenance.
(4) the feasibility of incorporating potable water and recycled water pipelines in the bridge deck.

The study shall include outside agency coordination, utility relocation, and engineering estimates for design, construction and permitting of each alternative. The feasibility study shall also indentify the required permitting for each alternative.

ii) East Penitencia Creek Vehicular/Pedestrian Crossing. Prior to first occupancy, the Permitee shall submit construction documents, including plans, studies, reports, and estimates for the alternative identified in the feasibility study or as directed by the City Engineer for review and approval.

iii) East Penitencia Creek Vehicular/Pedestrian Crossing. The East Penitencia Creek Vehicular/Pedestrian Crossing is an identified Transit Area Specific Plan (TASP) item and costs for the feasibility study and construction drawings will be credited through the TASP Fee Structure in a separate Fee Credit Agreement to be approved by the City Council prior to final map approval. Final reimbursement would occur after all documents have been provided to the City for review and approval and all supporting documentation for all costs associated with the study and design. These documents shall be tracked separately from the WLSMBE and Pedestrian Overcrossing documents. The Permitee will receive the reimbursement once all materials have been received and processed. **(E)**

iv) WLSMBE Design. Prior to Final Map, the Permitee shall prepare design documents for the WLSMBE Extension. WLSMBE shall extend from Capitol Avenue to East Penitencia Creek and shall align with the proposed S. Milpitas Boulevard Extension from Montague Expressway to Capital Avenue. The WLSMBE typical cross-section shall conform to the TASP approved sections and shall include, but not be limited to, one 11' southbound lane, one 11' northbound lane, one 11' northbound right turn lane, a Class II bike lane in each direction of travel, a 4' minimum raised median island, an 8' parking lane on one side of the street, a 7' planting strip, and 5' sidewalk on each side of the street or as directed by the Planning Director and the City Engineer. WLSMBE design shall include buried utilities such as potable water pipe, pressure reducing valve and vault, recycled water pipe, storm drain pipe, and sanitary sewer pipe. The pressure reducing valve shall be connected into the Zone 2 piping on the east side of Capitol Avenue and the Zone 1 piping on the west side of Capitol Avenue.The WLSMBE street elevation shall be designed and constructed to accommodate the future crossing over East Penitencia Creek pursuant to the TASP-designated street network and the East Penitencia Creek Crossing feasibility study.

v) WLSMBE Improvements. Prior to first occupancy, the Permitee shall submit construction documents, including plans, studies, reports, and estimates for the WLSMBE Improvements to the City for review and approval. The construction documents shall include all related improvements such as the relocation of existing utilities and the installation of traffic signals. Prior to the issuance of any Certificate of Occupancy, the Permittee shall pay for WLSMBE improvements pursuant to the condition below to the satisfaction of the City Engineer.

vi) WLSMBE Cost Share. Prior to first occupancy, the Permittee shall submit an engineer's estimate for all associated costs for the WLSMBE design, construction, management, and land cost assumption of 12% of the total cost of the project and an ENR Construction Cost Index projected out 5 years to the satisfaction of the City Engineer. The Permittee shall pay to the City a fair share contribution of 53% (based on site area of 10.47 acres) of the estimated costs. The Permittee fair share contribution shall be credited for all design costs. The Permitee shall pay the fair share contribution at Final Occupancy or final approval of construction plans or whichever occurs first. **(E)**

f. Future Traffic Signal at Capitol and WLSMBE. Prior to building permit issuance, the Permittee shall pay a fair share contribution for the construction of a new traffic signal at the E. Capitol Avenue and WLSMBE intersection. **(E)**

37. Utilities. The Permittee shall comply with the following conditions:
   a. Water System. Project shall be served by SCVWD Zone 1. A Water Supply Assessment is not required. Contractual water capacity is available. **(E)**
   b. Water Service. Building 1 shall be served by separate water meters for domestic and fire services. All landscape located inside the Building 1 footprint shall be served by a separate irrigation meter. Buildings 2-18 may be served by a combined domestic and fire service. Each parcel shall have independent service or shall provide recorded documents allowing reciprocal shared rights. Permittee is alerted that on-site pumping to upper floors may be required. Permittee shall provide backflow protection on all water connections, including fire services, in accordance with City guidelines and USC Manual of Cross Connection Control. **(E)**
   c. Hydraulic modeling is required to verify capacity of the adjacent water system piping and determine points of connection to the water and sanitary sewer systems. Permittee shall authorize the City to proceed with hydraulic modeling. All charges shall be applied to Permittee's PJ Account. **(E)**
   Waterline Relocation. Permittee is proposing to relocate the public water line in Montague Expressway. The water pipeline shall be located in Montague Expressway, subject to the City and County discretion on the location. Permittee shall connect the southern point of the relocated water line to the water line at Centre Pointe Drive in order to insure reliability looping. **(E)**
   d. Montague Expressway Waterline Easement. Prior to final map approval, the Permittee shall secure an easement, for the City of Milpitas benefit, from Santa Clara County for the installation and future maintenance of the relocated water line within the Montague

Expressway right-of-way. The water line shall be placed into service prior to issuance of the first occupancy. If the easement is not needed the Permitee may provide a letter from the County indicating that is not needed and it will be subject to review by the City Engineer. **(E)**

e. Public Landscaping. Street frontage landscaping shall be served by recycled water. The public portion of the proposed recycled water pipelines shall be a minimum of 8 inches in diameter. The Permittee shall install a gate valve and blind flange on the southerly leg of tee to accommodate future extension of the recycled water system. **(E)**

f. Water Supply Emergency. The City Council has declared a water supply emergency and enacted a Water Shortage Contingency Plan. The project is required to use recycled water for construction purposes such as dust control and compaction. Landscape planting shall be deferred for any areas designated to use potable water, such as internal podium areas. **(E)**

g. Existing Utilities. All existing public utilities shall be protected in place and if necessary relocated as approved by the City Engineer. No permanent structure is permitted within City easements and no trees or deep rooted shrubs are permitted within City utility easements, where the easement is located within landscape areas. **(E)**

h. Multistory Buildings. The apartment building shall require water supply pressures above that which the city can normally supply. Additional evaluations by the Permittee are required to assure proper water supply (potable or fire services). The Permittee shall submit an engineering report detailing how adequate water supply pressures will be maintained to the satisfaction of the City Engineer and the Fire Marshall. **(E)**

i. Utilities near Buildings. Building foundations adjacent to public utilities shall be designed to be self-supporting such that the building weight is not required to be supported during shoring and excavation of adjacent utilities.

j. Solid Waste Service. This site is recommended to use roll-off style solid waste service. The Permitee shall provide sufficient facilities for on-site storage and collection of solid waste and recyclables. Permittee shall provide a Solid Waste Handling Plan showing how materials will be transferred from Buildings 1-18 to the trash enclosure/external collection point. The Solid Waste Handling Plan shall also address other requirements, such as compaction, chute shut-off, sufficient number of bins, and property management responsibility for bin management and positioning. The Permittee shall demonstrate that sufficient space is provided at Building 1 basement trash areas to house extra containers and the vehicle that will transport the containers to the compactor. Applicant to demonstrate that the site plan provides sufficient space for the solid waste vehicle to perform collection and turn around on-site or provide proof of easement from adjacent property. Permittee shall procure sufficient service frequency and shall provide a minimum of 15 feet vertical (overhead) clearance at the trellis. Permittee shall provide a plan showing solid waste setout locations for Buildings 2-18 that do not block parking spaces. All s olid waste collection facilities shall comply with City guidelines. The compactors

shall be installed and functional prior to issuance of occupancy of the 80th dwelling unit. **(E)**

k. Solid Waste. Prior to issuance of any certificate of occupancy, Permittee shall construct a new trash enclosure to serve the project. The enclosure shall accommodate the required two self-contained compactors at minimum to serve this development. The proposed enclosure shall be designed per the Development Guidelines for Solid Waste Services and enclosure drains must discharge to sanitary sewer line. The enclosure will be subject to the City's review/approval prior to construction of the enclosure. **(E)**

l. Off-Site Recycled Water. Prior to final map approval, the Permittee shall submit construction documents, including plans, studies, reports, and estimates to extend the City's recycled water pipeline. The work consists of installing approximately 1,800 linear feet of new 8 inch diameter recycled water pipeline in Great Mall Parkway starting at Centre Pointe, crossing Montague Expressway, running along Capitol Avenue, and tieing into the Valley Transportation Authority's planned recycled water pipeline extension at South Milpitas Boulevard. Applicant shall secure an easement for the City of Milpitas benefit, from Santa Clara County for the installation and future maintenance of the relocated water line within Montague Expressway. Prior to the first certificate of occupancy, the Permittee shall construct the off-site recycled water pipeline. The Permitee may be reimbursed through the TASP Fee program for the portions of the recycled waterline not in front of their property. The Permitee shall keep accurate records of all construction costs for the installation and shall confer with Utility Staff regarding the segments that need to be tracked separately.

**FEES**

38. Development Fees: Permittee shall submit the following items with the building permit application and pay the related estimated fees prior to building permit issuance:
    a. Sewer Needs Questionnaire and/or Industrial Waste Questionnaire
    b. Water Service Agreement(s) for water meter(s), detector check(s), and double check detector assembly.
    c. Storm water connection fee of $21,562 per acre.
    d. Water, sewer and treatment plant fees will be calculated at the time of building plan check submittal.
    e. Calaveras Blvd Widening Traffic Impact Fee of $235 per residential unit and (in 2009 dollars) prior to building permit issuance. Fee shall be adjusted per ENR index rate at the time of building permit issuance.

    Contact the Land Development Section of the Engineering Division at (408) 586-3328 to obtain the form(s). *The above fees are preliminary estimates and subject to change.* There is no vesting of the fees with the adoption of this Resolution. **(E)**

36. Transit Area Specific Plan (TASP) Fees - Prior to any building permit issuance, Permittee shall pay a Transit Area Development Impact fee. The amount of fee to be paid shall be the amount

in effect pursuant to the implementing City Council ordinance or resolution at the time full payment is made to the City at the time of building permit issuance.

37. Fee Adjustments: All applicable fees for the Project may be adjusted prior to building permit issuance. The amount of fee to be paid shall be the amount in effect pursuant to the implementing City Council ordinance or resolution at the time full payment is made to the City at the time of building permit issuance. **(E)**

38. Building Permit Automation Fee: Prior to any building permit issuance, Permittee shall pay all applicable development fees, as determined by the City Engineer in accordance with the most current approved fee schedule adopted by the City Council, including but not limited to, connection fees (water, sewer and storm), Transit Area impact fee, plan check and inspection deposit, and 2.5% building permit automation fee as approved by City Council Resolution No. 7590. **(E)**

**FINAL MAP (STANDARD)**

39. Community Facilities District (CFD) Annexation: Prior to final map approval, Permittee shall submit an executed consent to annex the subject property into CFD 2008-1 and shall agree to pay the special taxes levied by CFD 2008-1 for the purpose of maintaining the public services. The petition to annex into the CFD shall be finalized concurrently with the final map recordation or prior to any building permit issuance, whichever occurs first. Permittee shall comply with all rules, regulations, policies, and practices established by State Law and by the City with respect to the CFD including, without limitation, the requirements for notice and disclosure to future owners and residents. **(E)**

40. Final Map: Prior to issuance of any building permit, the final map shall be recorded. The final map submittal shall meet the following requirements:

    a. Provide a current title report with your final map submittal, not more than 90 days old.
    b. All final maps shall designate all common lots and easements as lettered lots or lettered easements.
    c. The final map shall clearly delineate the project property line and the County right of way line. County right of way and Project boundary should be contiguous.
    d. All final maps shall be tied to the North America Datum of 1983 (NAD 83), California Coordinate of 1983, zone 3.
    e. Permittee shall dedicate all necessary easements for public utilities, emergency vehicle access, solid waste collection, pedestrian corridors, sidewalks, trails, paths, parks and public access on the final map for acceptance by the City in compliance with the City's Engineering Guidelines and the approved Tentative Map.
    f. Prior to recordation of any final map, Permittee shall submit to the City a digital copy of the approved final map in AutoCAD and GIS format. **(E)**

41. Homeowners/Property Management Association: Prior to final map approval, Permittee shall establish a Homeowners/Property Management Association ("Association"). The Association shall be responsible for the maintenance of the landscaping, walls, buildings, private street lights, common area and private streets and shall have assessment power. The Association

shall manage the onsite water, recycled water, storm, and sewer system and implement the Solid Waste handling plan. This information shall be clearly included in the Conditions, Covenants, and Restrictions (CC&R) and recorded documents. The CC&R document shall be submitted for review and approval by the City Engineer. **(E)**

## CONSTRUCTION (STANDARD)

42. Improvement Plans: Prior to final map approval, Permittee shall obtain design approval and bond for all necessary public improvements, including but not limited to the following:

    a. Removal and installation of new curb, gutter, and sidewalk, median modification or installation, signage and striping, street lights, street trees, fire hydrants, bus stop, and storm, water, and sewer service installation.
    b. All improvements plans shall be prepared using Vertical Datum of 1988 (NAVD 88). The specific city benchmark used for the project shall be indicated on the cover sheet of each improvement plan set.
    c. Plans for all public improvements shall be prepared on Mylar (24"x36" sheets) with City Standard Title Block and developer shall submit a digital copy of the Record Drawings AutoCAD and GIS format upon completion of improvements to the satisfaction of the City Engineer.
    d. Permittee shall also execute a secured public improvement agreement. The agreement shall be secured for an amount of 100% of the engineer's estimate of the construction cost for faithful performance and 100% of the engineer's estimate of the construction cost for labor & materials. The public facilities such as water meters, RP backflow preventers, sewer clean outs, etc., shall be placed so access is maintained and kept clear of traffic. **(E)**

43. Initial Acceptance: All improvements must be installed in accordance with the City of Milpitas standard drawing and specification, and shall be constructed to the City Engineer's satisfaction and accepted by the City prior to issuance of any final certificate of occupancy of any unit. **(E)**

44. Utility Undergrounding: Prior to issuance of the first Certificate of Occupancy, Permittee shall underground all existing wires and overhang utilities (except the distribution lines located at the upper end of the metal towers, lower lines shall be undergrounded) and remove all related poles within the proposed development and along all street frontages. All proposed utilities within the subdivision shall also be undergrounded. The improvement plans shall show all existing utilities within and bordering the proposed development, and clearly identify the existing PG&E wire towers and state wire voltage. All utility vaults, boxes, cabinets, and pedestals shall be identified and labeled on the improvement plans. Above ground utility facilities shall be underground, relocated, or screened to the satisfaction of the City Engineer and the Planning Director. **(E)**

45. Joint Trench Relocation: The joint trench shall be relocated in the field, if necessary, to accommodate the approved street layout (sidewalks, trees, streetlights, etc.) to the satisfaction of the City Engineer and the Planning Director. All joint trench structures (vaults, boxes, cabinets, etc.) shall be adjusted to the final grade. **(E)**

46. Encroachment Permit: Prior to any work within the public right of way or City easement, Permittee shall obtain an encroachment permit from City of Milpitas Engineering Division. Prior to installing offsite improvements, Permittee shall obtain an encroachment permit from the City of Milpitas and all necessary encroachment permits from other affected agencies and private parties, including but not limited to, Pacific Gas and Electric, SBC, Comcast, Santa Clara Valley Water District, Santa Clara County road and Airport Department, and Santa Clara Valley Transportation Agency (VTA). Copies of any approvals or permits shall be submitted to the City of Milpitas Engineering Division as a part of the encroachment permit review. **(E)**

47. Agency Approval: It is the responsibility of the Owner or Designee to obtain any necessary encroachment permits from affected agencies and private parties, including but not limited to, Pacific Gas and Electric, SBC, Comcast, Santa Clara Valley Water District and Caltrans. Copies of any approvals or permits must be submitted to the City of Milpitas Engineering Division. **(E)**

48. Construction Schedule: Prior to start of any construction, Permittee shall submit a construction schedule and monitoring plan for City Engineer review and approval. The construction schedule and monitoring plan shall include, but not be limited to, construction staging area, parking area for the construction workers, personnel parking, temporary construction fencing, and construction information signage and establish a neighborhood hotline to record and respond to neighborhood construction related concerns. Permittee shall coordinate their construction activities with other construction activities in the vicinity of this project. Permittee's contractor is also required to submit updated monthly construction schedules to the City Engineer for the purpose of monitoring construction activities and work progress. **(E)**

49. Demolition: All utilities shall be properly disconnected before the building can be demolished. Show (state) how the water service(s), sewer service(s) and storm service(s) will be disconnected. The water service shall be locked off in the meter box and disconnected or capped at main line in the street if the water meter is not to be used. The sanitary sewer shall be capped at the clean out near the property line or approved location if it is not to be used. The storm drain shall be capped off at a manhole or inlet structure or approved location if it is not to be used. **(E)**

50. Maximum Slopes: All slopes adjacent to public sidewalks and streets shall be designed to a maximum grade of 4:1 slope. The grading design shall also provide a 1' flat bench at the top and bottom of the slope adjacent to the public sidewalks, streets, or pathways. **(E)**

51. Tree Removal Permit: In accordance with COMC Chapter 2, Title X (Ord. 201), Permittee may be required to obtain a permit for removal of any existing tree(s). Contact the Public Works Department at (408) 586-2600 to obtain the requirements and forms. **(E)**

52. Underground Service Alert (USA): Permittee shall call Underground Service Alert (U.S.A.) at (800) 642-2444, 48 hrs prior to construction for location of utilities. **(E)**

53. Mailboxes: Prior to installation of mailboxes, Permittee shall obtain approval from the US Postal Services and submit documentation to the City for review. Structures to protect

mailboxes may be required as a result of the Building, Engineering and Planning Divisions review. **(E)**

## FLOODPLAIN MANAGEMENT (STANDARD)

54. Special Flood Hazard Area: The proposed development is located within the Special Flood Hazard Area (SFHA), and, therefore, shall comply with the National Flood Insurance Program (NFIP) Title 44 of the Code of Federal Regulations and the City of Milpitas (City) Flood Plain Management Regulations, City of Milpitas Code (COMC) Title XI Chapter 15. Prior to final map approval or any building permit issuance, Permittee shall obtain a Conditional Letter of Map Revision (CLOMR) or a Conditional Letter of Map Revision based on Fill (CLOMR-F) from the Federal Emergency Management Agency (FEMA), conditionally approving the revised floodplain or the removal of the development from the SFHA. Permittee shall also obtain a Letter of Map Revision (LOMR) or a Letter of Map Revision based on Fill (LOMR-F) and shall provide all elevation certificates prior to final building inspection or issuance of certificate of occupancy for any portion of the development. The proposed grading plan shall comply with the established BFE as determined in the final flood study report, the approved CLOMR or CLOMR-F, or the official FEMA Federal Insurance Rate Map (FIRM). **(E)**

55. Floodplain Management Ordinance: Per Chapter 15, Title XI of Milpitas Municipal Code (Ord. No. 209.4) the lowest floor elevation (finished floor) of each structure shall be at least one foot above the Base Flood Elevation (BFE). The structure pad(s) shall be properly designed by a registered civil engineer and compacted to meet FEMA's criterion. In addition, the pad(s) shall extend beyond the building walls before dropping below the base flood elevation, and shall have appropriate protection from erosion and scour. All electrical equipment, mechanical equipment, and utility type equipment servicing the structure shall be located above the BFE, or shall be flood proofed, and shall be constructed to prevent damage from flooding events. Any trailers, modular buildings, or pre-manufactured dwelling units located on this site for periods of time greater than one year, shall be adequately anchored to resist flotation, collapse and lateral movements per Floodplain Management Ordinance. The Owner or Designee's civil engineer shall complete and submit several FEMA Elevation Certificates to the City at different stages of the construction. Flood insurance is required for any construction that is financed with government backed loans. **(E)**

56. Flood Study: Prior to final map approval or any building permit issuance, Permittee shall submit a Flood Study for the project demonstrating, to the satisfaction of the City Engineer, that the proposed development has NO adverse impact to the surrounding flood plain within the SFHA and to flood carrying capacity of the area. The study should include cumulative effects of existing and proposed developments demonstrating the combined effects will not increase the water surface elevation of the Base Flood (BFE) more than one foot at any point. For the AO Flood Zone, the flood study is required to establish the BFE, and set the building elevation accordingly. The flood study shall be consistent with the requirements in accordance with Title 44 of the Code of Federal Regulations by establishing a hydraulic model and HEC-RAS. **(E)**

57. Drainage Study: Prior to final map approval or any building permit issuance, Permittee shall submit a final grading plan and hydrologic/hydraulic study prepared by a registered Civil Engineer, consistent with the approved CLOMR. The drainage study shall analyze the existing and ultimate conditions and facilities. The study shall be reviewed and approved by the City Engineer and Permittee shall satisfy the conclusions and recommendations of the approved drainage study. **(E)**

58. Elevation Certificates: Permittee shall submit an elevation certificate for each lot or structure that is to be removed from the SFHA:

    a. Prior to any grading permit issuance, based on an approved grading plan. This elevation certificate shall contain all proposed grades applicable and shall be required in order to receive community acknowledgement for the CLOMR or CLOMR-F application.
    b. Prior to building foundation pour, based on finished formwork while the building is under construction. If Permittee intends to apply for a LOMR or LOMR-F prior to finished construction, this elevation certificate shall be submitted after the foundation pour and shall be based on existing finished floor and adjacent grades. It shall be required in order to receive community acknowledgement for the LOMR or LOMR-F application.
    c. Prior to occupancy of each building or structure, based on finished construction. This elevation certificate shall contain all required finished grades and shall be based on existing information.
    d. Prior to final occupancy, Permittee shall submit a binder containing all the elevation certificates produced for the each phase of the project. **(E)**

**CLEAN WATER (STANDARD)**

59. Construction Storm Water Quality: Permittee shall comply with the requirements of the National Pollution Elimination Discharge System (NPDES) permit as administered by the California State Water Resources Control Board (State Board) and the San Francisco Bay Regional Water Quality Control Board (Regional Board). Prior to the issuance of any building, demolition, or grading permit, Permittee shall submit an Erosion and Sediment Control Plan (Erosion Control Plan) as a part of the improvement plan submittal. The erosion control plan shall show all construction best management practices (BMPs) and shall comply with the requirements of the NPDES, the Municipal Regional Permit Order R2-2009-0074 (MRP), and the City's stormwater and urban runoff pollution control standards and guidelines (City's Clean Water Program). Permittee shall ensure that all contractors and sub-contractors install and regularly maintain all construction BMPs as required by the approved erosion control plan, the COMC, and the City's Clean Water Program. **(E)**

60. Construction General Permit Compliance: Permittee shall comply with the requirements of the Construction General Permit as administered by the State and Regional Boards. Permittee shall obtain a Construction Activities Storm Water General Permit (State Permit) from the State Board. Prior to any construction activities and prior to the issuance of any building, demolition, or grading permit, Permittee shall submit:

a. a complete Storm Water Pollution Prevention Plan (SWPPP) with the project Waste Discharge Identification Number (WDID) displayed on the cover,
b. a copy of the approved Notice of Intent (NOI) from the State Board, and
c. an erosion control plan and a site monitoring plan meeting the satisfaction of the City Engineer.

Permittee shall ensure that all contractors and sub-contractors install and regularly maintain all storm water quality control measures as required by the approved SWPPP, the approved erosion control plan, the COMC, and the City's Clean Water Program.

Prior to final occupancy, Permittee shall submit an approved Notice of Termination (NOT). For phased occupancy, Permittee shall submit a Change of Information (COI) or an NOT approved by the State Board that removes each phase of occupancy from the boundaries of the State Permit prior to the issuance of occupancy for that phase. Contact the State and Regional Boards for questions regarding your specific project. For general information, contact the City of Milpitas Engineering Division at (408) 586-3329. **(E)**

61. Post-Construction Storm Water Quality: Permittee shall comply with the requirements of the MRP for post-construction storm water treatment (provision C.3 regarding new development and redevelopment requirements for regulated projects) and the City's Clean Water Program. Permittee shall submit a final, certified storm water quality control plan (SWCP), a SWCP sheet, and a post-construction BMP operations and maintenance plan (O&M) in accordance with the City's Clean Water Program and meeting the satisfaction of the City Engineer. **(E)**

62. Storm Water Quality Control Plan (SWCP): Prior to final map approval or any building permit issuance, Permittee shall submit a separate final or amended existing SWCP that incorporates post-construction BMPs for the treatment of storm water run off from all areas of the parcels. The SWCP shall incorporate source control, site design, and storm water treatment consistent with the MRP requirements and the City's Clean Water Program.

a. The SWCP shall comply with all "Model Conditions of Approval for Stormwater Quality" as shown in the Stormwater Section of the Engineering Plans and Map Procedures and Guidelines, dated July 15, 2010 and are hereby incorporated as conditions of project approval.

b. The final SWCP shall be certified by a third party reviewer from the MRP approved list of certifiers. The third party reviewer shall certify that the SWCP complies with the MRP requirements. A list of qualified reviewers can be found at the Santa Clara Valley Urban Runoff Pollution Prevention Plan (SCVRPPP) website (http://www.scvurppp-w2k.com/)

c. O&M Plan: The final SWCP shall include an Operation and Maintenance (O&M) Plan, acceptable to the City Engineer, describing the operation and maintenance procedures needed to insure that storm water treatment measures continue to work as intended and do not create a nuisance (including vector control). The plan shall include all BMP details, a location map, a maintenance schedule, and inspection and reporting templates. The

treatment measures shall be maintained for the life of the project. The storm water control operation and maintenance plan shall include the Permittee's signed statement accepting responsibility for maintenance until the responsibility is legally transferred.

d. O&M Agreement: Prior to final occupancy, Permittee shall execute and record an O&M Agreement with the City for the operation, maintenance, and annual inspection of the C.3 treatment facilities. Permittee shall submit documentation of inspection and maintenance to the City's Utility Section annually for reporting to the Regional Board.

e. Permittee shall include language in the approved CC&R providing the City with an annual inspection report in conformance with the approved O&M plan and agreement. If the City does not receive the report, the City will conduct the field inspection and report for the site and the applicant and its successor shall be responsible to pay all associated costs.

f. Format: The SWCP shall comply with the City's Standard SWCP formatting policy.

g. All permit applications shall be consistent with the applicant's final Storm Water Control Plan and approved special conditions, and shall include drawings and specifications necessary to implement all measures described in the approved Plan. Onsite improvement plans shall show the details and methods of construction for site design features, pervious pavements, self-retaining areas, treatment BMPs, permanent source control BMPs, and other features that control storm water flow and potential storm water pollutants. Site design shall limit directly connected impervious areas. Any changes to the final Storm Water Control Plan shall require Site & Architectural ("S" Zone) Amendment application review.

h. Storm Water Control Plan Sheet: A plan sheet shall be included in the offsite and onsite improvement plans for Storm Water Control. The sheet will show and label all drainage areas, treatment measures, drainage flow lines, high points, and low points. Each treatment measure shall have an independent drainage area which shall be designated. The sheet will provide sections and details for grading, drainage, and treatment measures. The sheet will include a table correlating the drainage areas to the treatment measures and summarizing the treatment provided.

i. Storm Water Control Inspection: Prior to initial acceptance of public improvements or initial occupancy for private improvements, the Third Party Certifier of the SWCP shall submit post-construction certification verifying that the post-construction BMPs have been installed correctly and are functioning properly. **(E)**

**UTILITIES (STANDARD)**

63. Utility Protection. All existing public utilities shall be protected in place and if necessary relocated as approved by the City Engineer. No permanent structure is permitted within City easements and no trees or deep-rooted shrubs are permitted within City utility easements, where the easement is located within landscape areas. **(E)**

64. Utility Capacity. The issuance of building permits to implement this land use development will be suspended if necessary to stay within (1) available water supplies, or (2) the safe or allocated capacity at the San Jose/Santa Clara Water Pollution Control Plant, and will remain suspended until water and sewage capacity are available. No vested right to the issuance of a Building Permit is acquired by the approval of this land development. The foregoing provisions are a material (demand/supply) condition to this approval. **(E)**

65. Utility Studies. Prior to final map recordation, Permittee shall submit and obtain approval from the City Engineer of the water, sewer, and storm drainage studies for this development. These studies shall identify the development's effect on the City's present Master Plans and the impact of this development on the trunk lines. If the results of the study indicate that this development contributes to the over-capacity of the trunk line, it is anticipated that the developer will be required to mitigate the overflow or shortage by construction of a parallel line or pay a mitigation charge, if acceptable, to the satisfaction of the City Engineer. **(E)**

66. Utility Modeling. Hydraulic modeling is required to verify the capacity of the adjacent water and sewer system piping and determine points of connection. Permittee shall authorize the City to proceed with hydraulic modeling and the costs of the modeling shall be charged to Applicant's PJ Account. **(E)**

67. Sanitary Sewer Discharge. Prior to any discharge into the sanitary sewer system, Permittee shall obtain all required industrial wastewater discharge approvals from San Jose/Santa Clara Water Pollution Control Plant (WPCP) by calling WPCP at (408) 277-2755. **(E)**

68. Per Chapter 6, Title VIII of Milpitas Municipal Code (Ord. No. 240); the landscape irrigation systems for street landscape, Park A, Park B, and the project site must be designed to meet the City's recycled water guidelines and connect to recycled water system. To meet the recycle water guideline the developer shall:

    a. Design the landscape irrigation for recycled water use. Use of recycled water applies to all existing rehabilitated and/or new landscape.
    b. Design the irrigation system in conformance to the South Bay Water Recycling Guidelines and City of Milpitas Supplemental Guidelines. Prior to building permit issuance the City will submit the plans to the California Department of Public Health (CDPH) for approval; this approval requires additional processing time. The owner is responsible for all costs for designing and installing site improvements, connecting to the recycled water main, and processing of City and CDPH approvals. Contact the Land Development Section of the Engineering Division at (408) 586-3329 to obtain copies of design guidelines and standards.
    c. Protect outdoor eating areas from overspray or wind drift of irrigation water to minimize public contact with recycled water. Recycled water shall not be used for washing eating areas, walkways, pavements, and any other uncontrolled access areas. **(E)**

d. The on-site recycled water irrigation system shall be split into several parallel systems to the satisfaction of the City Engineer. The purpose is to match construction phasing in order to allow recycled water use at the final occupancy for each phase. For example: Parks A and B would be on one meter, the podium building would be on one meter, the street landscape would be on a separate meter, and the landscaping around the condominiums would be served by two separate meters.

69. Landscaping Ordinance 238. In accordance with the provisions of Chapter 5, Title VIII (Ordinance 238) of the COMC for new or rehabilitated landscaping areas equaling 2500 square feet or greater, the applicant shall:

a. Provide separate water meters for domestic water service & irrigation service.
b. Provide separate domestic meters for each proposed use (Residential, Food Services, Commercial/Office).
c. Comply with all the requirements of Ordinance 238.
d. Submit two sets of landscape and irrigation improvement plans to the Building Division with the building permit plan check package. Prior to any building permit issuance, Approval from the Land Development Section of the Engineering Division is required prior to any building permit issuance, and submittal of the Certificate of Substantial Completion is required prior to final occupancy inspection. (E)

Contact the Land Development Section of the Engineering Division at (408) 586-3329 for information on the submittal requirements and approval process. **(E)**

**SOLID WASTE MANAGEMENT & RECYCLING (STANDARD)**

70. Solid Waste Handling Plan (Report). Prior to Final Map approval or any building permit issuance, Permittee shall submit a final Solid Waste Handling Plan that incorporates the following solid waste handling requirements and meeting the satisfaction of the City Engineer:

a. A description of the Solid Waste Services required for the development per the Development Guidelines for Solid Waste Services (Development Guidelines). The description shall include sizing calculations, type of service (front load bins, roll-off compactors, etc.), size of bins, and level of service (e.g. number of pick ups per week).
b. A description of the Solid Waste Operation at ultimate build out and for each phase of the development.
c. A detail of the solid waste enclosure designed per the Development Guidelines for Solid Waste Services to house all service described above and all necessary equipment. The enclosure design shall provide adequate access for the solid waste truck, and allocate enough space for the solid waste truck operation without impacting the proposed private street. The access to the location and size of the enclosure shall be designed to the City Engineer's satisfaction and shown on the plans prior to any building permit issuance.
d. A solid waste handling plan sheet shall be incorporated in the site improvement plan set containing the enclosure detail, a sizing table, a service table, a description of the solid waste operations, and truck turning templates for collection vehicles.

e. The enclosure drains shall discharge to the sanitary sewer line. Storm drain inlets shall be located at least 25 feet away from enclosures to prevent accidental spills from entering storm drains. Enclosures are not permitted within public utility easements.
f. The Homeowners Association shall be responsible for solid waste handling. The Solid Waste Handling Plan shall include detailed, step-by-step instructions describing the management of solid waste from generation to disposal. The plan shall demonstrate how recycling and waste will be separately handled and maintained.
g. Permittee shall complete the construction of the new trash enclosure to serve the Project prior to issuance of the First Certificate of Occupancy. **(E)**

71. Solid Waste Management. Per Chapter 200, Solid Waste Management, V-200-3.10, *General Requirement*, Permittee shall not keep or accumulate, or permit to be kept or accumulated, any solid waste of any kind and is responsible for proper keeping, accumulating and delivery of solid waste. In addition, according to V-200-3.20 *Owner Responsible for Solid Waste, Recyclables, and Yard Waste*, Permittee shall subscribe to and pay for solid waste services rendered. Prior to issuance of any certificate of occupancy, Permittee shall provide evidence to the City that a sufficient level of trash and recycling service has been secured using a Service Agreement with Republic Services (formally BFI). After Permittee has full occupancy, Permittee shall contact the Republic Services commercial representative to review the adequacy of the solid waste level of services. If services are determined to be inadequate, Permittee shall increase the service to the level determined by the evaluation. **(E)**

72. Recycling Report, Part I. Prior to demolition permit issuance, Permittee's contractor shall submit Part I of a Recycling Report on business letterhead to the Building Division, for forwarding to the Engineering Section. This initial report shall be approved by the City's Utility Engineering and Solid Waste Section (Utility Section) prior to demolition permit issuance. The report shall describe the following resource recovery activities:

    a. What materials will be salvaged?
    b. How materials will be processed during demolition?
    c. Intended locations or businesses for reuse or recycling.
    d. Quantity estimates in tons (both recyclable and for landfill disposal). Estimates for recycling and disposal tonnage amounts by material type shall be included as separate items in all reports to the Building Division before demolition begins.

    Permittee's contractor shall make every effort to salvage materials for reuse and recycling. **(E)**

73. Recycling Report, Part II. Prior to final approval of the demolition permit or any building permit issuance, Permittee shall submit Part II of the Recycling Report to the Building Division for forwarding to the Utility Section in order to confirm the information described on Part I of the Recycling Report, especially materials generated and actual quantities of recycled materials. Part II of the Recycling Report shall be supported by copies of weight tags and receipts of "end dumps." Actual reuse, recycling, and disposal tonnage amounts (and estimates for "end dumps") shall be submitted to the Building Division for approval by the Utility Section prior to inspection by the Building Division. **(E)**

74. Demolished Material Removal. All demolished materials including, but not limited to, broken concrete, asphalt paving, pipe, vegetation, excess earth, building debris, and other unsuitable materials, etc., shall be removed from the job site for recycling or disposal by Permittee's contractor, to the satisfaction of the City Engineer. Permittee's contractor shall, to the maximum extent possible, reuse any useful construction materials generated during the demolition and construction of the site. Permittee's contractor shall recycle all building and paving materials including, but not limited to roofing materials, wood, drywall, metals, and miscellaneous and composite materials, aggregate base material, asphalt, and concrete. Permittee's contractor shall perform all recycling and/or disposal by removal from the job site. **(E)**

**Planning Commission Added Conditions:**

75. Landscaping and Public Art: Applicant to work with staff and City arborist regarding species of trees for site landscaping, the addition of art for the project and energy efficiency improvements for the project. **(P)**

**Key:**
(P) = Planning
(B) = Building
(E) = Engineering
(F) = Fire Prevention
(CA) = City Attorney

# MEETING MINUTES

**MILPITAS PLANNING COMMISSION**
**Milpitas City Hall, Council Chambers**
**455 E. Calaveras Blvd., Milpitas, CA**

**Wednesday, March 25, 2015**

**I. PLEDGE OF ALLEGIANCE**

**Chair Mandal** called the meeting to order at 7:00 P.M. and led the Pledge of Allegiance.

**II. ROLL CALL/ SEATING OF ALTERNATE**

**Commissioners**
**Present:** Chair Sudhir Mandal, Vice Chair Larry Ciardella, Commissioners Rajeev Madnawat, Demetress Morris, Hon Lien, Ray Maglalang

**Absent:** Gurdev Sandhu and Zeya Mohsin

Commissioner Madnawat left the meeting at 8:05 PM

**Staff:** Steven McHarris, Johnny Phan, Adam Petersen, Shaunn Mendrin, Tim Wong

**III. PUBLIC FORUM**

**Chair Mandal** invited members of the audience to address the Commission and there were no speakers.

**IV. APPROVAL OF MEETING MINUTES**

**Chair Mandal** called for approval of the March 11, 2015 meeting minutes of the Planning Commission.

**Motion** to approve Planning Commission meeting minutes as submitted.

Motion/Second: Commissioner Maglalang/Commissioner Madnawat

AYES: 6

NOES: 0

ABSTAIN: 0

**V. ANNOUNCEMENTS**

Vice Chair Ciardella announced that he met with the developer for the Lennar project.

**VI. CONFLICT OF INTEREST**

**Assistant City Attorney Johnny Phan** asked if any member of the Commission had any personal or financial conflict of interest related to any of the items on the agenda.

There were no reported conflicts.

**VII. APPROVAL OF AGENDA**

**Chair Mandal** asked if staff or Commissioners had changes to the agenda and Planning Director Steven McHarris announced that item VIII-1 was deferred to the next meeting.

**Motion** to approve the March 25, 2015 agenda.

Motion/Second: Commissioner Madnawat/Vice Chair Ciardella

AYES: 6

NOES: 0

## VIII. CONSENT CALENDAR

**VIII-1** **PRESENTATION OF THE PROPOSED 2015-20 CAPITAL IMPROVEMENT PROGRAM (CIP):** Presentation of the CIP program, providing an overview of the Proposed 2015-20 CIP Annual Report.

Item deferred to the next meeting.

## IX. PUBLIC HEARING

**IX-1** **PUBLIC STORAGE REMODEL – 1600, 1601 Watson Ct / 1080 Pecten Ct. – EA14-0001, SD14-0004, UP14-0007:** A request for a Site Development Permit for the complete demolition of nine buildings and partial demolition of five buildings and construction of two new three-story storage buildings and a two-story mini storage building on three existing mini storage parcels and a Conditional Use Permit to allow mini-storage use on the Heavy Industrial Zoning District and apply for an increase in FAR for the additional square footage proposed. A Mitigated Negative Declaration has been prepared and circulated for this project.

Project Planner Adam Petersen reviewed a PowerPoint presentation discussing the project.

Vice Chair Ciardella asked about the location of the 90 parking spaces and asked if they would be rented out. Mr. Petersen showed the location and said the parking spots will be used for patrons of the public storage.

Chair Mandal said he is concerned with RV or boat parking at the site. Mr. Petersen said the spaces are 9'x18' and that it would be difficult to park an RV or a boat in a space that size.

Chair Mandal asked if there is consideration for public art and Mr. Petersen said the applicant has not proposed public art and the public art ordinance has not gone into effect yet.

Applicant Jim Fitzpatrick, Senior Vice President, said there is a demand for public storage and that their internal studies show this as a good location, and he said the parking spaces are for customers and there will not be parking for RV's or boats.

Chair Mandal opened the public hearing and Milpitas resident Robert Marini asked what will happen to the items in the buildings that are being demolished and how they would be relocated, and if there are elevators for access to the 2nd floor.

Mr. Petersen said there are storage units on the 2nd floor and that each building that has more than one floor has an elevator.

**Motion** to close the public hearing.

Motion/Second: Commissioner Madnawat/Vice Chair Ciardella

AYES: 6

NOES: 0

**Motion** to adopt Resolution No. 15-014 approving Site Development Permit SD14-0004, Use Permit UP14-0007, and Environmental Impact Assessment EA14-0001 to allow the demolition of nine existing public storage buildings and partial demolition of five existing public storage buildings in order to construct two new three-story storage buildings and a two-story mini-storage building and a Conditional Use Permit to allow mini-storage use in the Heavy Industrial Zoning District and an increase in the Floor Area Ratio at 1600 and 1601 Watson Court and 1080 Pecten Court (APN 092-08-093; -042; -051) as submitted with the recommendation that the applicant work with staff regarding the species of trees for the site and the addition of public art for the project.

Motion/Second: Commissioner Madnawat/Vice Chair Ciardella

AYES: 6

NOES: 0

**IX-2** **LENNAR 450 MONTAGUE – 450 Montague:** A request for a Site Development Permit No. SD14-0017, Conditional Use Permit No. UP14-0024 and a Major Tentative Map No. MT14-0004 for a 351 unit 5-story building and 138 condominium units located on a 10.5 acre site (APNs: 86-037-004, -019, -020, and -021) zoned Mixed Use Very High Density with Transit Oriented Development & Site and Architectural Overlays (MXD3-TOD-S) within the Transit Area Specific Plan (TASP).

Project Planner Shaunn Mendrin reviewed a PowerPoint presentation discussing the project.

Commissioner Madnawat asked if the parks at this project are public or private and Mr. Mendrin said they will be public parks maintained by the developer.

Commissioner Madnawat recused himself and left the meeting at 8:05 PM.

Chair Manda asked what type of energy efficient options are being built into the project and Mr. Mendrin responded that the applicant has to meet a Build it Green checklist and achieve 80 points by including a combination of things such as window types, insulation and energy efficient appliances.

Applicant Alex Waterbury of Lennar Multifamily Communities provided background on the project.

Kevin Ma of Lennar Homes showed a PowerPoint presentation which included a project summary and park overview.

Jessica Musick of KTGY, the design architects and planners on the project, showed a presentation which included photos of the different views of the buildings and discussed architectural aspects of the project.

Chair Mandal asked for an explanation of the energy efficient options for this project and Mr. Ma made reference to the Build it Green compliance program and said they will use high efficiency windows which will help control the temperature in the units and the units they are building are much more efficient in their layout.

Commissioner Morris asked about the trees selected for the site and Colin Bly of Guzzardo Partnership Inc discussed the trees that were selected and said they can work with the city arborist regarding the species of trees.

Chair Mandal opened the public hearing and there were two speakers.

Milpitas resident Robert Marini said there is a shortage of water in the community, City residents have been asked to cut their water use by 20% if possible, yet the City continues to approve more projects and additional units increases the number of gallons of water needed annually. He said the water fee has doubled in a five year span and the cost of living to the residents increases when more housing is added.

Bob Lawler said his family owns a trucking business located at 730 E Capitol next door to the Lennar project and he he is very much in favor of their project. He said he would like to sell the business to a developer but that there has been difficulty doing so due to the uncertainty of the Milpitas Road extension. He discussed Resolution 15-014 Item #36 and said he is concerned with the methodology of 12% of building costs for the construction of the road and is very much against it.

**Motion** to close the public hearing.

Motion/Second: Commissioner Maglalang/Vice Chair Ciardella

AYES: 5

NOES: 0

Chair Mandal asked about public art for the project and Mr. Mendrin said the public art ordinance has not yet been adopted by City Council but a condition can be added to require public art.

Commissioner Maglalang wants it on the record that he approves of the project but wishes the developer would reconsider including affordable housing.

**Motion** to adopt Resolution No. 15-003 recommending the City Council Approve Site Development Permit No. SD14-0017, Conditional Use Permit UP14-0024, and Tentative Map No. MT14-0004 with additional conditions that the applicant work with staff and the City arborist regarding the species of trees for site landscaping, the addition of art for the project and energy efficiency improvements for the project.

Motion/Second: Commissioner Morris/Vice Chair Ciardella

AYES: 5

NOES: 0

**IX-3** **SUPPORTIVE AND MANUFACTURED HOUSING ZONE AMENDMENTS**: To conform to State law and to implement two Housing Element programs, the City of Milpitas is considering revising its MXD and R2 zoning code. The proposed ordinance revision would permit supportive and transitional housing in the MXD zone and allow manufactured housing in the R2 zoning district. An Addendum to the Housing Element Negative Declaration has been prepared pursuant to Section 15164(b) of the CEQA Guidelines.

Mr. McHarris explained that the Housing Element has been certified by the state but requires zone amendments and staff decided it would be best to return to the Planning Commission and then bring this and the Housing Element together to City Council.

Project Planner Tim Wong provided a PowerPoint presentation.

Chair Mandal opened the public hearing and there were no speakers.

**Motion** to close the public hearing.

Motion/Second: Vice Chair Ciardella/Commissioner Maglalang

AYES: 5

NOES: 0

**Motion** to adopt Resolution No. 15-0015 recommending the City Council approve Zoning Amendment No. ZA15-015 and the Addendum to the 2013 Zoning Ordinance Amendments: Housing Element Implementation Project Initial Study and Negative Declaration.

Motion/Second: Commissioner Morris/Commissioner Maglalang

AYES: 5

NOES: 0

## X. NEW BUSINESS

**No Items**

## XI. ADJOURNMENT

The meeting was adjourned at 9:30 PM to the next meeting scheduled on Wednesday, April 8, 2015.

**Motion** to adjourn to the next meeting.

Motion/Second: Commissioner Morris/Commissioner Maglalang

AYES: 5

NOES: 0

*Meeting Minutes submitted by*
*Planning Secretary Elia Escobar*

LSA ASSOCIATES, INC.
2215 FIFTH STREET
BERKELEY, CALIFORNIA 94710
510.540.7331 TEL
510.540.7344 FAX
CARLSBAD
FRESNO
IRVINE
PALM SPRINGS
PT. RICHMOND
RIVERSIDE
ROCKLIN
SAN LUIS OBISPO

**M E M O R A N D U M**

DATE: March 19, 2015

TO: Shaunn Mendrin, AICP, Senior Planner, City of Milpitas

FROM: Judith H. Malamut, AICP, Principal, Amy Paulsen, AICP, Associate/Project Manager and Nicole Catalano, Assistant Planner

SUBJECT: California Environmental Quality Act (CEQA) Exemption Memo for the 450 Montague Project, Milpitas, California

This memorandum and attachments provide a description of the 450 Montague Project (project) and substantial evidence to confirm that the potential project is exempt from further environmental analysis per Section 15168(c) of the California Environmental Quality Act (CEQA). The approximately 10.5-acre project site is located at 400 and 450 Montague Expressway in Milpitas, Santa Clara County, at the corner of Montague Expressway and East Capitol Avenue. The proposed project would involve the demolition of all existing structures and associated pavements on the site and grading and construction of 489 residential units.

Attachment A provides a project description of the 450 Montague Project (project). This attachment includes a description of the project, location, existing site characteristics, the proposed project and required approvals and entitlements. The City of Milpitas (City) is the CEQA lead agency for the project.

The responses in an environmental checklist (Attachment B) prepared for the project demonstrate for each CEQA topic that because the proposed project was evaluated and impacts were mitigated to the degree possible as part of the Milpitas Transit Area Specific Plan (Specific Plan) Project and EIR, no additional CEQA review is required. CEQA Guidelines 15168(c)(4) recommends using a written checklist or similar device to confirm whether the environmental effects of a subsequent activity were adequately covered in a program EIR. The responses contained in the checklist confirm that the project was considered within the scope of the evaluation within the TASP EIR and no new impacts were identified and no new mitigation measures are required.

The City can approve the 450 Montague project as being within the scope of the Specific Plan covered by its EIR and no new environmental document for the purposes of CEQA clearance is required. Pursuant to Public Resources Code section 21166 and CEQA Guideline 15168, the 450 Montague project is exempt from further review under CEQA. This analysis finds that a Notice of Exemption may be prepared for the project and filed with the Santa Clara County Clerk.

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# ATTACHMENT A

# PROJECT DESCRIPTION

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# PROJECT DESCRIPTION

The following describes the 450 Montague Project (project). This section includes a description of the project, location, existing site characteristics, the proposed project and required approvals and entitlements. The City of Milpitas (City) is the CEQA lead agency for the project.

## A. PROJECT SITE

The following section describes the location and site characteristics and provides a brief overview of the existing land uses within and in the vicinity of the site.

### 1. Location

The approximately 10.5-acre project site is located at 400 and 450 Montague Expressway in Milpitas, Santa Clara County, at the corner of Montague Expressway and East Capitol Avenue. The irregularly-shaped site is bounded by Montague Expressway to the west, Capitol Expressway to the north, Penitencia Creek Channel to the south, and office development to the east. Figure 1 shows the site's regional and local context.

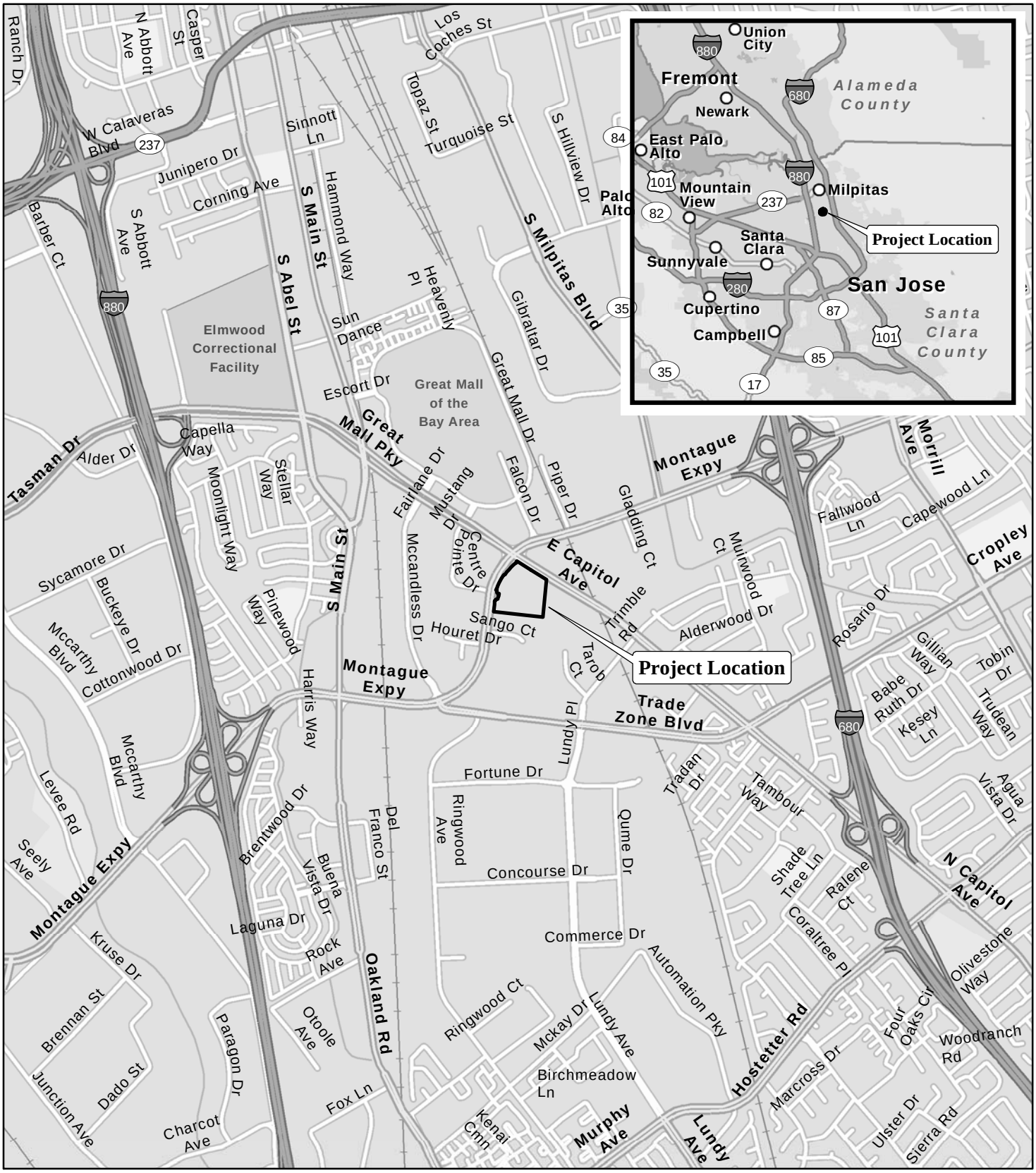
Regional vehicular access to the project site is provided by Interstate 80 (I-880), located approximately 3 miles west of the site and by Interstate 680 (I-680), located approximately 1.5 miles east of the site. The future Bay Area Rapid Transit (BART) Milpitas station is currently under construction and will be co-located with the Montague VTA light rail station, approximately 0.30 miles northeast of the project site.

### 2. Site Characteristics and Current Site Conditions

The generally level project site (Assessor's Parcel Number [APN] 086-37-019, 086-37-020, 086-37-004, and 086-37-021) is located in the southern, light-industrial land use corridor of Milpitas. Approximately 44 percent of the site is currently covered with impervious surfaces, consisting of buildings and paved parking lots, driveways, and walkways. The remainder of the site (approximately 56 percent) consists of pervious vegetated areas.[1]

Two existing office buildings, and their associated surface parking lots, are located on the western portion of the project site. Both structures are one-story in height and are accessible via Montague Expressway. A median island separates the two driveway approaches to the two buildings from Montague Expressway. A row of ornamental trees and other vegetation extends between the two structures. In addition, an electric utility box is also located in the vegetated area between the two properties. The northern building (located at 450 Montague Expressway) is approximately 30,000 square feet and the southern building (located at 400 Montague Expressway) is approximately 40,000 square feet in size.

[1] Carlson, Barbee & Gibson, Inc., 2014. *Stormwater C3 Control Plan*. December 12.




LSA

FIGURE 1

0 1000 2000
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SOURCE: ESRI StreetMap North America (2012).

I:\MLP1501 450 Montague\figures\Fig_1.ai (1/13/15)

*450 Montague Project*

Project Location and Regional Vicinity Map

The eastern and northern portion of the project site is largely undeveloped, including the area directly east of the two office buildings, extending north to the corner of Montague Expressway and East Capitol Avenue. This undeveloped area includes grass vegetation with a few shrubs and trees. An unused driveway approach is located near the northeastern edge of the project site along East Capitol Avenue and is surfaced with gravel and rock.

Mature street trees and landscaped areas border the site on the western edge of the project site near Montague Expressway. Approximately 45 trees (which are greater than 15 inches in diameter at breast height) are located within, or immediately adjacent to, the site. A vegetated channel of the Penitencia Creek is located directly south of the project site. Water was flowing in the creek during the site visit on January 14, 2015. A high-pressure gas transmission line is located south of the Penitencia Creek channel.

There are no existing sidewalks along the portions of Montague Expressway and East Capitol Avenue that front the project site.

## 3. Existing General Plan and Zoning

The project site is currently designated as Boulevard Very High Density Mixed Use and Urban Residential in the City's General Plan. The site is zoned as Mixed Use Very High Density (MXD-3) and Urban Residential (R5). Permitted uses in the Boulevard Very High Density Mixed Use designation include residential, office, commercial and medical. The project would require a Site Development Permit, a Conditional Use Permit and a Major Tentative Map entitlement.

## 4. Milpitas Transit Area Specific Plan

In 2008, the City of Milpitas adopted the Milpitas Transit Area Specific Plan[2] (Specific Plan) for the area in the vicinity of the future BART and current VTA station. The goal of the Specific Plan is to transform the area into a high-density, mixed-use neighborhood that meets the demand for housing, offices and shopping and that is within walking distance to the future Milpitas BART station. Environmental impacts associated with implementation of the Specific Plan were evaluated in the Milpitas Transit Area Specific Plan Draft Environmental Impact Report (TASP EIR).[3] A Final EIR was released in 2008. The project site was included within the area evaluated within the TASP EIR.

The Specific Plan identifies subdistricts within the Specific Plan area, each having their own policies related to street design, land use, building height, setbacks, parks and building design. The project site is located within two overlapping subdistricts within the Specific Plan: the Montague Corridor Subdistrict and the Trade Zone/Montague Subdistrict.

As noted above, the TASP EIR evaluated the environmental impacts associated with implementation of the Specific Plan. Table 1 shows the housing units and population assumptions evaluated within the TASP EIR and also shows existing and proposed housing development.

[2] Dyett & Bhatia, 2008. *Milpitas Transit Area Specific Plan,* June, (amended December 2011).

[3] Dyett & Bhatia, 2007. *Draft Environmental Report, Milpitas Transit Area Specific Plan,* October.

**Table 1: Existing and Proposed Housing Units and Population with the Specific Plan Area**

| | Evaluated Within The TASP EIR | Approved Units | Under Construction | 450 Montague Project | Remaining Development Available |
|---|---|---|---|---|---|
| Housing Units | 7,109 [a] | 2,122 | 1,548 | 489 | 2,950 |
| Population | 17,915 [a] | 5,348 [b] | 3,901 [b] | 1,233 [b] | 7,443 |

[a] Milpitas, City of, 2008. *Final Transit Area Specific Plan EIR.*
[b] Estimated population associated with approved units, under construction units, and the proposed project was determined by using the residents per unit evaluated within the TASP EIR (17,915 residents / 7,109 units = 2.52 residents per unit).
Source: LSA Associates, Inc., 2015.

### 5. Surrounding Land Uses

The project site is located within a light industrial land use corridor of Milpitas that is predominantly developed with commercial office parks and other buildings for industrial uses. The project site is in close proximity to the Great Mall shopping center in Milpitas, located approximately 0.5 miles northwest of the project site. A Heald College campus and a Marriott Courtyard hotel are also located directly northwest of the project site. Commercial office uses associated with Centerpointe Drive are located directly west of the project site on the other side of Montague Expressway, and a combination of office and light industrial uses surround the project site to the east, south and northeast.

## B. PROPOSED PROJECT

This section provides a description of the proposed project as identified in the materials provided by the project applicant that are dated October 17, 2014, and December 15, 2014. The proposed project would involve the demolition of all existing structures and associated pavements on the site and grading and construction of 489 residential units. Figure 2 depicts the proposed conceptual site plan for the project site, and Figures 3a and 3b provide representative conceptual elevations of the project. The proposed project components are described in detail below.

### 1. Residential Development

The proposed project would develop 489 residential units. The project would feature a combination of two different building types: one multi-story building that features 351 podium flats (apartment units) and 17 individual multi-story buildings that feature a total of 138 stacked flats (townhome units). The podium building (Building 1) would front on East Capitol Avenue and Montague Expressway, with five levels of rental residential units above two levels of subterranean parking. Types of units include studio units (690 square feet), one-bedroom units (719 to 1,083 square feet) and two-bedroom units (1,029 to 1,391 square feet). The ground floor of the podium building would contain a 1,330-square-foot leasing lobby, a 725-square-foot sky deck, and a 6,022-square-foot, two-story indoor amenity.

The project would also include the development of 17 multi-story buildings that include 138 for-sale townhomes. The townhomes (Buildings 2 through 18) would vary in size from 1,057 to 1,779 square feet and would include two- and three-bedroom units. The interior of the building configuration would be varied with 3-plex, 6-plex and 9-plex structures. Building heights for the stacked townhome units would reach four stories plus a roof, extending no more than 45 feet in height. Each townhome would be provided a two-car, above-ground garage.

Building heights along East Capitol Avenue would reach 5.5 stories, and building heights along Montague Expressway would range from 3 stories to 5.5 stories.

In addition to the residential development, the project would build two new driveways, two private roads, landscaped paseos, parks, drive aisles, open space improvements, and improvements to public sidewalks and roadways.

The 450 Montague Project would develop in the lower range of the density and intensity standards than what was assumed in the TASP EIR. The Specific Plan allows a density range from 41 to 75 dwelling units per acre and the project proposes a density of 47 dwelling units per acre. In addition, TASP development policies allow the construction of buildings up to 12 stories in height. The proposed project proposes development that will not exceed 5.5 stories in height. Impervious surface area would not exceed 70 percent. Front yard setbacks would conform to the City's standards: 45-foot landscape setback from the curb on Montague Expressway, plus 15- to 20- foot setback from back of sidewalk; 24-foot planting strips; and 10-foot sidewalks for units facing East Capitol Avenue. Other street facing yards would have 12- to 14-foot setback. Side yard setbacks between buildings would average approximately 20 feet. The Penitencia Creek setback would start at 25 feet from the top of the creek with an additional 18-foot setback to buildings.

## 2. Open Space and Landscaping

The proposed project would include approximately 86,648 square feet (approximately 1.99 acres) of open space on the site, including two interior courtyards and two interior parks. The majority of the units would have private open space in the form of balconies. However, 16 percent of the podium apartment units would not have balconies (mostly studio and one-bedroom units) due to overall unit size and proximity to noise from a major arterial. The podium building would provide additional open space via two courtyards and a sky deck. There would be two parks (Park A and Park B) within the development, totaling 1.48 acres that would serve as open space and transition areas between the housing types. The project would include two trails for future residents. One trail (Park B extension) would be located between Building 14 and Building 15 and would connect Park B to Linear Park and other local trails and parks in the area. Another trail (Linear Park) would include a 0.49-acre linear park adjacent and parallel to Penitencia Creek on the southern boundary of the project site. In addition, the proposed project would install a decomposed granite trail over the existing maintenance road along the creek in efforts to support the development of public trails along Lower Penitencia Creek.

Approximately 8.0 acres (70 percent) of the project site would be covered with impervious surface and about 3.5 acres (30 percent) would be covered with landscaped areas including lawns, shrubs, and trees. There are 45 protected trees on and immediately bordering the project site, all of which would be removed with development of the proposed project and would be replaced according to City standards.[4] Approximately 324 new trees would be planted along existing public streets and within the project site. Landscaping would be provided throughout the site, including planting strips along public roadways.

[4] Neck of the Woods Tree Service. 2014. *Arborist Report for 400 and 450 Montague Expressway.* October 12.

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FIGURE 2

N

0 80 160

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SOURCE: KTGY GROUP, INC., JANUARY 23, 2015

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*450 Montague Project*

Conceptual Site Plan

View of the Building 1 (Podium) apartments from East Capitol Avenue

LSA

FIGURE 3a

*450 Montague Project*

Representative Conceptual Elevation for Building 1

SOURCE: KTGY GROUP, INC., JANUARY 23, 2015.

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View of the Townhouses from Internal Road

LSA

FIGURE 3b

*450 Montague Project*

Representative Conceptual Elevations for Townhome Buildings 2 – 18

SOURCE: KTGY GROUP, INC., JANUARY 23, 2015.

I:\MLP1501 450 Montague\figures\Fig_3b.ai (1/30/15)

Sidewalks would be constructed on the perimeter of the project site, along Montague Expressway, East Capitol Avenue, the southern boundary of the site by Penitencia Creek (an 8-foot sidewalk is proposed in this location), and the eastern boundary of the project site by Street B. A pedestrian connection would be developed along Penitencia Creek and would terminate at the boundary of the project site to allow future extension by the City.

## 3. Access, Circulation and Parking

All existing driveway approaches and median islands would be removed. Two new driveways would be constructed to provide access to the development from Montague Expressway and East Capitol Avenue. In addition, two new internal private roads would be built within the development (Street A and Street B) as shown on Figure 2. Street A would be accessible directly from Montague Expressway and Street B would be accessible directly from East Capitol Avenue via the new driveways. Street A would intersect the stacked flats and terminate at its intersection with Street B. The two new streets would vary between 26 and 40 feet in width. Vehicular access to each home in the stacked flats would be provided by 10 private drive aisles.

The two new driveways would both be right-turn only and would have one inbound and one outbound lane. The first driveway would be located on Montague Expressway that would prohibit turns from accessing the eastbound left turn pocket on Montague Expressway at Great Mall Parkway/Capitol Avenue. The second driveway would be a temporary driveway and would be located on East Capitol Avenue, approximately 630 feet south of the Montague Expressway/Capitol Avenue intersection. Access from this driveway to the existing southbound left turn pocket on Capitol Avenue at Montague Station would also be prohibited. All project traffic destined for westbound Montague Expressway would most likely make u-turns at the future intersection of Capitol Avenue/Milpitas Avenue extension, proceed northbound on Capitol Avenue, and turn left at the intersection of Montague Expressway/Great Mall Parkway/Capitol Avenue. A future roadway is planned just south of the project site, which would link the proposed project to the future Capitol Avenue/Milpitas Boulevard extension traffic signal. All movements (left and right turn) would be permitted to and from the project site onto Capitol Avenue at the future location, which is not scheduled to be completed until the properties directly south of the proposed project are redeveloped.

A two-level subterranean parking garage would be located below the podium apartment building. The garage height will vary above grade at some points due to the topography and water table, but would be mostly at grade at major entry points. Entrance into the parking garage would be made accessible via Street B and also by Drive Aisle 1 between Building 2 and Building 3. Ramps to the lower level would be located near these entry points. There is no direct access from Montague Expressway or East Capitol Avenue to the parking garage.

A total of 839 parking spaces will be provided for the entire development, including a total of 111 guest parking spaces. The podium apartment building would have 512 parking spaces in the form of standard, compact and tandem parking. The stacked flats would have 327 parking spaces, mostly in the form of garages and minimal surface parking. A total of 127 short-term and long-term bicycle parking spaces would be provided, a majority of which are for the future residents of the podium flats.

## 4. Utilities and Infrastructure

The project site is located in an urban area and is currently served by existing utilities, including: water, sanitary sewer, storm drainage, electricity, and telecommunications infrastructure. The

majority of existing utilities within the boundary of the project site would be removed. Existing and proposed utility connections are discussed below.

**a. Water.** Water service in the City of Milpitas is provided by the Santa Clara County Water District (SCVWD). Existing water mains within the vicinity of the site are located on Montague Expressway and East Capitol Avenue. One water line would be relocated, from Montague Expressway to the center of the travel lane on Montague Expressway. The applicant proposes to secure an easement from Santa Clara County for the installation and future maintenance of the relocated water line within the Montague Expressway right-of-way. In addition, two existing fire hydrants would also be relocated.

**b. Wastewater.** The San José/Santa Clara Water Pollution Control Plant (WPCP) provides wastewater treatment for Milpitas. The City of Milpitas maintains existing sanitary sewer lines within the vicinity of the site. Residential units built as part of the proposed project would connect directly to these lines, which are located on Montague Expressway and East Capitol Avenue.

**c. Stormwater.** The Santa Clara Valley Water District owns and maintains most of the storm-water infrastructure within the City of Milpitas, including the project site. Existing storm drainage infrastructure surrounding the site includes two principle drainage areas:

- Drainage Area 'A': Approximately 3.5 acres of the northern portion of the project site will discharge into the existing storm drain line in Montague Expressway which ultimately flows through an existing outfall into Penitencia Creek. Water discharging from the project site will be treated by a combination of bioretention, raised planters, and media filtration before entering the storm drain system.
- Drainage Area 'B': Approximately 8.0 acres of the southern portion of the project site will discharge into the existing storm drain stub on the project site, which ultimately flows through an existing outfall into Penitencia Creek. Water discharging from the project site will be treated by a combination of bioretention and media filtration before entering the storm drain system.

In addition, bioretention areas will be incorporated into the landscape design to provide appropriate vegetation and water quality treatment, including in open spaces, street frontages, and paseos. On site drainage has been designed consistent with the C3 requirements for Low Impact Development and Special Project Categories. All walkways within the open space area of the development will be sloped to drain onto the surrounding landscaping.

This project would extend the existing recycled water main in Centre Pointe Drive to the project site to provide recycled water for irrigation.

**d. Electricity and Natural Gas.** Electricity and natural gas services to the site are provided by Pacific Gas and Electric Company (PG&E). Existing underground utility connections and gas mains provide electricity and gas to the project site. The proposed project would connect to these existing lines and any new electrical lines would be installed underground.

To reduce energy usage, the project would incorporate green building measures in compliance with CALGreen's 2013 standard building measures for residential buildings and Title 24 requirements.

## C. APPROVALS/PERMITS

The following approvals and permits would be required for the project:

- Site Development Permits
- Conditional Use Permits
- Major Tentative Map Permits
- Demolition Permits
- Building Permits
- Off-Site (Encroachment) Permits
- Tree Removal Permits

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# ATTACHMENT B

# PROGRAM EIR CHECKLIST
# PURSUANT TO CEQA GUIDELINE 15168

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# PROGRAM EIR CHECKLIST
# PURSUANT TO CEQA GUIDELINE 15168

CEQA Guidelines 15168(c)(4) recommends using a written checklist or similar device to confirm whether the environmental effects of a subsequent activity were adequately covered in a program EIR. This checklist confirms that the 450 Montague Project is within the scope of the Transit Area Specific Plan EIR (TASP EIR) and will have no effects and no new mitigation measures are required, and as such, the City can approve the 450 Montague project as being within the scope of the TASP covered by its EIR and no new environmental document is required. Pursuant to Public Resources Code section 21166 and CEQA Guideline 15168, the 450 Montague project is exempt from further review under CEQA.

## ENVIRONMENTAL CHECKLIST

| | | Potentially Significant Impact | Less Than Significant Impact with Mitigation | Less Than Significant Impact | No New Impact |
|---|---|---|---|---|---|
| **I.** | **AESTHETICS.** Would the project: | | | | |
| a) | Have a substantial adverse effect on a scenic vista? | ☐ | ☐ | ☐ | ☒ |
| b) | Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway? | ☐ | ☐ | ☐ | ☒ |
| c) | Substantially degrade the existing visual character or quality of the site and its surroundings? | ☐ | ☐ | ☐ | ☒ |
| d) | Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area? | ☐ | ☐ | ☐ | ☒ |

## DISCUSSION

As described in more detail in the project description (Attachment A), the 10.5-acre site currently includes two vacant one-story light industrial buildings, paved driveways and parking areas, an undeveloped area, and trees and landscaping. The proposed project would involve: (1) the demolition of all existing structures; (2) the removal of existing pavement, landscaping and trees; (3) the construction of 18 buildings, housing 489 residential townhomes and apartment units; and (4) the installation of parks, landscaping, trees, and other site improvements. The proposed buildings would be between three to five-and-a-half stories along Montague Expressway.

The project site (400/450 Montague Expressway) is located within two overlapping subdistricts identified in the Specific Plan: the Montague Corridor Subdistrict and the Trade Zone/Montague Subdistrict. Specific policies that apply to each district are outlined further below and would be applicable to the proposed project.

As noted in the TASP EIR, the Specific Plan will enhance the visual and aesthetic character of the planning area by incorporating specific development standards to ensure that impacts to visual resources are less than significant. These development standards and design guidelines are detailed in Section 5 of the Specific Plan and include policies related to street design, land use, building height, setbacks, parks and building design in order to create a unique character for each subdistrict within the Specific Plan area.

The primary potentially significant impact to scenic resources identified in the TASP EIR was the potential for 12- to 24-story buildings along Montague Expressway to block scenic views of the eastern foothills (Impact 3.2-1). The proposed project would include buildings that would be between three to five-and-a-half stories along Montague Expressway, which is significantly shorter than what was assumed in the TASP EIR (12- to 24-story buildings). Additionally, given the varied heights of the proposed structures on the project site, intermittent views of the hills would still be available from the site. Therefore, the proposed project would have a less severe effect on scenic views of the foothills than was identified in the TASP EIR.

The TASP EIR determined that Specific Plan policies related to aesthetics ensure that impacts are less than significant. The design style and materials proposed for the 450 Montague project are consistent with policies of the Specific Plan.

The TASP EIR also addressed the loss of mature trees that serve as visual or scenic resource in the area, specifically on McCandless Drive. The proposed project is not located on or near McCandless Drive and, as such, would have no impact on the mature trees that exist on McCandless Drive. Other than the scenic trees on McCandless Drive, there are no scenic resources located within the Planning area.[1]

The project would involve removal of all existing trees on the site (including 45 trees that are 15 inches or more in diameter as measured at breast height). Any tree removal on the project site would be conducted in compliance with the City ordinance which requires a tree removal permit for the removal of any protected tree and compensation for lost trees as may be requested by the City. The proposed project includes the planting of approximately 314 trees, which is significantly more than the number of trees currently on the project site.

The TASP EIR found that there are potential significant impacts resulting from the introduction of new light and glare in the area (Impact 3.2-2), but concludes that Specific Plan Development Standards related to lighting will minimize light and glare impacts. The proposed project will not cause any new light and glare impacts.

[1] Dyett and Bhatia, *Draft Environmental Impact Report, Milpitas Transit Area Specific Plan*, October 2007; and *Final Environmental Impact Report, Milpitas Transit Area Specific Plan*, May 2008.

The 450 Montague project is generally consistent with the type of development analyzed in the TASP EIR, it reduces the height of the buildings from what was assumed in the TASP EIR, it is consistent with the Specific Plan policies relating to aesthetics, and it would greatly increase the number of trees on the property and within the area. As such, there is no new impact on visual and aesthetic resources.

## APPLICABLE MITIGATION

No new mitigation measures are required.

## APPLICABLE POLICIES TO REDUCE THE IMPACT

### Midtown Plan Policies

- *Policy 6.13: Require the undergrounding of new utilities.*
- *Policy 6.14: Prioritize the undergoing of existing above ground facilities within the Midtown Area for the use of PG&E Rural 20A money. Consider using other financial resources to complete the undergoing of utilities, as necessary.*

### Specific Plan Development Standards

- Utilities shall be underground or in subsurface conduits and accessible.

### Specific Plan Policies

These policies apply specifically to the Montague Corridor Subdistrict:

- *Policy 4.4: A 40 foot wide, landscaped setback is required from the future right of way line of Montague Expressway.* A landscaped setback creates a strong attractive image for the Transit Area, offers an attractive view to residents or employees in the buildings, and provides a buffer from the heavy traffic volumes and automobile exhaust. The setback will contain a double row of trees and a continuous sidewalk, as shown in the Street Sections in Chapter 5. The future right of way refers to Montague Expressway after its planned expansion to eight through-lanes.
- *Policy 4.6: Buildings will be designed with facades facing Montague Expressway.* A building entrance shall be provided facing onto Montague Expressway. The facades facing Montague Expressway shall not have blank walls, service entrances, or other features that make the façade look like the back side of a building. Building facades should contain punched openings similar to window openings, cornice or other details at the top of the building, and any sloping floors must be concealed. Parking structures may only front on Montague Expressway if the façade facing the expressway is of a design quality equivalent to habitable space.

These policies apply specifically to the Trade Zone/Montague Subdistrict:

- *Policy 4.46: Create a deep landscape setback along Capitol Avenue to separate residences from noise and heavy traffic on Capitol Avenue.* See Figure 5-11, Chapter 5 of the Specific Plan.

This policy applies to the entire Planning Area:

- *Policy 6.41: Construct a continuous trail network as delineated in the Transit Area Plan through land dedication and improvements by property owners in coordination with the Santa Clara Valley Water District and the City of Milpitas.*

Other Specific Plan Development Standards:

5. *Lighting*
    a. Lighting should be designed and placed to direct lighting to appropriate surfaces and minimize glare into adjacent areas.
    b. The light source used in outdoor lighting should provide a white light for better color representation and to create a more pedestrian-friendly environment.
    c. Low pressure sodium lamps are prohibited.
    d. To reinforce the pedestrian character of the area, light standards along sidewalks should be approximately 12 to 16 feet in height.
    e. The use of uplighting to accent interesting architectural features or landscaping is encouraged

**CONCLUSION**

The TASP EIR adequately evaluated the potential aesthetic impacts of the 450 Montague project.

| | Potentially Significant Impact | Less Than Significant Impact with Mitigation | Less Than Significant Impact | No New Impact |
|---|---|---|---|---|
| **II. AGRICULTURAL AND FORESTRY RESOURCES.** In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project: | | | | |
| a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to a non-agricultural use? | ☐ | ☐ | ☐ | ☒ |
| b) Conflict with existing zoning for agricultural use, or a Williamson Act contract? | ☐ | ☐ | ☐ | ☒ |
| c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use? | ☐ | ☐ | ☐ | ☒ |

## DISCUSSION

There are no agricultural or forestry resources located within or near the project site. The Specific Plan area is predominantly urbanized and is classified as "Urban and Built-Up Land" by the State Department of Conservation. The City of Milpitas does contain prime farmland between North McCarthy Boulevard and Coyote Creek, north of Route 237. However, this prime farmland is not located within the boundaries of the Specific Plan. The proposed project is also not located on land that is currently under the Williamson Act contract. In addition, the City does not contain woodland or forestland cover, nor land zoned for timberland production

Therefore, the proposed project would not result in a significant impact to agriculture or forestry resources.

## APPLICABLE MITIGATION

No new mitigation measures are required.

## CONCLUSION

There would be no agriculture or forestry impacts associated with the 450 Montague project.

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| | Potentially Significant Impact | Less Than Significant Impact with Mitigation | Less Than Significant Impact | No New Impact |
|---|---|---|---|---|
| **III. AIR QUALITY.** Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project: | | | | |
| a) Conflict with or obstruct implementation of the applicable air quality plan? | ☐ | ☐ | ☐ | ☒ |
| b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation? | ☐ | ☐ | ☐ | ☒ |
| c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or State ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)? | ☐ | ☐ | ☐ | ☒ |
| d) Expose sensitive receptors to substantial pollutant concentrations? | ☐ | ☐ | ☐ | ☒ |
| e) Create objectionable odors affecting a substantial number of people? | ☐ | ☐ | ☐ | ☒ |

## DISCUSSION

The TASP EIR includes a detailed analysis of the air quality impacts related to the construction and operation of projects associated with implementation of the Specific Plan. The TASP EIR summarizes the air quality impacts on page 3.6-14 as follows:

Air quality impacts resulting from the implementation of the proposed Specific Plan fall into two categories: short-term impacts due to construction and long-term impacts due to operation. Construction activities pursuant to development under the Specific Plan would affect local particulate concentrations primarily due to fugitive dust sources and an increase in other criteria pollutant emissions from equipment exhaust.

Over the long-term, the full implementation of the proposed Specific Plan would result in an increase in criteria pollutant emissions primarily due to related motor vehicle trips. Stationary sources and area sources would result in lesser quantities of criteria pollutant emissions. These pollutant emissions would add to the regional pollution burden and conflict with the implementation of the 2005 Ozone Strategy. Stationary sources and diesel-fueled mobile sources would also generate emissions of TACs including diesel particulate matter that could pose a health risk.

The Bay Area Air Quality Management District's (BAAQMD) guidelines were referenced to determine if a project would conflict with or obstruct implementation of an applicable air quality plan, which for the TASP EIR was the 2005 Bay Area Ozone Strategy.[2] For a plan to be consistent with an air quality plan it must be consistent with population and vehicle miles traveled thresholds, which are:

- The population growth for the jurisdiction should not exceed the values included in the current regional air quality plan, and
- The rate of increase in vehicle miles traveled (VMT) for the jurisdiction should be equal to or lower than the rate of increase in population.

In forecasting future stationary and mobile source emissions and preparing the regional air quality plan, the BAAQMD uses growth projections prepared by ABAG.[3] The 2005 Bay Area Ozone Strategy is based on population projections in the 2003 ABAG Projections. The TASP EIR found that the increase in population in the City is anticipated to exceed the population increase accounted for by the 2003 ABAG Projections, thus resulting in a significant and unavoidable impact (Impact 3.6-1) related to consistency with the applicable Clean Air Plan.

The population growth associated with the 450 Montague project is consistent with the Specific Plan and would not result in any new impacts related to consistency with the applicable air quality plan.

The TASP EIR determined that construction activities that would occur as part of the Specific Plan would generate substantial amounts of dust primarily from “fugitive” sources and lesser amounts of other criteria air pollutants primarily from the operation of heavy equipment construction machinery (primarily diesel operated) and construction worker automobile trips (primarily gasoline generated). The TASP EIR found that with implementation of BAAQMD dust control measures, construction emissions would not be expected to impede attainment or maintenance of ozone standards in the Bay Area. The Specific Plan also developed policies that would reduce construction and demolition

[2] Bay Area Air Quality Management District, 2006. *Bay Area 2005 Ozone Strategy*.

[3] Association of Bay Area Governments, 2003. *Projections 2003*.

related air quality impacts to less-than-significant levels. The 450 Montague project would be required to comply with BAAQMD dust control measures as described in Specific Plan Policy 5.16, which are designed to address short term air pollutants caused by construction and demolition activities.

The TASP EIR analyzed the Specific Plan's long-term impact on localized air quality from increases in traffic. The analysis indicated no violations of ambient carbon monoxide standards at any of the intersections analyzed. Worst-case carbon monoxide concentrations in the vicinity of the intersections would be well below the State and federal ambient air quality standards. Therefore, the 450 Montague project is not anticipated to result in new air quality impacts related to carbon monoxide hot-spots.

As noted in the TASP EIR, the Bay Area is currently designated "non-attainment" for State (1-hour and 8-hour) and national ( 8-hour) ozone standards and for the State $PM_{10}$ and $PM_{2.5}$ standards. Development of projects associated with the Specific Plan (including the 450 Montague project) could further contribute to non-attainment of air quality standards. The TASP EIR identified this impact is significant and unavoidable (Impact 3.6-5).

Additionally, implementation of the Specific Plan could place sensitive land uses near roadways associated with air pollutant emissions that expose sensitive receptors to substantial pollutant concentrations. The TASP EIR analyzed the impact of toxic air emissions (TACs) on sensitive receptors, such as future residents of the 450 Montague project. The TASP EIR found that compliance with Policy 5.25 and BAAQMD's construction BMPs would ensure that impacts are less than significant. Policy 5.25 requires new residential developers to inform future residents of TAC related health effects.

In compliance with Policy 5.25, the project applicant hired ENVIRON International Corporation to conduct an analysis[4] of the impact of roadways within 500 feet of new residential receptors if traffic on the roadways exceeds 100,000 vehicles per day. The roadways within 500 feet of the proposed project are Montague Expressway, East Capitol Avenue, Great Mall Parkway, Center Point Drive and Sango Court. The results of the analysis found that the total daily traffic volume from all roadways within 500 feet of the project site is approximately 74,000 trips per day, which is below the threshold of 100,000 vehicles per day identified in Policy 5.25. Therefore, the analysis concluded that the City of Milpitas does not require further analysis of TACs from roadway traffic to determine the necessity of the exposure minimization measures for future residents, as residents would not be exposed to substantial pollutant concentrations.

The 450 Montague project is consistent with the type of development analyzed in the TASP EIR and is consistent and therefore, implementation of the project would not result in any new air quality impacts.

## APPLICABLE MITIGATION

No new mitigation measures are required.

[4] ENVIRON, 2014. *CEQA Toxic Air Contaminant Roadway Screening Analysis for Proposed Residential Development at 450 Montague Expressway, Milpitas, California.* November 6.

## APPLICABLE POLICIES

### General Plan Policies

- Policy 3.d-G-2: Provide adequate bicycle parking and end-of trip support facilities for bicyclists at centers of public and private activity.
- Policy 3.d-I-9: Require developers to make new projects as bicycle and pedestrian "friendly" as feasible, especially through facilitating pedestrian and bicycle movements within sites and between surrounding activity centers.
- Policy 3.d-I-10: Encourage developer contributions toward pedestrian and bicycle capital improvement projects and end-of-trip support facilities.
- Policy 3.d-I-14: Include evaluation of bicycle facility needs in all planning applications for new developments and major remodeling or improvement projects.
- Policy 3.d-I-15: Encourage new and existing developments to provide end-of-trip facilities such as secure bicycle parking, on-site showers and clothing storage lockers, etc.
- Policy 2.b-I-2: Consider locating housing in close proximity to industrial developments where they can be served by existing city services and facilities.

### Specific Plan Policies

- *Policy 3.21: Provide continuous pedestrian sidewalks and safe bike travel routes throughout the entire Transit Area and within development projects. New development shall install sidewalks per the street design standards in Chapter 5 [of the Specific Plan]. The City and/or private property owner shall install sidewalks in areas where they currently do not exist, and where new development is not anticipated during the Plan timeframe. City staff will review individual development applications to ensure that adequate pedestrian facilities are provided and are consistent with the Transit Area Plan's pedestrian improvements.*
- *Policy 3.22: Private development shall be encouraged to provide direct walking and biking routes to schools and major destinations, such as parks and shopping, through their property.*
- *Policy 3.27: Every resident of the Transit Area shall be able to safely walk and bike to the BART and VTA light rail stations. As projects are constructed, make sure that all the routes are continuous and designed to be attractive and safe for pedestrians.*
- *Policy 3.33: Require new development within the Transit Area to facilitate the use of alternative modes of transportation through programs such as carpool parking, the VTA's EcoPass Program, shuttles to transit stations and lunchtime destinations, assistance to regional and local ridesharing organizations, alternative work schedules, telecommuting, etc. Establish a Transportation Demand Management (TDM) program for this purpose, as described in Policy3.16.*
- *Policy 5.23: Require project sponsors to inform future and/or existing sensitive receptors (such as day care facilities, schools, nursing homes) of any potential health impacts resulting from nearby sources of dust, odors, or toxic air contaminants, and where mitigation cannot reduce these impacts.*

- *Policy 5.24: Allow only natural gas fireplaces, pellet stoves or EPA-Certified wood-burning fireplaces or stoves. Conventional open-hearth fireplaces shall not be permitted.*
- *Policy 5.16: During review of specific development proposals made to the City, sponsors of individual development projects under the Specific Plan shall implement the BAAQMD's approach to dust abatement. This calls for "basic" control measures that should be implemented at all construction sites, "enhanced" control measures that should be implemented in addition to the basic control measures at construction sites greater than four acres in area, and "optional" control measures that should be implemented on a case-by-case basis at construction sites that are large in area, located near sensitive receptors or which, for any other reason, may warrant additional emissions reductions (BAAQMD, 1999).*
- *Policy 5.25: For new residential development that is proposed within 500 feet of active rail lines where vehicles emit diesel exhaust, or roadways where total daily traffic volumes from all roadways within 500 feet of such location exceed 100,000 vehicles per day, will, as part of its CEQA review, include an analysis of toxic air contaminants (which includes primarily diesel particulate matter (DPM)). If the results show that the carcinogenic human health risk exceeds the 10 people in a million standard for carcinogenic human health impacts established by the BAAQMD, the City may require upgraded ventilation systems with high efficiency filters, or other equivalent mechanisms, to minimize exposure of future residents.*

**CONCLUSION**

The TASP EIR adequately covered the air quality impacts of the 450 Montague project. In addition, ENVIRON International Corporation conducted a CEQA toxic air contaminant (TAC) roadway screening analysis for the proposed project which determined that impacts would be less-than-significant and that further analysis is not required.

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| | Potentially Significant Impact | Less Than Significant Impact with Mitigation | Less Than Significant Impact | No New Impact |
|---|---|---|---|---|
| **IV. BIOLOGICAL RESOURCES.** Would the project: | | | | |
| a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service? | ☐ | ☐ | ☐ | ☒ |

| | Potentially Significant Impact | Less Than Significant Impact with Mitigation | Less Than Significant Impact | No New Impact |
|---|---|---|---|---|
| b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service? | ☐ | ☐ | ☐ | ☒ |
| c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) Through direct removal, filling, hydrological interruption, or other means? | ☐ | ☐ | ☐ | ☒ |
| d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites? | ☐ | ☐ | ☐ | ☒ |
| e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? | ☐ | ☐ | ☐ | ☒ |
| f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan or other approved local, regional, or State habitat conservation plan? | ☐ | ☐ | ☐ | ☒ |

## DISCUSSION

The majority of the Specific Plan area is already developed and there are no sensitive habitats identified within the area. The TASP EIR found that the Specific Plan would largely have minimal impacts on biological resources. However, the TASP EIR concluded that proposed development within the Specific Plan would result in removal of landscaping and disturbance to habitat, which could affect wildlife including burrowing owl, nesting birds and common wildlife species (Impacts 3.8-1 and 3.8-2). The TASP EIR also found that development activities near jurisdictional hydrologic features, such as Lower Penitencia Creek, could result in significant impacts (Impacts 3.8-4 and 3.8-5). The TASP EIR concluded that implementation of the proposed policies of the General Plan and Specific Plan would ensure that the impact on biological resources is less than significant.

The only record of special-status species occurring in the area is the burrowing owl. The TASP EIR notes that development of vacant and ruderal lots could result in a loss of burrowing owls or their nests. Since 55 percent of the project site is not developed, the proposed project must adhere to General Plan Policies 4.b-I-4 and 4.b-I-5, and Specific Plan Policy 5.25 to reduce this potential impact to less-than-significant levels.

H.T. Harvey & Associates Ecological Consultants was hired to conduct a burrowing owl survey for the 450 Montague project site on October 17, 2014.[5] The result of the survey found that burrowing owls are currently absent from the site, the site does not currently provide suitable nesting and foraging habitat, and that it is highly unlikely that burrowing owls will occupy the site or immediately adjacent areas given the low quality of habitat on and adjacent to the site. The survey did find evidence of ground squirrel burrows along the Penitencia Creek Channel area that could potentially be used by burrowing owls, but found this to be highly unlikely due to the presence of human activity, the presence of feral cats, and the highly disturbed conditions surrounding the potential burrowing owl habitat. Furthermore, the project would be required to comply with Specific Plan Policy 5.26 requiring pre-construction surveys 30 days before the beginning of construction to ensure that no owls occupy the site.

The TASP EIR found that the removal of trees could have an impact on non-listed special-status nesting raptors and other birds, as trees do provide habitat for birds and have biological value (Impact 3.8-2). Specific Plan Policy 5.26 addresses the impacts of tree removal and non-listed special-status raptors and nesting birds.

The City has a tree and planting ordinance to protect significant trees,[6] which require removal permits. According to the City ordinance, any tree that is located on developed commercial or industrial property or on vacant, undeveloped property is protected if the trunk measures 37 inches or greater circumference at 4.5 feet above the ground. The arborist report for the project site identified 45 trees on the project site greater than 15 inches diameter measured at breast height, all of which will be removed. A tree removal permit is required to remove any protected tree and compensation for lost trees may be requested by the City. Tree removal will also comply with all City requirements to minimize impacts on biological resources during removal. As part of the landscape plan, the applicant proposes to plant 314 trees within and along the street frontage of the project site.

Penitencia Creek is protected under Section 404 of the Clean Water Act. The TASP EIR found that while development could have an impact on wetlands and other waterways associated with Penitencia Creek (Impacts 3.8-4 and 3.8-5), direct impacts on the creek are not likely to occur due to required setbacks from the creek (a minimum of 25 feet from top of bank or from a maintenance road if one exists for creation of a public trail) in addition to required side or rear yard setbacks. The General Plan also requires the project applicant to coordinate with appropriate agencies such as the Corps, California Fish and Game (CDFG), and Resource Water Quality Control Board (RWQCB) if necessary. The General Plan and Specific Plan policies outlined below ensure that impacts would be less than significant. In addition, the 450 Montague Project would have no direct impact on Penitencia Creek and meets the setback requirements for all structures.

The 450 Montague project is consistent with the type of development analyzed within the TASP EIR. Tree removal will be conducted in conformance with the City's Tree Ordinance. As such, there is no new impact on biological resources.

[5] H.T. Harvey & Associates Ecological Consultants, 2014. *Lennar-Milpitas Burrowing Owl Survey and Habitat Assessment Report (HTH #7647)*. October 23.

[6] Milpitas, City of. Municipal Code, Title X, Street and Sidewalks, Section 7 – Tree Protection and Heritage Tree Program.

## APPLICABLE MITIGATION

No new mitigation measures are required.

## APPLICABLE POLICIES

### General Plan Policies

- Policy 4.b-I-4 Require a biological assessment of any project site where sensitive species are present, or where habitats that support known sensitive species are present.
- Policy 4.b-I-5 Utilize sensitive species information acquired through biological assessments, project land use, planning and design.

### Specific Plan Policies

- *Policy 5.26: For any project sites that are either undeveloped or vacant and support vegetation, or project sites which are adjacent to such land, a pre-construction survey shall be conducted by a qualified biologist within 30 days of the onset of construction. This survey shall include two early morning surveys and two evening surveys to ensure that all owl pairs have been located. If preconstruction surveys undertaken during the breeding season (February 1st through July 31st) locate active nest burrows, an appropriate buffer around them (as determined by the project biologist) shall remain excluded from construction activities until the breeding season is over. During the non-breeding season (August 15th through January 31st), resident owls may be relocated to alternative habitat. The relocation of resident owls shall be according to a relocation plan prepared by a qualified biologist in consultation with the California Department of Fish and Game (CDFG). This plan shall provide for the owl's relocation to nearby lands possessing available nesting habitat. Suitable development-free buffers shall be maintained between replacement nest burrows and the nearest building, pathway, parking lot, or landscaping. The relocation of resident owls shall be in conformance with all necessary state and federal permits.*
- *Policy 5.27: To mitigate impacts on non-listed special-status nesting raptors and other nesting birds, a qualified biologist will survey the site for nesting raptors and other nesting birds within 14 days prior to any ground disturbing activity or vegetation removal. Results of the surveys will be forwarded to the U.S. Fish and Wildlife Service (USFWS) and CDFG (as appropriate) and, on a case-by-case basis, avoidance procedures adopted. These can include construction buffer areas (several hundred feet in the case of raptors) or seasonal avoidance. However, if construction activities occur only during the non-breeding season between August 31 and February 1, no surveys will be required.*
- *Policy 5.29: Per Figure 5-23 G and Tables 5-1 and 5-2 [of the Specific Plan], a minimum 25 foot setback from the top of bank of any creek or drainage channel, or from a maintenance road if one exists, shall be provided.*
- *Policy 5.30: Prior to new development in areas that border creeks and with potential riparian habitat, applicants will be required to coordinate with the CDFG, as required by law. Coordination will include evaluation of existing riparian habitat and development of*

*avoidance, minimization, and/or compensatory measures sufficient to procure a Streambed Alteration Agreement with the CDFG.*

- *Policy 5.31: For properties adjacent to any waterway in the study area, the following requirements shall apply:*
  - *Any plans for construction over the Santa Clara Valley Water District (SCVWD) fee or easement lands require review and issuance of a permit.*
  - *The SCVWD's Milpitas Pipeline, located at the north end of the study area and adjacent and parallel to the rail line continuing south onto Capitol Avenue at the southern end of the study area, shall be shown on all future plans.*
  - *Projects should generally be consistent with the recommendations developed by the Water Resources Protection Collaborative in the "Guidelines and Standards for Land Use Near Streams."*
- *Policy 5.32: Consistent with current City practice, all new development located on or adjacent to Penitencia and Berryessa Creek will be required to comply with the standards and guidelines for land uses near streams, as adopted by the City of Milpitas. Any development or construction activity to be conducted on or adjacent to SCVWD property or easements, such as creek crossings, shall be required to obtain applicable permits from the SCVWD prior to such construction activity.*

**CONCLUSION**

The TASP EIR adequately evaluated the potential biological impacts of the 450 Montague Project.

| | Potentially Significant Impact | Less Than Significant Impact with Mitigation | Less Than Significant Impact | No New Impact |
|---|---|---|---|---|
| **V. CULTURAL RESOURCES.** Would the project: | | | | |
| a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5? | ☐ | ☐ | ☐ | ☒ |
| b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5? | ☐ | ☐ | ☐ | ☒ |
| c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? | ☐ | ☐ | ☐ | ☒ |
| d) Disturb any human remains, including those interred outside of formal cemeteries? | ☐ | ☐ | ☐ | ☒ |

## DISCUSSION

The TASP EIR concluded that the potential impact of development within the Specific Plan area on cultural resources, including historic, archeological and paleontological resources and human remains was less than significant. However, the TASP EIR concluded that a disturbance to cultural resources could occur during grading and development of individual projects within the Specific Plan area, and that there is a reasonable possibility that archeological deposits could be uncovered and identified during grading (Impacts 3.13-2 and 3.13-3). The TASP EIR identifies several national, State and local laws and policies in the General Plan, Midtown Plan and Specific Plan that would reduce the potential impacts on known or undiscovered cultural resource to less than significant levels.

There are no known historic or cultural resources within the project site.[7] The existing structures that would be demolished as part of the project are approximately 35 years, are typical of light industrial buildings located throughout the State, and are not likely to yield important information about the State or region's history. The project applicant would be required to adhere to all applicable State laws if human remains are discovered, and would be required to follow Specific Plan Policies 5.34 and 5.35 during earth moving activities. Construction of the 450 Montague project would not result in any new impacts to cultural resources.

## APPLICABLE MITIGATION

No new mitigation measures are required.

## APPLICABLE POLICIES

Pursuant to CEQA Guidelines 15064.5 (f), if potentially significant cultural resources are discovered during ground-disturbing activities associated with project preparation, construction, or completion, work shall halt in that area until a qualified archaeologist can assess the significance of the find, and, if necessary, develop appropriate treatment measures in consultation with Santa Clara County and other appropriate agencies and interested parties. For example, a qualified archaeologist shall follow accepted professional standards in recording any find including submittal of the standard Department of Parks and Recreation (DPR) Primary Record forms (Form DPR 523) and locational information to the California Historical Resources Information Center Office (Northwest Information Center). The consulting archaeologist shall also evaluate such resources for significance per California Register of Historical Resources eligibility criteria (Public Resources Code Section 5024.1; Title 14 CCR Section 4852). If the archaeologist determines that the find does not meet the CEQA standards of significance, construction shall proceed. On the other hand, if the archaeologist determines that further information is needed to evaluate significance, the Planning Department staff shall be notified and a data recovery plan shall be prepared.

All future development in the Planning Area will be in accordance with State laws pertaining to the discovery of human remains. Accordingly, if human remains of Native American origin are discovered during project construction, the developer and/or the Planning Department would be

[7] Milpitas, City of, 2015. Cultural Resources Register. Available online at: www.ci.milpitas.ca.gov/_pdfs/plan_cultural_resources.pdf (accessed on January 13).

required to comply with state laws relating to the disposition of Native American burials, which fall within the jurisdiction of the Native American Heritage Commission (PRC Sec. 5097). Sections 21083.2 and 21084.1 of the PRC states that if any human remains are discovered or recognized in any location on the project site, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until:

- The Santa Clara County Coroner/Sheriff has been informed and has determined that no investigation of the cause of death is required; and
- If the remains are of Native American origin,
    - The descendants of the deceased Native Americans have made a recommendation to the landowner or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in PRC Section 5097.98, or
    - The Native American Heritage Commission was unable to identify a descendant or the descendant failed to make a recommendation within 24 hours after being notified by the commission

**Specific Plan Policies**

- *Policy 5.34: Any future ground disturbing activities, including grading, in the Transit Area shall be monitored by a qualified archaeologist to ensure that the accidental discovery of significant archaeological materials and/or human remains is handled according to CEQA Guidelines § 15064.5 regarding discovery of archeological sites and burial sites, and Guidelines §15126.4(b) identifying mitigation measures for impacts on historic and cultural resources. (Reference CEQA §§ 21083.2, 21084.1.) In the event that buried cultural remains are encountered, construction will be temporarily halted until a mitigation plan can be developed. In the event that human remains are encountered, the developer shall halt work in the immediate area and contact the Santa Clara County coroner and the City of Milpitas. The coroner will then contact the Native American Heritage Commission (NAHC) which will in turn contact the appropriate Most Likely Descendent (MLD). The MLD will then have the opportunity to make a recommendation for the respectful treatment of the Native American remains and related burial goods.*
- *Policy 5.35: All grading plans for development projects involving ground displacement shall include a requirement for monitoring by a qualified paleontologist to review underground materials recovered. In the event fossils are encountered, construction shall be temporarily halted. The City's Planning Department shall be notified immediately, a qualified paleontologist shall evaluate the fossils, and steps needed to photo-document or to recover the fossils shall be taken. If fossils are found during construction activities, grading in the vicinity shall be temporarily suspended while the fossils are evaluated for scientific significance and fossil recovery, if warranted.*

**CONCLUSION**

The TASP EIR adequately evaluated the potential cultural resource impacts of the 450 Montague Project.

| | Potentially Significant Impact | Less Than Significant Impact with Mitigation | Less Than Significant Impact | No New Impact |
|---|---|---|---|---|
| **VI. GEOLOGY AND SOILS.** Would the project: | | | | |
| a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving: | ☐ | ☐ | ☐ | ☒ |
| i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42. | ☐ | ☐ | ☐ | ☒ |
| ii) Strong seismic ground shaking? | ☐ | ☐ | ☐ | ☒ |
| iii) Seismic-related ground failure, including liquefaction? | ☐ | ☐ | ☐ | ☒ |
| iv) Landslides? | ☐ | ☐ | ☐ | ☒ |
| b) Result in substantial soil erosion or the loss of topsoil? | ☐ | ☐ | ☐ | ☒ |
| c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse? | ☐ | ☐ | ☐ | ☒ |
| d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property? | ☐ | ☐ | ☐ | ☒ |
| e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water? | ☐ | ☐ | ☐ | ☒ |

## DISCUSSION

The TASP EIR concluded that the geologic and soil impacts in the Specific Plan area are primarily related to potential ground shaking and associated ground failure (liquefaction), soil expansion, settlement and soil erosion during construction activities. Since the Specific Plan area is not located within an Earthquake Fault Hazard Zone, the likelihood of surface fault rupture is minimal. In addition, the TASP EIR found that slope instability hazards are also minimal because the surface area in the Specific Plan area is relatively level.

The TASP EIR determined that impacts related to ground shaking, liquefaction, settlement and soil erosion are less than significant when projects are built in accordance with General Plan Policy 5.a.-I-3, the City of Milpitas Municipal Code and NPDES General Construction Permit requirements (Impacts 3.5-1, 3.5-2, and 3.5-3). Specifically, the TASP EIR states that State of California building codes and construction standards contained in Title 24 of the CCR reduce impacts to a less-than-significant level. The 450 Montague project would be designed and constructed in accordance with these requirements.

Projects associated with implementation of the Specific Plan would be required to comply with NPDES General Construction Permit requirements. Project applicants would be required to prepare a Stormwater Pollution Prevention Plan (SWPPP) to minimize the discharge of pollutants, including silt and sediment, during construction. The SWPP would need to include measures to control erosion and effectively manage runoff and retain sediment on-site during construction.

Additionally, in accordance with the City Code, building permit applications for subdivisions must be accompanied by a preliminary soils report. The report must address site soil conditions, including expansive soils, settlement, and erosion, and provide recommendations to offset potential soils problems. Compliance with the recommendations included in the preliminary soils report and geotechnical investigation would help reduce potential liquefaction hazards to less-than-significant levels.

The 450 Montague Project is consistent with the type of development analyzed in the TASP EIR and is required to adhere to General Plan and Specific Plan policies relating to building standards and emergency service needs. The 450 Montague Project submitted a Stormwater Control Plan on December 12, 2014.[8]

In addition, the applicant hired Rockridge Geotechnical to prepare a preliminary soils report on January 7, 2014, which was submitted to the City on December 14, 2014. The findings of the preliminary soil report indicated that the project site is bound by the following geotechnical constraints: 1) the presence of 1 to 3 feet of undocumented fill on the site; 2) the presence of highly expansive near-surface fill and native clay; and 3) the potential for differential settlement under static foundation loads due to compression of the thin, light over-consolidated clay layers between depths of 10 and 20 feet.[9] The preliminary geotechnical report makes specific recommendations to lessen these constraints, including: moisture conditioning; blending and re-compacting of the undocumented fill; moisture conditioning the expansive soil and adding non-expansive fill or lime treated soil; the use of supporting foundations below the moisture zone, or the use of stiff, shallow foundations; and the use of conventional shallow foundations to resist the effect of highly expansive near-surface soil.[10] The report also recommends that the expansion potential of the soil and the potential impact on the 450 Montague Project should be further evaluated during the final geotechnical investigation of the

[8] Carlson, Barbee & Gibson, Inc., 2014. *Stormwater Control Plan for 450 Montague, Milpitas, CA*. December 14.

[9] Rockridge Geotechnical, 2014. *Preliminary Geotechnical Study Due Diligence Evaluation*. January 17.

[10] Ibid.

project once a proposed grading plan has been established.[11] Implementation of measures identified in the geotechnical report would be required as a Condition of Approval.

Since the 450 Montague Project would comply with Specific Plan policies, including implementing the recommendations of the preliminary geo-technical report, there is no new impact on geology and soil.

## APPLICABLE MITIGATION

No new mitigation measures are required.

## APPLICABLE POLICIES

### General Plan Policies

- *Policy 5.a-I-3: Require projects to comply with the guidelines prescribed in the City's Geotechnical Hazards Evaluation manual.* Mandatory compliance with building codes and construction standards established in the California Building Code, the requirements of the Seismic Hazards Mapping Act and the City of Milpitas Municipal Code, and policies contained in the City of Milpitas General Plan would reduce seismic-related ground shaking and liquefaction to less than significant levels.

### Specific Plan Policies

- *Specific Plan Policy 5.36: Require construction projects that disturb one or more acres to prepare a Stormwater Pollution Prevention Plan (SWPPP) that, when properly implemented, would reduce or eliminate impacts on surface water quality during construction.*
- *Specific Plan Policy 5.37: Require construction projects to comply with the Santa Clara County National Pollutant Discharge Elimination System (NPDES) permit for stormwater discharges.*

## CONCLUSION

The TASP EIR adequately evaluated the potential geology and soil impacts of the 450 Montague Project.

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[11] Ibid.

| | | Potentially Significant Impact | Less Than Significant Impact with Mitigation | Less Than Significant Impact | No New Impact |
|---|---|---|---|---|---|
| **VII.** | **GREENHOUSE GAS EMISSIONS.** Would the project: | | | | |
| a) | Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment? | ☐ | ☐ | ☐ | ☒ |
| b) | Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases? | ☐ | ☐ | ☐ | ☒ |

## DISCUSSION

The TASP EIR found that the primary source of greenhouse gas (GHG) emissions related to urban development in the Specific Plan area are anticipated to continue to be from combustion of fossil fuels by motor vehicles and from electric power generation. Short-term impacts are anticipated from construction activity that will occur during the implementation of the Plan. Since the GHG emission rate is related to growth, the Specific Plan promotes policies that reduce energy consumption and fuel usage by encouraging development patterns that will reduce the vehicles miles traveled (VMT) per capita and proposes a variety of actions and policies that can reduce emissions to less-than significant levels.

The TASP EIR found that the rate of increase in VMT would be less than the rate of increase in population due to the mixed-use and transit area nature of new development proposed under the Specific Plan. The TASP EIR found that while the population is expected to increase significantly in the area, a large percentage of that population would use transit options made available to them which in turn would reduce vehicle use. The TASP EIR also found that the increase in VMT will not prevent the reduction of statewide greenhouse gas emissions to 1990 levels.

In 2013, the City adopted the Milpitas Climate Action Plan (CAP),[12] which is considered a Qualified GHG Reduction Strategy by the Bay Area Air Quality Management District (BAAQMD). If the project is consistent with the CAP, it can be presumed that the project will not have significant GHG emissions under CEQA and no further GHG analysis would be required for the project. As shown in Appendix A to this document, the City and the project applicant prepared the Development Checklist from Appendix C of the CAP. Based on the features incorporated into the project by the applicant, the project would be consistent with the CAP.

Additionally, the TASP EIR identifies several Specific Plan policies that reduce the impacts of greenhouse gas emissions associated with growth: planting trees, establishing and implementing a travel demand management program to encourage alternate modes of transportation, providing

[12] Milpitas, City of, 2013. *Climate Action Plan. A Qualified Greenhouse Gas Reduction Strategy*. May 27.

pedestrian and bike routes, providing continuous bicycle circulation routes, requiring provision of bicycle and pedestrian facilities, and requiring new development to facilitate the use of alternate modes of transportation through various programs. These policies are outlined further below and would be applicable to the proposed project.

Regarding electricity consumption, the TASP EIR found that the increase in total demand for electrical energy as a result of the Specific Plan will be reduced to less-than-significant levels by requiring compliance with State, local and Specific Plan energy efficiency policies. These policies (outlined below) will ensure that the additional energy that homes and businesses consume will not impede achievement of the statewide reduction in emissions mandated by the California Climate Solutions Act of 2006 and will ensure that the impact of increased energy consumption in the Specific Plan area is less than significant.

The 450 Montague Project adheres to the building guidelines of the Specific Plan, is consistent with the Milpitas CAP, and promotes reductions in greenhouse gas emissions through high-density development in close proximity to transit. Additionally, while the proposed project would remove all existing trees, the project proposes to plant approximately 314 trees, which will help offset greenhouse gas emissions. The proposed project would result in no new impacts related to greenhouse gas emissions and further analysis is not required.

## APPLICABLE MITIGATION

No new mitigation measures are required.

## APPLICABLE POLICIES

### Specific Plan Policies related to Greenhouse Gas Emissions

- *Policy 3.16: Establish and implement a travel demand management (TDM) program in order to encourage alternate modes of travel and thereby reduce automobile trips. Establish a funding mechanism to pay for the costs of the program, including the cost of a transportation coordinator to administer the program. The program would include a ride-matching program, coordination with regional ride-sharing organizations, and provision of transit information; and could also include sale of discounted transit passes and provision of shuttle service to major destinations.*
- *Policy 3.21: Provide continuous pedestrian sidewalks and safe bike travel routes throughout the entire Transit Area and within development projects.*
- *Policy 3.22: Private development shall provide direct walking and biking routes to schools and major destinations, such as parks and shopping, through their property.*
- *Policy 3.23: Encourage children to walk or bike to school by expanding existing safe walking and bicycling routes to schools into the Transit Area.*
- *Policy 3.28: Provide continuous bicycle circulation through the project site and to adjacent areas by closing existing gaps in bicycle lanes and bicycle routes, per Figure 3-5 [of the Specific Plan].*

- *Policy 3.31: Require provision of bicycle and pedestrian facilities such as weather protected bicycle parking, direct and safe access for pedestrians and bicyclists to adjacent bicycle routes and transit stations, showers and lockers for employees at the worksite, secure short-term parking for bicycles, etc.*
- *Policy 3.33: Require new development within the Transit Area to facilitate the use of alternative modes of transportation through programs such as carpool parking, the VTA's EcoPass Program, shuttles to transit stations and lunchtime destinations, assistance to regional and local ridesharing organizations, alternative work schedules, telecommuting, etc. Establish a Transportation Demand Management (TDM) program for this purpose, as described in Policy3.16.*
- *Policy 5.6: Require the use of Energy Star appliances and equipment in new residential and commercial development, and new City facilities.*
- *Policy 5.7: Require at least 50 percent of all new residential development to be pre-wired for optional photovoltaic roof energy systems and/or solar water heating.*
- *Policy 5.8: Incorporate cost-effective energy conservation measures into all buildings being constructed by the City in the Transit Area, including construction, operations and maintenance. These measures can include but are not limited to:*
    - *Energy efficient light fixtures, including solar powered systems, for streetscapes, parks, and public buildings which have limited glare and spillover;*
    - *Automatic lighting systems in public buildings and offices; and*
    - *Life-cycle costing of capital projects so that the environmental, societal, and economic costs are evaluated over the project's long-term operation.*

**CONCLUSION**

The TASP EIR adequately covered the greenhouse gas emissions impacts of the 450 Montague Project and no new impacts related to greenhouse gas emissions are anticipated.

| | Potentially Significant Impact | Less Than Significant Impact with Mitigation | Less Than Significant Impact | No New Impact |
|---|---|---|---|---|
| **VIII. HAZARDS AND HAZARDOUS MATERIALS.** Would the project: | | | | |
| a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? | ☐ | ☐ | ☐ | ☒ |
| b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment? | ☐ | ☐ | ☐ | ☒ |
| c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school? | ☐ | ☐ | ☐ | ☒ |
| d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment? | ☐ | ☐ | ☐ | ☒ |
| e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area? | ☐ | ☐ | ☐ | ☒ |
| f) For a project located within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area? | ☐ | ☐ | ☐ | ☒ |
| g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? | ☐ | ☐ | ☐ | ☒ |
| h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands? | ☐ | ☐ | ☐ | ☒ |

**DISCUSSION**

The TASP EIR concluded that due to past land uses and previously reported hazardous material releases and spills, there are potential impacts associated with existing soil and groundwater contamination in areas of the Specific Plan (Impact 3.4-1). These potential impacts include the risk of upset during demolition and construction activities and could pose a health risk to humans and the environment. All projects implemented as part of the Specific Plan are subject to existing hazardous materials regulations for the use, transport and disposal of hazardous materials. The TASP EIR found that any impact from potential exposure during construction can be reduced to a less-than-significant level with implementation of Specific Plan policies.

Existing structures that would be demolished in the Specific Plan area could potentially include hazardous building materials such as asbestos, PCBs or lead-based paint. Specific Plan Policy 5.21 requires applicants to submit information to the City regarding asbestos-containing building materials, PCBs, and lead-based pain in existing buildings proposed for demolition. The 450 Montague Project would be required to comply with Policy 5.21, reducing this impact to a less-than-significant level.

All new development within the Specific Plan area must comply with Section 19827.5 of the California Health and Safety Code, which requires that local agencies not issue demolition or alteration permits until an applicant has demonstrated compliance with notification requirements under applicable federal regulations regarding hazardous air pollutants, including asbestos. Full compliance with Title 17 and Title 8 of the California Code of Regulations is also required, which includes implementing work practice standards related to the evaluation and abatement of lead in public and residential buildings and covers construction work where an employee may be exposed to lead.

Advanced Environmental Concepts, Inc. (AEC) prepared a Phase I hazards report for the 450 Montague project site in October 2012. The results of this study identified the following Recognized Environmental Condition:[13]

> Subsurface investigations of soil gas, soil, and groundwater conducted by Enviro Soil Tech and Environmental Guidance have identified concentrations of volatile organic compounds in the three media that exceed applicable regulatory action levels such as the Bay Area ESLs and water quality MCLs. However, the site is under the supervision of the Bay Area RWQCB (Mr. Mark Johnson), and Mr. Johnson has informed both the current consultant of record (Tim Becker of Environmental Guidance) and AEC that due to the low onsite concentrations of VOCs in shallow groundwater that it does not warrant remedial measures.
>
> Therefore, AEC recommends completion of the required groundwater sampling events and obtaining a letter of no further action from the RWQCB. In addition, AEC recommends preparation of a Soil Management Plan to address contingencies that may be identified during the demolition of the existing building and proposed new development.

[13] Advanced Environmental Concepts, Inc., 2012. *Phase I Site Assessment for 450 Montague Expressway*. October.

Arcadis US, Inc. (Arcadis) prepared a Phase I Environmental Site Assessment (ESA) report on March 7, 2014 for the portion of the project site located at 400 Montague Expressway. The findings of this report did not identify environmental concerns related to the historical development and current use of the site other than the following Recognized Environmental Conditions:

- The prior agricultural use of the site indicates the potential for residual pesticides in shallow surface soil.
- The prior use of the site by Vickers for minor vehicle servicing and washing indicates a potential for a release of automotive-related fluids to the site surface.
- The adjacent property north of the site (450 Montague Expressway) had a release of VOCs that impacted groundwater. Based on the hydraulically cross-gradient location, there is a potential that contaminated groundwater has migrated beneath the site.

The applicant will comply with Policy 5.2 and will prepare a Phase I for the 2369 E. Capitol Avenue and 620 E. Capitol Avenue parcels prior to the issuance of the site development permits.

Arcadis later prepared a Limited Phase II hazards report in July 2014 for the 450 Montague portion of the project site, the Capitol Avenue portions, as well as some portions of the 400 Montague site. The purpose of the Phase II hazards report was to assess whether chemicals, primarily volatile organic compounds (VOCs) are present. The report concluded that VOC concentrations in soil and ground-water samples collected during the investigations were below their corresponding residential environmental screening levels (ESLs). However, several VOCs were detected in soil vapor samples that exceeded their corresponding ESLs by one or two orders of magnitude. Arcadis found that the VOC-impacted soil vapor to be limited to the parking lot behind the existing building at 450 Montague and recommend that it can be remediated with soil excavation during site development and that it does not appear that VOC-affected groundwater is a source of VOCs in the soil vapor.

In addition, Arcadis reported that based on RWQCB data, the concentrations of VOCs were declining at the 450 Montague portion of the project site and that the RWQCB issued a letter on December 2013 to the property owner stating that they were considering a “low threat closure” of the property if an Environmental Covenant and Deed Restriction to restrict the use of groundwater was recorded and if a Soil Management Plan was prepared for possible redevelopment of the property with a residential use.

Implementation of the above-mentioned remediation actions, including those associated with soil excavation and the development of a soil management plan, would be required as a Condition of Approval for the project. Implementation of the remediation measures identified in the various environmental reports, as well as a deed restriction, would also be required as a Condition of Approval. In addition, Specific Plan Policy 5.22 requires Risk Management Plans at sites with known contamination issues. As noted above, a Phase II hazards report identified VOC-impacted soil vapor above the associated screening level. The proposed project would be required to develop a Risk Management Plan.

Hazardous materials transportation, use, and disposal would be subject to State and federal hazards materials laws and regulations. Hazardous materials would be required to be transported under DOT regulations as well as ordinances administered by the Milpitas Fire Department and Santa Clara County department of Environmental Health.

The project site is not located within 2 miles of a public airport. Additionally, the proposed project would not be expected to impair implementation or interfere with an adopted emergency plan. Specific Plan Policies 6.49, 6.50, and 6.52 would ensure that adequate emergency services are available.

The 450 Montague Project is consistent with the overall vision of transforming the area from industrial to a new, transit-oriented, mixed-use neighborhood. Since the proposed project would comply with Specific Plan policies, including Policy 5.20, 5.21 and 5.22, there are no new impacts on hazards and hazardous materials.

## APPLICABLE MITIGATION

No new mitigation measures are required.

## APPLICABLE POLICIES

### Specific Plan Policies

- *Policy 5.20: Property owners shall work with the City of Milpitas Fire Department, the Santa Clara County Department of Environmental Health (SCCDEH), the California Department of Toxic Substances Control (DTSC), and/or the State Water Resources Control Board (SWRCB), whichever has jurisdiction, to resolve issues related to contamination that could potentially impact future land uses in the project area. The lateral and vertical extent of contamination shall be determined, remediation activities completed, and land use restrictions implemented, as necessary, prior to the issuance of development permits on parcels with known contamination.*

  *For parcels with known contamination, appropriate human health risk assessments (HHRAs) shall be conducted based on proposed land uses by a qualified environmental professional. The HHRAs shall compare maximum soil, soil gas, and groundwater concentrations to relevant environmental screening levels (ESLs[2]) and evaluate all potential exposure pathways from contaminated groundwater and soil. Based on the findings of the HHRAs, if appropriate, engineering controls and design measures shall be implemented to mitigate the potential risk of post-development vapor intrusion into buildings.*

  *For parcels with no identified contamination, a Phase I study shall be completed to review potential for ground water, soil, or other contamination related to previous land uses. If any potential for contamination is determined to exist that could adversely affect human health for residential uses, a Phase II level analysis shall be conducted per City, State, and Federal requirements. If contamination is found to exist, procedures for contaminated sites as described in the paragraph above shall be followed.*

- *Policy 5.21: Project applicants shall submit information to the City regarding the presence of asbestos-containing building materials, PCBs, and lead-based paint in existing buildings proposed for demolition, additions, or alterations. The information shall be verified prior to the issuance of demolition permits by the City of Milpitas Building Inspection Division for any existing structures or buildings in the project area. If it is found that painted surfaces contain lead-based paint and/or the structures contain asbestos-containing*

*building materials, measures to ensure the safe demolition of site structures shall be incorporated into the project Demolition Plan. The Demolition Plan shall address both onsite and offsite chemical and physical hazards. Prior to demolition, hazardous building materials associated with lead-based paint and asbestos-containing building materials shall be removed and appropriately disposed of in accordance with all applicable guidelines, laws, and ordinances. The demolition of buildings containing asbestos would require retaining contractors who are licensed to conduct asbestos abatement work and notifying the Bay Area Air Quality Management District (BAAQMD) ten days prior to initiating construction and demolition activities. Regarding lead based paint, Cal-OSHA regulates all worker exposure during construction activities associated with lead-based paint. The Cal-OSHA-specified method of compliance includes respiratory protection, protective clothing, housekeeping, hygiene facilities, medical surveillance, and training.*

- *Policy 5.22: At sites with known contamination issues, a Risk Management Plan (RMP) shall be prepared to protect the health and safety of construction workers and site users adjacent to construction activities. The RMP shall include engineering controls, monitoring, and security measures to prevent unauthorized entry to the construction site and to reduce hazards outside of the construction site. The RMP shall address the possibility of encountering subsurface hazards and include procedures to protect workers and the public. The RMP shall also include procedures for managing soils and groundwater removed from the site to ensure that any excavated soils and/or dewatered groundwater with contaminants are stored, managed, and disposed of in accordance with applicable regulations and permits. Protocols for the handling, transport, and disposal of both known and previously unidentified hazardous materials that may be encountered during project development shall be specified. If prescribed exposure levels are exceeded, personal protective equipment shall be required for workers in accordance with OSHA regulations. Finally, the RMP shall also include procedures for the use, storage, disposal, of hazardous materials used during construction activities to prevent the accidental release of these materials into the environment during construction.*
- *Policy 6.50: The Fire Department shall conduct a "standards of cover" analysis to determine the Transit Plan's precise impact on the department's staffing and equipment, and any required facility needs. Identify and evaluate potential sites for an expanded or new fire station near the Transit Area if the standards of cover analysis determines it is warranted.*
- *Policy 6.51: Additional fire department staff will be hired, equipment purchased, and facilities built to provide an adequate level of service—as determined by City Council—for the residents, workers, and visitors of the Transit Area. New equipment and facilities shall be funded by the Community Facilities District fee and new staff paid from the City's General Fund. These facilities are not expected to be sited within the Transit Area.*
- *Policy 6.53: The Fire Department shall update the City's emergency and disaster response plans to take the location and type of new development, and future traffic levels, into account.*

## CONCLUSION

The TASP EIR adequately evaluated potential impacts related to hazards and hazardous materials at or affecting the 450 Montague Project.

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| | Potentially Significant Impact | Less Than Significant Impact with Mitigation | Less Than Significant Impact | No New Impact |
|---|---|---|---|---|
| **IX. HYDROLOGY AND WATER QUALITY.** Would the project: | | | | |
| a) Violate any water quality standards or waste discharge requirements? | ☐ | ☐ | ☐ | ☒ |
| b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)? | ☐ | ☐ | ☐ | ☒ |
| c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site? | ☐ | ☐ | ☐ | ☒ |
| d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site? | ☐ | ☐ | ☐ | ☒ |
| e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff? | ☐ | ☐ | ☐ | ☒ |
| f) Otherwise substantially degrade water quality? | ☐ | ☐ | ☐ | ☒ |
| g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map? | ☐ | ☐ | ☐ | ☒ |

| | | Potentially Significant Impact | Less Than Significant Impact with Mitigation | Less Than Significant Impact | No New Impact |
|---|---|---|---|---|---|
| h) | Place within a 100-year flood hazard area structures which would impede or redirect flood flows? | ☐ | ☐ | ☐ | ☒ |
| i) | Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding of as a result of the failure of a levee or dam? | ☐ | ☐ | ☐ | ☒ |
| j) | Inundation by seiche, tsunami, or mudflow? | ☐ | ☐ | ☐ | ☒ |

## DISCUSSION

The TASP EIR identified that implementation of the Specific Plan would have minimal impacts on the hydrology and water quality of the Specific Plan area. Potential impacts to groundwater and to streams and rivers are not likely to occur, and the Specific Plan area is expected to maintain the same drainage pattern upon build-out, utilizing existing street gutters and storm drains. Furthermore, the Specific Plan area is also not subject to inundation by seiche, tsunami or mudflow. Potential impacts would be related to stormwater and flooding (Impacts 3.10-3) and water quality (Impacts 3.10-1 and 3.10-2). The TASP EIR concluded compliance with specific municipal policies, General Plan and Specific Plan policies would reduce the impacts related to stormwater quality, runoff, and flooding to less-than-significant levels.

During the construction period, grading and excavation activities would result in exposure of soil to runoff, potentially causing erosion and entrainment of sediment in runoff. This condition could cause erosion and increase sedimentation in storm drains or waterways within the area. In addition, there is the potential for release of chemicals such as fuels, oils, paints and solvents from construction sites. The chemicals could be transported to nearby surface waterways, groundwater in stormwater runoff, wash water and dust control water. General Plan Policies 4.d-G-1 and 4.d-I-1 and Specific Plan Policies 5-36 and 5-37 would help reduce construction related water quality impacts to less-than-significant levels.

In addition, construction projects are required to prepare a Stormwater Control Plan, which requires implementing Best Management Practices (BMPs) to control stormwater peak flows and pollutant levels. This requirement is stipulated in Provision C.3 of the Santa Clara County National Pollutant Discharge Elimination System (NPDES). All projects within the Specific Plan area must comply with NPDES requirements, including the proposed project.

The proposed increase in population and traffic associated with the project could increase discharge of pollutants in stormwater runoff beyond current levels after partial or full build-out of the Specific Plan. However, full compliance with the Santa Clara County NPDES permit guidelines for stormwater discharge, General Plan Policy 4.d-G-1, Midtown Policy 6.8, and Specific Plan Policies 5-36 and 5-37 would ensure the impacts would be less than significant.

The Specific Plan area is within a FEMA-designated floodplain. As such, the City has conducted area-wide storm drainage planning that includes Master Grading and Storm Drainage Plans for each subdistrict of the Specific Plan area. The proposed project must comply with the requirements of the Master Grading and Storm Drainage Plans for the Montague Corridor and Trade Zone/Montague subdistricts. Additional impacts related to the floodplain could occur, however, several local and Specific Plan policies identified in the TASP EIR would reduce the impact to less-than-significant levels.

Since the 450 Montague project site is located in a FEMA special flood area, a flood study was conducted for the property by Schaaf & Wheeler Associates on October 21, 2014.[14] The analysis found that the project site has impacts of less than 0.3 feet, neighboring projects would not adversely impact one another, and cumulative impacts would be less than 1 foot. The report found that the proposed project complies with the City of Milpitas Floodplain Ordinance Section XI-15-4.3 (a)(4) and XI-15-5.1 (c)(1), which requires residential finish floor elevations be one foot above the base flood elevation.

The 450 Montague Project conforms to the TASP EIR, and, therefore, there is no new impact on hydrology and water quality.

## APPLICABLE MITIGATION

No new mitigation measures are required.

## APPLICABLE POLICIES

### City of Milpitas Municipal Policies

- Standards of Construction (Section XI-15-5.1) – specify requirements for anchoring, construction materials and methods, and elevation and flood-proofing
- Standards for Utilities (Section XI-15-5.2) – specify requirements for new and replacement water supply and sanitary sewage systems, and on-site waste disposal systems
- Standards for Subdivisions (Section XI-15-5.3)
- Floodways (Section XI-15-5.6) – specify requirements and constraints for encroachments, and other flood hazard reduction provisions.

### General Plan Policies

- Policy 4.d-G-1: Protect and enhance the quality of water resources in the Planning Area.
- Policy 4.d-I-1: Continue implementing the National Pollutant Discharge Elimination System (NPDES) requirements of the Regional Water Quality Control Board – this is implemented through Chapter 16 of the City's Zoning Ordinance.

[14] Schaaf & Wheeler Consulting Civil Engineers, 2014. *450 Montague Flood Study*. October 21.

**Specific Plan Policies**

- *Policy 5.36: Require construction projects that disturb one or more acres to prepare a Stormwater Pollution Prevention Plan (SWPPP) that, when properly implemented, would reduce or eliminate impacts on surface water quality during construction.*
- *Policy 5.37: Require construction projects to comply with the Santa Clara County National Pollutant Discharge Elimination System (NPDES) permit for stormwater discharge.*
- *Policy 6.1: Minimize damage associated with flooding events and comply with regulations stipulated by FEMA and the National Flood Insurance Program.*
- *Policy 6.2: New development within a FEMA-designated flood hazard zone must follow the City's construction standards for such areas, as currently laid out in Section XI-15 'Floodplain Management Regulations' of the Milpitas Municipal Code.*
- *Policy 6.3: New development must maintain the Transit Area's urban design standards. In particular, first floor commercial space must be within two feet of the elevation of the public sidewalk. The design and development standards in Chapter 5 [of the proposed Plan] must be followed, as well as the FEMA construction standards. This policy is particularly important regarding the location and appearance of on-site parking and the accessibility of ground floor retail from sidewalks. FEMA's construction standards require a building's floor plate to be one foot above flood level. Rather than elevate a building on stilts and require store access via stairs or ramps, the ground floor should be accessible via a sloping sidewalk. On streets fronted by ground floor commercial, no sidewalk shall be more than two feet above or below the floor level of adjacent commercial space, as specified in Chapter 5. The sidewalk needs to be designed so that the grade of its slope complies with federal, state, and local standards for disabled access.*
- *Policy 6.4: Provide storm drain infrastructure to adequately serve new development and meet City standards.*
- *Policy 6.5: Ensure that runoff in storm drains does not lower water quality within or outside of the Transit Area by implementing Best Management Practices (BMPs) in new developments within the Transit Area.*
- *Policy 6.6: Construct the improvements within the Transit Area that were identified in the 2001 Storm Drainage Master Plan, and any other improvements identified in updates to the Master Plan.*
- *Policy 6.7: Prepare Master Grading and Storm Drainage Plans for each subdistrict of the Transit Area prior to approval of Zoning Permits for new buildings in that subdistrict.*

**Midtown Specific Plan Policies**

- *Policy 6.8: Encourage creativity in design of new development in order to reduce stormwater runoff, increase percolation, and improve water quality.*

## CONCLUSION

The TASP EIR adequately evaluated the hydrology and water quality impacts of the 450 Montague Project.

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| | | Potentially Significant Impact | Less Than Significant Impact with Mitigation | Less Than Significant Impact | No New Impact |
|---|---|---|---|---|---|
| **X.** | **LAND USE AND PLANNING.** Would the project: | | | | |
| a) | Physically divide an established community? | ☐ | ☐ | ☐ | ☒ |
| b) | Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect? | ☐ | ☐ | ☐ | ☒ |
| c) | Conflict with any applicable habitat conservation plan or natural community conservation plan? | ☐ | ☐ | ☐ | ☒ |

## DISCUSSION

The TASP EIR concluded that while implementation of the Specific Plan would significantly change the land use designations and pattern of development for the area, impacts related to land use would be minimal. The Specific Plan does not divide an established community because the area was primarily developed with industrial uses prior to the development of the Specific Plan. In addition, there is no habitat conservation or natural community conservation plans within the Specific Plan area.

Existing land use designations in the Specific Plan would change from industrial to residential, mixed-use, and parks/community facilities over a period of 20 years. The changes that occur as a result of the Specific Plan are seen as positive and will include the development of street and trail connections and pedestrian bridges across major arterials to connect resident and employees with jobs, services, parks and transit. New zoning districts associated with the Specific Plan include: MXD2, MXD3, and R5 and edits the "- TOD" Combining District to include MXD2-TOD, MXD3-TOD, R3-TOD, R5-TOD, and MPTOD and revises C2-TOD. These amendments ensure that potential impacts related to inconsistency and altered land use designations are less than significant.

Under the Specific Plan, the proposed project has two land use designations: Boulevard Very High Density Mixed Use and Very High Density Transit Oriented Residential. Permitted uses under the Boulevard Very High Mixed Use designation include residential, office, commercial and medical.

A 1.5 maximum gross FAR and density of FAR of 2.5 may be permitted on individual sites in this land use designation. In addition, building heights of 4-12 stories (20 stories with CUP) are permitted. Permitted densities for residential uses range from a minimum of 41 units per acre minimum average gross density to 60 units per acre maximum average gross density. Small local-serving retail, office, and live/work uses are permitted at ground floor levels.

Permitted uses under the Very High Density Transit Oriented Residential include only residential with densities ranging from 41 units per acre minimum to 60 units per acre maximum gross density. Building heights in this land use designated area range from 4 to 6 stories, with 12 stories permitted near arterials and 20 stories permitted with CUP.[15] The 450 Montague Project complies with the standards of both of these land use designations and would develop in the lower range of the density and intensity standards from what was assumed in the TASP EIR.

The TASP EIR also found that proposed uses would be more compatible with the adjacent residential and commercial uses than existing uses. However, over the planning horizon, the City expects there would be temporary incompatible land uses in the area until the build-out of the Specific Plan is complete. Policies are included in the Specific Plan to address temporary neighboring incompatible land uses. The Specific Plan includes streets, landscaped areas, parks and linear parks that create buffers between the different types of land uses. Conformance with Specific Plan policies (outlined below) will ensure that temporary conflicts between land uses would be less than significant.

The Specific Plan area is intended to be a cohesive neighborhood identified by a similar look and feel in its public spaces and a consistent orientation toward walking and transit usage. However, the area is currently bisected by regional arterial roadways and rail lines that create discrete areas with varying development environments. As a planning and development strategy, the Specific Plan created subdistricts to capitalize on and accommodate these identified areas. Each subdistrict has a carefully chosen plan of land uses, local street grid, and open space assigned to it to generate a character that takes into account existing and future physical conditions as well as expected market demand. Each subdistrict has individual development criteria for setbacks and building location and placement, which would reduce the impact of interactions between adjacent potentially incompatible uses.

The proposed project is within the overlapping Montague Corridor and Trade/Montague subdistricts. The Montague Corridor subdistrict encompasses the area fronting Montague Expressway, which is a broad, high volume roadway that is anticipated to become wider and experience an even greater volume of traffic by the time the Specific Plan is built out. The goal of the corridor is to create a grand boulevard style neighborhood with intense development that is near a major transit station.

The Trade Zone/Montague subdistrict is located east of Montague Expressway and south of Capitol Avenue, extending to the City limits on Trade Zone Boulevard and Lundy Street. The goal of this subdistrict is to create an attractive residential district, with ample green space in the form of a sports field and a creekside park, plus trails along Penitencia Creek. Land Use Policy 4.44 for the Trade Zone/Montague Subdistrict of the Specific Plan requires all projects within this subdistrict to create an interior street parallel to Capitol Avenue in an effort to create a "quiet front door" and "residential

[15] Dyett and Bhatia, *Draft Environmental Impact Report, Milpitas Transit Area Specific Plan*, October 2007; and *Final Environmental Impact Report, Milpitas Transit Area Specific Plan*, May 2008; Chapter 3.

character" for the residents.[16] The proposed project includes two internal roads, Street A and Street B. Street A conforms to Policy 4.44 as it is parallel to East Capitol Avenue and would be extended in the future by adjacent properties as they redevelop. As such, the proposed project would conform to the development standards of both subdistricts, which lessens the impact of incompatible adjacent uses.

Since the land use impacts of the 450 Montague Project are consistent with the impacts identified in the TASP EIR, and because the project would comply with the building standards of the Specific Plan, there is no new impact on land use.

## APPLICABLE MITIGATION

No new mitigation measures are required.

## APPLICABLE POLICIES

### Specific Plan Policies

- *Policy 3.8: Allow contiguous developments to build at higher or lower residential densities, so long as their average density falls between the designated minimum and maximum.*
- *Policy 3.9: Maintain the Midtown Plan's gross floor area policy, which excludes all areas of a building devoted to parking from FAR calculations.*
- *Policy 3.38: The open space requirements of the Midtown Milpitas Specific Plan (Policy 3.2.4) shall apply to the entire area of the Transit Area Specific Plan.*

### Montague Corridor Subdistrict Policies

- *Policy 4.1 (MON): High rise buildings are encouraged along Montague Expressway.*
- *Policy 4.2 (MON): New curb cuts and auto access onto Montague Expressway are strongly discouraged, unless specifically indicated on the Plan map.*
- *Policy 4.3 (MON): Parcels fronting Montague Expressway are permitted to contain residential, employment, or hotel uses.*
- *Policy 4.4 (MON): A 45 foot wide, landscaped setback is required from the future right of way line of Montague Expressway.*
- *Policy 4.5 (MON): New development along Montague Expressway must dedicate land, such that a total of 79 feet from the roadway centerline is provided, to accommodate the future Montague Expressway widening project.*
- *Policy 4.6 (MON): Buildings will be designed with facades facing Montague Expressway.*

### Trade/Montague District Policies

- *Policy 4.43 (TR-M): Create a new street that aligns with the Milpitas Boulevard Extension with a traffic signal that allows left and right turns from Capitol Avenue.*

[16] Dyett and Bhatia, *City of Milpitas Transit Area Specific Plan,* June 2008. Chapter 4.

- *Policy 4.44 (TR-M): Create an interior street parallel to Capitol Avenue.*
- *Policy 4.45 (TR-M): Do not locate curb cuts for driveway or garage access on Capitol Avenue.*
- *Policy 4.46 (TR-M): Create a deep landscape setback along Capitol Avenue to separate residences from noise and heavy traffic on Capitol Avenue. See Figure 5-11, Chapter 5 of the Specific Plan.*
- *Policy 4.47 (TR-M): Create a street connection between Sango Court and the new residential area to the south and east when the Sango Court area redevelops for residential use.*
- *Policy 4.48 (TR-M): Provide street connections from residential and mixed use development on Montague Expressway to the park and residential neighborhoods within this subdistrict.*
- *Policy 4.49 (TR-M): Create street connections, bike connections, and pedestrian connections across the creek channel.*
- *Policy 4.50 (TR-M): Prevent cut-through traffic avoiding the Montague/Capitol intersection.*
- *Policy 4.51 (TR-M): Create a deep landscape setback along Trade Zone Boulevard to buffer residential uses from the office/R&D/industrial uses across the street in San Jose, and to provide an overall attractive street appearance.*
- *Policy 4.52 (TR-M): Access to private parking should be from local streets that do not abut a park.*
- *Policy 4.53 (TR-M): Provide 30 foot landscape setbacks with a double row of trees between the BART track and residential buildings.*
- *Policy 4.54 (TR-M): Provide very high-density residential near BART and light rail stations, served by a linear park along the drainage-way. Provide high-density residential development at the interior of the subdistricts, serviced by neighborhood parks with sports fields.*
- *Policy 4.58 (TR-M): Buildings fronting on Capitol Avenue must be designed to minimize impacts of traffic, noise and pollution on the residential units that face Capitol Avenue.*

**CONCLUSION**

The TASP EIR adequately evaluated the land use impacts of the 450 Montague Project.

| | Potentially Significant Impact | Less Than Significant Impact with Mitigation | Less Than Significant Impact | No New Impact |
|---|---|---|---|---|
| **XI. MINERAL RESOURCES.** Would the project: | | | | |
| a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the State? | ☐ | ☐ | ☐ | ☒ |
| b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan? | ☐ | ☐ | ☐ | ☒ |

**DISCUSSION**

The City of Milpitas General Plan does not identify mineral resources within the Specific Plan area. Therefore, the 450 Montague Project has no new impact on mineral resources.

**CONCLUSION**

The TASP EIR adequately evaluated the mineral resource impacts of the 450 Montague Project.

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| | Potentially Significant Impact | Less Than Significant Impact with Mitigation | Less Than Significant Impact | No New Impact |
|---|---|---|---|---|
| **XII. NOISE.** Would the project result in: | | | | |
| a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? | ☐ | ☐ | ☐ | ☒ |
| b) Exposure of persons to or generation of excessive ground borne vibration or ground borne noise levels? | ☐ | ☐ | ☐ | ☒ |
| c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project? | ☐ | ☐ | ☐ | ☒ |
| d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project? | ☐ | ☐ | ☐ | ☒ |

| | Potentially Significant Impact | Less Than Significant Impact with Mitigation | Less Than Significant Impact | No New Impact |
|---|---|---|---|---|
| e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels? | ☐ | ☐ | ☐ | ☒ |
| f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels? | ☐ | ☐ | ☐ | ☒ |

## DISCUSSION

The TASP EIR found that the implementation of the Specific Plan would result in temporary and intermittent construction-related noise impacts (Impact 3.7-4) as well as long-term operational impacts from the increase in roadside noise levels (Impact 3.7-1) and the exposure of sensitive receptors to noise levels above the standards (Impact 3.7-2). The TASP EIR also found that due to the transit-oriented and mixed-use nature of the Specific Plan area, there would be exposure to groundborne noise and vibration from future BART activity (Impact 3.7-3). The TASP EIR cites General Plan and Specific Plan policies to ensure that these impacts are less than significant.

Traffic-related noise levels would increase on local roadways within the Specific Plan area. Significant noise impacts, as a result of traffic, are expected for segments of Great Mall Parkway and East Capitol Avenue, which are adjacent to the project site. Noise analysis conducted as part of the TASP EIR found that these segments would reach traffic specific noise level estimates of 70.4 dBA by 2030.[17] In addition, peak-hour noise levels along Montague Expressway would expose future residents to noise levels of 65 to 70 dBA, placing the proposed project in an area considered "conditionally acceptable" per the land use noise compatibility guidelines of the City of Milpitas General Plan.[18] Noise impacts to new multi-family residential or hotel development along these road segments would be mitigated to a less-than-significant level by policies in the General Plan and Specific Plan.

General Plan Policy 6-I-2 requires that projects within "conditionally acceptable" or "normally unacceptable" exterior noise exposure areas prepare a an acoustical analysis and implement measures to reduce noise to acceptable levels. A noise study was conducted on October 30, 2014 by Charles M. Salter and Associates for the 450 Montague Project, which analyzed noise from traffic and the VTA light-rail line that runs along East Capitol Avenue. The study found that current noise levels at the

[17] Dyett and Bhatia, *Draft Environmental Impact Report, Milpitas Transit Area Specific Plan*, October 2007; and *Final Environmental Impact Report, Milpitas Transit Area Specific Plan*, May 2008; *Section 3.7-14. Table 3.7-4.*

[18] Dyett and Bhatia, *Draft Environmental Impact Report, Milpitas Transit Area Specific Plan*, October 2007; and *Final Environmental Impact Report, Milpitas Transit Area Specific Plan*, May 2008; *Section 3.7-23.*

project site are at normally unacceptable levels.[19] The study provides recommendations to reduce sound levels to acceptable levels, including the use of sound-rated assemblies for exterior façades, windows, and doors and the use of mechanical ventilation. Pursuant to General Plan Policy 6-I-2 and 6-I-4, the project must include measures identified in the noise study as well as Specific Plan policies to reduce sound levels to acceptable levels. A detailed analysis of the noise reduction requirements must be made as well as noise insulation features included in the design. Implementation of these actions would be required as a Condition of Approval for the proposed project.

The Santa Clara Valley's VTA's BART Extension SEIR[20] has developed specific mitigation measures to reduce future noise and vibration impacts as a result of the new BART extension project in Milpitas. Additional Specific Plan policies 5.13 and 5.14 also address these impacts.

The TASP EIR identifies temporary, short-term noise impacts as a result of construction activity that would occur intermittently during the implementation of the Specific Plan. The TASP EIR concludes that these impacts would be less than significant with implementation of several policies, including General Plan Policy 6-I-13 and Specific Plan Policy 5.15. As the 450 Montague project would be required to comply with the Specific Plan and General Plan policies, the project's construction would not result in additional noise impacts, beyond those analyzed in the TASP EIR.

## APPLICABLE MITIGATION

No new mitigation measures are required.

## APPLICABLE POLICIES

### General Plan Policies

- Policy 6-G-1: Maintain land use compatibility with noise levels similar to those set by State guidelines.
- Policy 6-G-2: Minimize unnecessary, annoying, or injurious noise.
- Policy 6-I-2: Require an acoustical analysis for projects located within a "conditionally acceptable" or "normally unacceptable" exterior noise exposure area. Require mitigation measures to reduce noise to acceptable levels.
- Policy 6-I-3: Prohibit new construction where the exterior noise exposure is considered "clearly unacceptable" for the use proposed.
- Policy 6-I-4: Where actual or projected rear yard and exterior common open space noise exposure exceeds the "normally acceptable" levels for new single-family and multifamily residential projects, use mitigation measures to reduce sound levels in those areas to acceptable levels.

[19] Charles M. Salter and Associates, 2014. *Due Diligence Environmental Noise Study 450 Montague Expressway*. October 30.

[20] Santa Clara Valley Transportation Authority, 2007. *Draft Supplemental EIR,* January; and *Final Supplemental EIR,* May.

- Policy 6-I-5: All new residential development (single family and multifamily) and lodging facilities must have interior noise levels of 45 dB DNL or less. Mechanical ventilation will be required where use of windows for ventilation will result in higher than 45 dB DNL interior noise levels.
- Policy 6-I-6: Assist in enforcing compliance with noise emissions standards for all types of vehicles, established by the California Vehicle Code and by federal regulations, through coordination with the Milpitas Police Department, Santa Clara County Sheriff's Department, and the California Highway Patrol.
- Policy 6-I-9: Enforce the provisions of the City of Milpitas Noise Ordinance and the use of established truck routes.
- Policy 6-I-13: Restrict the hours of operation, technique, and equipment used in all public and private construction activities to minimize noise impact. Include noise specifications in requests for bids and equipment information.

**Specific Plan Policies**

- *Policy 5.10: New development in the Transit Area shall adhere to the standards and guidelines in the Milpitas General Plan that govern noise levels. The particular policies of note are Policies 6-I-1 through 6-I-16.*
- *Policy 5.11: Construct masonry walls to buffer residential uses from BART and UPRR train tracks. These walls will be constructed by residential developers. They may be located within the landscaped buffer along the tracks*
- *Policy 5.13: Apply the FTA groundborne vibration criteria (presented in Table 5-5) as review criteria for development projects in the vicinity of vibration sources such as BART trains and heavy rail trains.*
- *Policy 5.14: Project applicants shall conduct a vibration impact analysis for any sites adjacent to or within 300 feet of active UPRR and BART alignments to demonstrate that interior vibration levels within all new residential development (single family and multifamily) and lodging facilities would be at acceptable levels. If needed, require mitigation measure to reduce vibration to acceptable levels.*
- *Policy 5.15: Prior to issuance of building permits, applicants shall demonstrate that noise exposure to sensitive receptors from construction activities has been mitigated to the extent feasible pursuant to the City's Noise Abatement Ordinance. Mitigation may include a combination of techniques that reduce noise generated at the source, increase the noise insulation of the receptor or increase the noise attenuation rate as noise travels from the source to the receptor.*
- *Policy 5.17: In all rental and sale agreements, provide disclosures to future residents about all surrounding industrial uses, including UPRR train tracks and operations, and permanent rights of such industrial uses to remain. Describe potential impacts including but not limited to: noise, groundborne and airborne vibration, odors, and use of hazardous materials.*
- *Policy 5.18: Day care facilities, schools, nursing homes, and other similar sensitive receptors shall be located away from sites which store or use hazardous materials, in accordance with State and City standards. Adequate buffers to protect occupants of these*

*sensitive uses shall be provided, including but not limited to walls, fences, landscaping, large building setbacks, and additional exit routes over and above minimum code requirements.*

- *Policy 5.19: Require the installation of temporary buffers—fences, walls, or vegetation—when residential uses are developed adjacent to existing industrial uses. The type of buffer must be reviewed and approved by the City Planning Department. The temporary buffers may be removed if and when an adjacent site is redeveloped as a non-industrial use.*

## CONCLUSION

The TASP EIR, with incorporation as a Condition of Approval of the noise reduction measures identified in the project's noise impact analysis, adequately covered the noise impacts of the 450 Montague Project.

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| | Potentially Significant Impact | Less Than Significant Impact with Mitigation | Less Than Significant Impact | No New Impact |
|---|---|---|---|---|
| **XIII. POPULATION AND HOUSING.** Would the project: | | | | |
| a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)? | ☐ | ☐ | ☐ | ☒ |
| b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere? | ☐ | ☐ | ☐ | ☒ |
| c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere? | ☐ | ☐ | ☐ | ☒ |

## DISCUSSION

Implementation of the Specific Plan would transform a predominantly industrial area by adding high intensity residential developments near transit to maximize transit ridership and to create a vibrant residential community that is in close proximity to jobs, parks and retail uses.

The TASP EIR evaluated potential environmental impacts associated with approximately 7,100 residential units and 18,000 new residents within the Specific Plan area. The TASP EIR assumes that the population growth is concentrated in this area and that the Specific Plan would increase the City's

housing stock by 39 percent and its population by 28 percent based on 2006 estimates from the California Department of Finance.[21]

The TASP EIR concluded that the population and growth impacts associated with the Specific Plan are adequately addressed by the City's Housing Element. Table 1 below includes the housing and population assumptions evaluated within the TASP EIR and also shows existing and proposed housing development within the Specific Plan area. As the population and housing units proposed by the project would fall within the total development anticipated by the TASP EIR, the project would result in no new impacts associated with population and housing.

**Table 1: Existing and Proposed Housing Units and Population with the Specific Plan Area**

| | Evaluated Within The TASP EIR | Approved Units | Under Construction | 450 Montague Project | Remaining Development Available |
|---|---|---|---|---|---|
| Housing Units | 7,109 [a] | 2,122 | 1,548 | 489 | 2,950 |
| Population | 17,915 [a] | 5,348 [b] | 3,901 [b] | 1,233 [b] | 7,443 |

[a] Dyett and Bhatia, *Draft Environmental Impact Report, Milpitas Transit Area Specific Plan*, October 2007; and *Final Environmental Impact Report, Milpitas Transit Area Specific Plan*, May 2008.

[b] Estimated population of the associated approved units, under construction units, and the proposed project was determined by using the residents per unit evaluated within the TASP EIR (17,915 residents / 7,109 units = 2.52 residents per unit).

Source: LSA Associates, Inc., 2015.

## APPLICABLE MITIGATIONS

No new mitigation measures are required.

## CONCLUSION

The TASP EIR adequately evaluated the population and housing impacts of the 450 Montague Project.

[21] Dyett and Bhatia, *Draft Environmental Impact Report, Milpitas Transit Area Specific Plan*, October 2007; and *Final Environmental Impact Report, Milpitas Transit Area Specific Plan*, May 2008.

| | Potentially Significant Impact | Less Than Significant Impact with Mitigation | Less Than Significant Impact | No New Impact |
|---|---|---|---|---|
| **XIV. PUBLIC SERVICES.** | | | | |
| a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: | | | | |
| i. Fire protection? | ☐ | ☐ | ☐ | ☒ |
| ii. Police protection? | ☐ | ☐ | ☐ | ☒ |
| iii. Schools? | ☐ | ☐ | ☐ | ☒ |
| iv. Parks? | ☐ | ☐ | ☐ | ☒ |
| v. Other public facilities? | ☐ | ☐ | ☐ | ☒ |

## DISCUSSION

The Specific Plan area contains portions of three school districts: the Milpitas Unified School District (MUSD), Berryessa Union School District, and East Side Union School District. The TASP EIR evaluated the impact that the Specific Plan's anticipated 18,000 residents, and associated increase in expected student population, would have on the three school districts. The TASP EIR concluded that build-out of the Specific Plan will require at least one new elementary school within MUSD and the expansions of existing facilities. The TASP EIR identified a significant and unavoidable impact related to an increased demand for school facilities (Impact 3.9-1).

The project site falls within the Berryessa Union School District and the East Side Union School District attendance boundaries. Projected student enrollment rates associated with the build-out of the TASP are as follows: 233 students for East Side Union High School District and 330 students for Berryessa Union School District.[22]

Due to the project's location, school-aged children would be expected to attend Northwood Elementary and Morrill Middle School in the Berryessa Union School District.[23] Northwood Elementary has a

[22] Dyett and Bhatia, 2008. *Milpitas Transit Area Specific Plan, p. 3.9-8.* May.

[23] Berryessa Union School District, 2015. Margot Sandoval, Administrative Assistant, Business Services. Written communication with LSA Associates. January 27.

current student enrollment of 446 and a capacity of 648.[24] The TASP identifies the elementary school student generation rate for the district as 0.046 students per unit.[25] As such, the proposed project would generate 22.5 new students that would attend Northwood Elementary. Morrill Middle School has a current enrollment of 730 students and a capacity of 1,024 students.[26] The TASP identifies the middle-school student generation rate to be 0.016 students per unit.[27] Based on this rate, the proposed project would generate 7.8 students that would attend Morrill Middle School. The number of elementary and middle-school students generated by the proposed project would be within the capacity range of these two schools.

High-school aged students would be expected to attend Independence High School in the East Side Union High School District.[28] Independence High School has a current enrollment of 3,126 students and a capacity to serve a total of 3,744 high school students.[29] The student generation rate for Independence High School is 0.078 students per multi-family housing unit.[30] Since the proposed project would develop 489 residential units, the expected number of high school-aged students generated from the proposed project would be 38.2, which is within the existing capacity of Independence High School.

Policies in the General Plan, Midtown Plan and Specific Plan would reduce the impact and include coordination with the school districts to update their comprehensive facilities plans, update school fees for developers, and consider joining use agreements for potential shared facilities; as well as applicant payment of school impact fees pursuant to State Government Code 65995 to 65998, which is a means of offsetting development's school impacts. As the above information illustrates, residential growth associated with implementation of the proposed project would fall within the growth parameters evaluated within the TASP EIR and the proposed project's impacts on schools have been adequately analyzed in the TASP EIR; as such, the project would not result in a new impact to school facilities.

The TASP EIR concluded that the fire department would need to expand an existing fire station and/or construct a new station, in addition to providing additional staff and equipment, to adequately serve the development associated with implementation of the Specific Plan (Impact 3.9-2). The TASP EIR noted that under the National Fire Protection Association (NFPA) standard of one firefighter per 1,000 residents, 18 new firefighters would be needed. Policies contained in the Milpitas General Plan and the Specific Plan would help to ensure that even with new development anticipated in the Specific Plan, Milpitas Fire Department response times remain consistent with National Fire Protection Association Standard 1710. Given this, less-than-significant impacts to the provision of

[24] Berryessa Union School District,2015. Margot Sandoval, Administrative Assistant, Business Services. Written communication with LSA Associates. February 26.

[25] Dyett and Bhatia, 2008. *Milpitas Transit Area Specific Plan, p. 3.9-7.* May.

[26] Berryessa Union School District,2015, op. cit.

[27] Ibid.

[28] East Side Union High School District, 2015. Marcus Battle, Associate Superintendent. Written communication with LSA Associates. January 28.

[29] Ibid.

[30] Ibid.

fire services are anticipated. As the population and housing units proposed by the project would fall within the total development anticipated by the TASP EIR, the project would result in no new impacts associated with fire services.

As noted in the TASP EIR, implementation of the Specific Plan would increase the long-term demand for police assistance and new staff and equipment would be required (Impact 3.9-3); however, a new police station would not be warranted. An addition of 26.3 police offers would be needed to service the Specific Plan's increase in population. Policy 6.45 of the Specific Plan would ensure that there are adequate police services in place to serve the Specific Plan area, including the proposed project. As such, the TASP EIR concluded that the impacts to police services would be less than significant. The 450 Montague Project also adheres to policies in the Specific and General Plan, and because the population and housing units proposed by the project would fall within the total development anticipated by the TASP EIR, the project would result in no new impacts associated with fire services.

The TASP EIR concluded that the combination of Parks/Plazas and Linear Parks meets the expected park requirements for the Planning Area given the anticipated population associated with implementation of the Specific Plan. All land shown in the Specific Plan as parks or landscape buffers with trails must be dedicated as public parks to meet the requirements (or an equivalent amount of land if park locations are adjusted). The TASP EIR concludes that the impacts to parks would be less than significant because of various policies regarding open space requirements, park land dedication and in-lieu feeds for new development. The Specific Plan also provides numerous policies related to parks which are incorporated into the Parks and Recreation section (Section XV, Recreation) of this checklist. The 450 Montague project would comply with all applicable policies regarding the provision and design of open space and parks, and would include the provision of two parks on site, connection to the new trail along Penitencia Creek. Additionally, the proposed project would install a decomposed granite trail over the existing maintenance road along the creek in efforts to support Policy 3.54 of the Specific Plan, which is focused on developing a network of public trails along Penitencia Creek.

The TASP EIR adequately evaluates public service impacts and the proposed project's impacts are adequately included in and analyzed by the TASP EIR. Therefore, the 450 Montague Project has no new impact on public services.

## APPLICABLE MITIGATION

No new mitigation measures are required.

## APPLICABLE POLICIES

### General Plan Policies

- Policy 2.c-I-1: Continue working with Milpitas Unified School District (MUSD), Berryessa Union High School District, and East Side Union School District in its update of the comprehensive facilities plan and to ensure adequate provision of school facilities.
- Policy 2.c-I-3: Work with MUSD, Berryessa Union High School District, and East Side Union School District to monitor statutory changes and modify school fees when necessary

to comply with statutory changes. Following this policy will permit the MUSD to update school fees for developers to cover the cost of constructing a new school and expanding Milpitas High School.

- Policy 5.c-I-1 Maintain a response time of four minutes or less for all urban service areas.

**Midtown Specific Plan Policies**

- *Policy 6.20: Coordinate with the school districts in planning for adequate public school facilities.*

**Specific Plan Policies**

- *Policy 6.46: Coordinate with the affected school districts on facilities needed to accommodate new students and define actions the City can take to assist or support them in their efforts.*
- *Policy 6.44: The City will ensure that all school impact fees are paid from individual projects prior to the issuance of any building permits.*
- *Policy 6.44: The City and the school districts located in the Transit Area should consider entering into a joint use agreement, allowing public use of a new school's playfields when not in use by students, and public use of rooms in the school building for community meetings and events. Any new school site should include outdoor active recreation facilities, which would be counted toward the Transit Area's public parks requirement. The school building should include facilities that can be accessed and used for community events.*
- *Policy 6.50: The Fire Department shall conduct a "standards of cover" analysis to determine the Transit Plan's precise impact on the department's staffing and equipment, and any required facility needs. Identify and evaluate potential sites for an expanded or new fire station near the Transit Area if the standards of cover analysis determines it is warranted.*
- *Policy 6.51: Additional fire department staff will be hired, equipment purchased, and facilities built to provide an adequate level of service—as determined by City Council—for the residents, workers, and visitors of the Transit Area. New equipment and facilities shall be funded by the Community Facilities District fee and new staff paid from the City's General Fund. These facilities are not expected to be sited within the Transit Area.*
- *Policy 6.52: If a new fire station is built to meet the service needs of the Transit Area, it must be sited and developed in such a way to not create substantial adverse physical impacts or significant environmental impacts. The new station should be chosen to minimize noise and traffic impacts on existing land uses.*
- *Policy 6.53: The Fire Department shall update the City's emergency and disaster response plans to take the location and type of new development, and future traffic levels, into account.*
- *Policy 5.3: All streets (public & private) shall be consistent with the street sections in Chapter 5 [of the proposed Plan] and shall meet any additional Milpitas Fire Department fire apparatus design requirements for access and firefighting operations.*

## CONCLUSION

The TASP EIR adequately evaluated the public service impacts of the 450 Montague Project.

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| | | Potentially Significant Impact | Less Than Significant Impact with Mitigation | Less Than Significant Impact | No New Impact |
|---|---|---|---|---|---|
| **XV.** | **RECREATION.** | | | | |
| a) | Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated? | ☐ | ☐ | ☐ | ☒ |
| b) | Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment? | ☐ | ☐ | ☐ | ☒ |

## DISCUSSION

Public parks identified in the Specific Plan have three main forms: Parks/Plazas, Linear Parks, and Landscape Buffers. The TASP EIR concluded that the combination of Parks/Plazas and Linear Parks would meet the expected park requirements for the Specific Plan area given the anticipated population at full implementation of the Specific Plan. All land shown in the Plan as parks or landscape buffers with trails must be dedicated as public parks to meet the requirements (or an equivalent amount of land if the park locations are adjusted), and recreation impacts would be considered less than significant.

The proposed project would include approximately 86,648 square feet (approximately 1.99 acres) of open space on the site, including two interior courtyards and two interior parks. The majority of the units would have private open space in the form of balconies. However, 16 percent of the podium apartment units would not have balconies (mostly studio and one-bedroom units) due to overall unit size and proximity to noise from a major arterial. The podium building would provide additional open space via two courtyards and a sky deck. There would be two parks (Park A and Park B) within the development, totaling 1.48 acres that would serve as open space and transition areas between the housing types. The project would include two trails for future residents. One trail (Park B extension) would be located between Building 14 and Building 15 and would connect Park B to Linear Park and other local trails and parks in the area. Another trail (Linear Park) would include a 0.49-acre linear park adjacent and parallel to Penitencia Creek on the southern boundary of the project site. In addition, the proposed project would install a decomposed granite trail over the existing maintenance road along the creek in efforts to support the development of public trails along Lower Penitencia

Creek. The City's Parks, Recreation and Cultural Resources Commission would review the proposed park layout and design prior to submitting the project to the City Council for approval.

The TASP EIR adequately evaluated the environmental impacts associated with implementation of the Specific Plan, including parks and recreation impacts. Development of the proposed project would fall within the development assumptions evaluated within the TASP EIR. Therefore, the proposed project has no new impact on parks and recreation.

**APPLICABLE MITIGATION**

No new mitigation measures are required.

**APPLICABLE POLICIES**

**Midtown Plan Policies**

- *Policy 3.24: Require new residential development to provide public parks at a ratio of 3.5 acres per 1,000 persons, of which up to 1.5 acres per 1,000 persons can be developed as private or common open space.*
- *Policy 3.26: Encourage new or expanding office and public/quasi-public uses to provide publicly accessible outdoor open spaces (plazas, gardens, arcades) as a part of new development. Ensure that open spaces are linked to sidewalks and pedestrian paths.*

**Specific Plan Policies**

- *Policy 3.38: The open space requirements of the Midtown Milpitas Specific Plan (Policy 3.24) shall apply to the entire area of the Transit Area Specific Plan. Parks are required at a ratio of 3.5 acres per 1,000 people, with at least 2.0 of those acres publicly accessible. Land dedicated for public parks or trails shall fulfill the park land requirements. In addition, 20 percent of a landscape buffer area along a street or public right of way may count towards the public park requirements, when it includes trails or wide sidewalks connected to an overall pedestrian/bike circulation network.*
- *Policy 3.39: Develop between 32 and 47 acres of public park space in the Transit Area, with a goal of around 36 acres. This target is based on the Midtown Milpitas Specific Plan's parks standard of 2.0 acres of public park land per 1,000 residents, applied against the minimum and maximum population expected in the Transit Area. The 36 acre goal, which includes parks, plazas and linear parks, is generated from the Transit Area's expected final population.*
- *Policy 3.40: Locate and size parks as shown on Figure 3-6, Parks, Public Spaces, and Trails [of the Specific Plan]. Minor adjustments to the location of parks may be necessary to facilitate a better site plan, respond to site specific constraints, or to accommodate phasing of a project. Smaller parks may be combined to form a larger neighborhood park within the same subdistrict as long as there is no reduction in park area. Complete elimination or relocation of a park outside of a subdistrict requires an amendment to the Specific Plan. If a school is located on a site designated as a park, it may be counted as a park if a joint use agreement is established to allow public use of open space and buildings*

*for recreation purposes after school hours and on weekends. If no such joint use agreement is established, an alternative park site shall be designated.*

- *Policy 3.41: Park land dedication and in-lieu fees required of new development. Park land shall be dedicated as part of the approval of any new development, if a park site is designated on the property as shown in Figure 3-6 [of the Specific Plan]. Land dedication is required for Parks/Plazas/Community Facilities and Linear Parks and Trails in the locations and amounts shown on Figure 3-6 [of the Specific Plan].*

  *Dedication of the land shown on Figure 3-6 cannot be substituted by in-lieu fees. If a development's parkland obligation as determined by City ordinances is not satisfied by the require land dedication, it must pay an in-lieu fee which shall be spent to acquire and develop other parks within the Transit Area. If a development provides more than its fair share of park land, it will be compensated by the City at fair market value, using in-lieu fees paid by new development and other available sources.*

- *Policy 3.42: If a public utility easement (such as the one existing between Capitol Avenue and Penitencia Creek East Channel) is developed as a publicly-accessible pathway or linear park that connects two public streets, it can be counted toward a development's park dedication requirement.*

- *Policy 3.43: New development must pay for the construction of public parks and streets surrounding the parks (or half-streets if bordering an adjacent development site). In addition to dedicating or contributing toward the land for new public parks, projects under this Specific Plan must also pay for the improvement of the parks with appropriate landscaping and recreation facilities. Covering this cost can be handled by paying a fee to the City or by direct development of parkland, or both. The cost and/or actions expected of projects will be determined by the City.*

- *Policy 3.44: The design and programming of new parks must be approved by the City's Parks and Recreation Department.*

- *Policy 3.45: Private development within the Transit Area must meet the private open space requirements on a project-by-project basis.*

- *Policy 3.48: The park along the Penitencia Creek East Channel shall provide a pedestrian path along the creek; BBQ's; a tot lot; open space areas for frisbee and similar informal recreation, and other passive recreation facilities.*

- *Policy 3.50: The park in the center of the Trade Zone/Montague subdistrict shall provide sports fields for soccer, baseball, basketball, and/or other sports that have a high demand in Milpitas. There shall be ample perimeter landscaping to create an attractive setting for the surrounding housing; and a tot lot shall be included. A community center could also be included. Sports fields should serve both children and adult sports leagues.*

- *Policy 3.51: Parks will have public streets abutting at least three sides. Parks shall be surrounded by streets on three sides in order to: provide parking for the park on the street; enhance security of the park by having residents overlook the park and police vehicles able to drive by; and provide noise and visual separation for residents and offices from the activities in the park. If approved by the City, a park can also have public streets on two sides and a public right of-way, such as a trail, or a railroad right-of-way along the third side.*

- *Policy 3.54: Include a network of trails along Penitencia Creek and railroad right of ways. These bike/pedestrian trails will connect into the citywide trail network, pedestrian overcrossings of expressways, and the Transit Area's continuous network of bike lanes. They will be located on both sides of Lower Penitencia Creek and on the east side of the Union Pacific railroad tracks that run between Main Street and McCandless Drive.*
- *Policy 3.55: Complete a Trail Loop connecting the whole Transit Area. The trail loop goes from McCandless Drive and Lower Penitencia Creek; along Penitencia Creek East Channel, across Montague Expressway, west along the creek channel, then northeast across Capitol Avenue, then across Montague Expressway, along Piper Drive, and across the Great Mall back to Centre Point and McCandless. It is shown on Figure 3-6 [of the Specific Plan].*
- *The Trail Loop provides a clear and easy way for people to access the BART and LRT station, move between different subareas of the Transit Area, and offers a roughly 1.5 to 2 mile jogging and walking and biking path for recreational use.*
- *Policy 3.56: Connections shall be created across Montague Expressway with overhead bridges or undercrossings to create a continuous trail network; allow pedestrians and bicyclists to cross safely; and connect neighborhoods, schools, and parks. One connection will be where the Penitencia Creek East Channel crosses Montague, via ramps in the creek channel area or on adjacent park land, and another will be at Piper Drive, connected to the BART station, with elevators at both ends.*
- *Policy 3.57: All properties along the trail network will need to set aside land for the trails. This land will count towards the required public park land dedication requirement. Refer to Figure 3-7 [of the Specific Plan] for required dimensions. If trail easements already exist or are acquired within the rail line or flood control right of way, these easements may be used in lieu of land on development sites.*

**CONCLUSION**

The TASP EIR adequately evaluated the recreation impacts of the 450 Montague Project**.**

| | Potentially Significant Impact | Less Than Significant Impact with Mitigation | Less Than Significant Impact | No New Impact |
|---|---|---|---|---|
| **XVI. TRANSPORTATION/TRAFFIC.** Would the project: | | | | |
| a) Cause an increase in traffic which is substantial in relation to the existing load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio of roads, or congestion at intersections)? | ☐ | ☐ | ☐ | ☒ |
| b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways? | ☐ | ☐ | ☐ | ☒ |
| c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks? | ☐ | ☐ | ☐ | ☒ |
| d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? | ☐ | ☐ | ☐ | ☒ |
| e) Result in inadequate emergency access? | ☐ | ☐ | ☐ | ☒ |
| f) Conflict with adopted polices, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities? | ☐ | ☐ | ☐ | ☒ |

## DISCUSSION

The TASP EIR concluded that the build-out of the Specific Plan would result in significant changes in transportation patterns and use. Implementation of the Specific Plan would have significant near-term impacts to 15 key intersections, four freeways systems, and to existing bicycle, pedestrian and transit facilities (Impacts 3.3-1 through 3.3-21). The TASP EIR found that year 2030 impacts would occur at the majority of roadway segments within the Specific Plan area. The TASP EIR states that while compliance with Specific Plan policies would reduce impacts to less-than-significant levels, there will still be significant and unavoidable impacts for key intersections, freeways and roadway segments.

The TASP EIR identified intersections in the Specific Plan area that would have traffic that would exceed existing standards. Specific Plan policies require developers to pay two new traffic impact fees, one for the City and one for the County. Payment of the traffic impact fees would contribute funding towards road improvements to alleviate traffic related impacts; however, intersections that cannot widen lanes would result in significant and unavoidable impacts. In particular, relative to the proposed 450 Montague Project, the following three intersections would have level-of-service (LOS)

conditions that would be significant and unavoidable: 1) the intersection of the Great Mall Parkway and East Capitol Avenue and Montague Expressway; 2) the intersection of Montague Expressway and McCandless Drive/Trade Zone Boulevard; and 3) the intersection of Montague Expressway and Milpitas Boulevard. The City proposes an extension of Milpitas Boulevard as part of VTA's BART Extension project between Montague Expressway and East Capitol Avenue to partially mitigate this impact. However, the TASP EIR found that feasible mitigation measures are not available to reduce impacts at these intersections to less-than-significant levels.

The TASP EIR found that build-out of the Specific Plan would exacerbate unacceptable operations for four freeway segments and multiple roadway segments, making the impacts significant and unavoidable despite the numerous freeway and roadway improvements that are planned for the area.

The TASP EIR concluded that the Specific Plan area is deficient in sidewalks and bicycle paths (Impact 3.3-19) and therefore will not meet the future demand associated with high-density residential housing. Specific Plan policies 3.15, 3.28 and 3.29 are designed to reduce this impact to less than significant, and require the development of sufficient pedestrian and bicycle facilities and pathways that are consistent with TASP circulation standards.

Increased vehicle trips from new residential development could be reduced with use of public transportation including the new Bart line extension and existing use of the VTA light rail system. The TASP EIR concluded that the VTA would likely adjust the transit schedule and frequency to accommodate future demand. Specific Plan policy 3.32 would reduce this impact to a less-than-significant level.

The TASP EIR concluded that the mix of proposed land uses in the Specific Plan reduces the amount of vehicle trips by providing opportunities for residents to link trips, including walking and biking to destinations in lieu of driving, thereby reducing parking demand. However, a Court of Appeals decision held that parking is not part of the permanent physical environment, and that parking conditions change over time as people change their travel patterns. Therefore, unmet parking demand created by a project need not be considered a significant environmental effect under CEQA unless it would cause significant secondary effects. The development of residential units adjacent to transit and employment could reduce vehicle use and parking demand, and the project provides parking for the residential units. The TASP EIR found the impacts to parking would be less than significant.

Hexagon Transportation Consultants, Inc. conducted a traffic analysis for the proposed project in December 2014. The report includes an analysis of the project's two proposed driveways as well as the nearby intersections of Montague Expressway/Great Mall Parkway/Capitol Avenue and the future Capitol Avenue/Milpitas Boulevard extension. The results of the analysis determined that the proposed project would generate an estimated total of 3,107 daily trips, with 243 trips occurring during the AM peak hour and 289 trips occurring during the PM peak hour period.[31] This trip generation estimate does not include any deductions for public transit usage on the adjacent light rail system.

[31] Hexagon Transportation Consultants, Inc. 2014. *400 & 450 Montague Expressway Traffic Operations, Milpitas, CA.* December 24.

In addition, the results of the analysis concluded that the proposed project driveways would not cause significant operational problems on Montague Expressway or Capitol Avenue under near term conditions. The signalized intersection of Montague Expressway and Great Mall Parkways currently operates at LOS E during the AM peak hour and LOS F during the PM peak hour. The proposed driveway on Montague Expressway is expected to operate at LOS A during the AM peak hour and LOS C during the PM peak hour. The analysis concluded that no adverse impacts to traffic flow on Montague Expressway as a result of this proposed driveway.[32] However, the report notes that if the driveway is moved further east on Montague Expressway, the level of service could degrade because eastbound traffic queues on Montague Expressway could block the driveway during peak hours. The temporary driveway proposed on East Capitol Avenue would operate at LOS A during the AM peak hour and LOS E during the PM peak hour. The poor LOS during the PM commute period is due to heavy southbound traffic on Capitol Avenue. The analysis notes that while southbound vehicle queues could block the temporary driveway on Capitol Avenue during the PM commute period, it is not usual to occur at properties located adjacent to major arterial streets. Therefore, the analysis concluded that there would be adequate gaps for project traffic to enter the traffic stream after the adjacent queues clear.[33]

Hexagon also conducted a Sight Distance Analysis and concluded that the sight distance provided by the proposed driveways would comply with Caltrans Highway Design Manual (HDM) standards. Sight distance at the existing driveway on Montague Expressway is currently obscured by a monument sign for the adjacent office building and also by a utility pole that is within 100 feet west of the existing driveway. The report noted that the signage would be removed as part of the proposed project and the fact that drivers could see around the pole for at least 715 feet along Montague Expressway. As such, the analysis concluded that the proposed driveway on Montague Expressway complies with HDM standards. The report also determined that the sight distance for the temporary driveway on Capitol Avenue was also in excess of 605 feet, which is in compliance with HDM standards.[34]

Since development of 450 Montague Project falls within the development parameters anticipated in the Specific Plan and evaluated in the TASP EIR, there are no new transportation impacts associated with the proposed project. Moreover, the 450 Montague Project would be required to comply with all policies within the Specific Plan and the applicant would be required to pay the TASP Mitigation Fee of approximately $32,781 per unit and the CFD Maximum Annual Special Tax Rate of $559.86 per market-rate unit which would be used for circulation improvements. These fees are updated annually.

**APPLICABLE MITGATION**

No new mitigation measures are required.

**APPLICABLE POLICIES**

[32] Ibid.

[33] Ibid.

[34] Ibid.

**Specific Plan Policies**

- *Policy 3.12: Preserve adequate right-of-way along Capitol Avenue, Great Mall Parkway, and Montague Expressway to accommodate future regional roadway improvements. Final dimensions of right-of-way acquisition are not yet known. The detailed street sections in Chapter 5 [of the Specific Plan] include notes about right-of-way acquisition, to the extent that information is currently available.*
- *Policy 3.15: Review individual development applications to ensure that adequate street right-of- way, bicycle facilities, pedestrian facilities and landscaping are provided and are consistent with the Transit Area Plan circulation policies and street design standards in Chapter 5 [of the Specific Plan].*
- *Policy 3.16: Establish and implement a travel demand management (TDM) program in order to encourage alternate modes of travel and thereby reduce automobile trips. Establish a funding mechanism to pay for the costs of the program, including the cost of a transportation coordinator to administer the program. The program would include a ride-matching program, coordination with regional ride-sharing organizations, and provision of transit information; and could also include sale of discounted transit passes and provision of shuttle service to major destinations.*
- *Policy 3.17: New streets shall be located as generally shown on the Street System Map, Figure 3-2.*
- *Policy 3.18: New development must dedicate land for new public streets and pay for their construction.*
- *Policy 3.21: Provide continuous pedestrian sidewalks and safe bike travel routes throughout the entire Transit Area and within development projects.*
- *Policy 3.22: Private development shall provide direct walking and biking routes to schools and major destinations, such as parks and shopping, through their property.*
- *Policy 3.28: Provide continuous bicycle circulation through the project site and to adjacent areas by closing existing gaps in bicycle lanes and bicycle routes, per Figure 3-5 [of the Specific Plan]. Gaps exist on Capitol Avenue between Montague Expressway and Trimble Road, and on Trade Zone Boulevard between Montague Expressway and Lundy Place. Capitol Avenue only needs to be re-striped to add a bike lane. Trade Zone Boulevard generally contains sufficient width to accommodate two travel lanes and bike lanes in each direction; however, the westbound lanes on Trade Zone jog south slightly, so right-of-way acquisition will likely be required to push the curb further north to maintain a consistent section and to add bike lanes. Bike routes should be upgraded to bike lanes as part of any Montague widening project.*
- *Policy 3.29: A Class III bicycle route shall be created on the internal roadways (from the Milpitas Boulevard Extension/Capitol Avenue intersection to Tarob Court) to provide a continuous bicycle connection between Milpitas Boulevard and the existing bicycle lanes on Lundy Street, as indicated on Figure 3-5 [of the Specific Plan].*
- *Policy 3.32: Coordinate with VTA to provide sufficient amenities (such as transit shelters) at all transit stops within the Transit Area.*

- *Policy 6.32: The City shall establish and assess a transportation impact fee program, known as the Regional Traffic Fee, to contribute toward traffic improvements to be undertaken in whole or in part by the County of Santa Clara or City of San Jose. This fee will go toward the East/West Corridor Study, Montague Expressway Widening project, and Calaveras Boulevard (SR 237) Overpass Widening project, as well as other local and regional improvements.*
- *Policy 6.33: The City shall establish and assess a transportation impact fee program to provide improvements to mitigate future traffic operations on the roadway segments within the City of Milpitas. All projects within the Transit Area Plan will be required to pay this fee.*
- *Policy 6.34: The new traffic impact fee program should include fair-share payments toward the following improvement: At the West Calaveras Boulevard/I-880 northbound ramps, convert the northbound center left turn lane to a shared left-turn/right-turn lane. The City of Milpitas will coordinate with Caltrans to implement this improvement.*
- *Policy 6.35: The new traffic impact fee program should include fair-share payments toward the following improvement: At the intersection of Tasman Drive/McCarthy Boulevard, the southbound (McCarthy Boulevard) shared through/right-turn lane will be converted to an exclusive right-turn lane with overlap signal phasing. The southbound right-turn will have a green arrow and enter the intersection at the same time as the eastbound left-turn movement. Eastbound left-turns will be prohibited. The City of Milpitas will implement this improvement.*
- *Policy 6.36: The new traffic impact fee program should include fair-share payments toward the following improvement: Coordinate the traffic signals at the Tasman Drive / I-880 southbound ramps and the Great Mall Parkway/I-880 northbound ramps with one another as well as adjacent intersections, particularly Tasman Drive/Alder Drive, in order to improve operations in the Great Mall Parkway/Tasman Drive corridor north of the Transit Area. The City of Milpitas will coordinate with Caltrans to implement this improvement.*

**CONCLUSION**

The TASP EIR adequately evaluated the transportation impacts of the 450 Montague Project. The proposed project would be required to comply with Specific Plan policies related to transportation including the traffic impact fees and City of Milpitas 2008 CFD (TASP area) tax rates.

| | Potentially Significant Impact | Less Than Significant Impact with Mitigation | Less Than Significant Impact | No New Impact |
|---|---|---|---|---|
| **XVII. UTILITIES AND SERVICE SYSTEMS.** Would the project: | | | | |
| a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board? | ☐ | ☐ | ☐ | ☒ |
| b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? | ☐ | ☐ | ☐ | ☒ |
| c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? | ☐ | ☐ | ☐ | ☒ |
| d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed? | ☐ | ☐ | ☐ | ☒ |
| e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments? | ☐ | ☐ | ☐ | ☒ |
| f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs? | ☐ | ☐ | ☐ | ☒ |
| g) Comply with federal, State, and local statutes and regulations related to solid waste? | ☐ | ☐ | ☐ | ☒ |

## DISCUSSSION:

The TASP EIR concluded that development associated with implementation of the Specific Plan would result in less-than-significant impacts on utilities and services systems, including water supply, wastewater treatment, stormwater drainage and solid waste disposal. The TASP EIR anticipates impacts related to additional demand for water, sewer flow capacity, and recycled water lines (Impacts 3.11-1, 3.11-2, 3.11-3, 3.11-4, 3.11-5, and 3.11-6). Policies are included in the Specific Plan that address these impacts and include the installation of additional pipes, water efficiency measures and the purchase of water and sewer treatment capacity as needed. The TASP EIR also describes how the Specific Plan area is already developed and therefore will require upgrading of existing infrastructure in lieu of adding new infrastructure.

The TASP EIR describes how the transition from industrial to high density residential in the Specific Plan area will decrease the amount of stormwater runoff. The Specific Plan area would add more landscaping and the amount of impervious surface area over time will actually decrease, resulting in less stormwater runoff in the area. Therefore, implementation of the Specific Plan would not require any storm drain improvements.

The TASP EIR concluded that there would be a substantial increase in water demand as a result of the build-out of the Specific Plan -- average daily demand would be 2.65 mgd in comparison to the City's 2002 Master Water Plan prediction of 1.55 mgd (Impact 3.11-1). This increase in demand for water would require improvements to existing water infrastructure both in the Specific Plan area and affected pressure zones. The capacity of the existing turnout delivering water from the Santa Clara Valley Water District (SCVWD) system could be exceeded during peak hours of demand. As such, an additional 20-inch turnout would be needed to supply the additional water needed to the Specific Plan area which would eliminate the need for any pipeline improvements in the SCVWD pressure zones. The Specific Plan includes additional policies that would ensure that impacts to the provision of water would be less than significant.

The TASP EIR found that additional allotments of water needed to serve new growth (Impact 3.11-2) would be approximately 1.0 mgd, and that this increase would be offset by the supplies available from the SCWVD. During droughts, the City has the ability to run emergency wells and increase the use of recycled water to offset potable water demand. The Specific Plan includes numerous policies that would provide additional water supply allocations, including the use of recycled water.

The TASP EIR determined that sewer flow capacity as a result of the build-out of the Specific Plan would exceed the capacity planned for in the City's Sewer Master Plan (Impact 3.11-3) by a total of 2.20 mgd over 2007 conditions. This increased demand for capacity would require extensive improvements to the sewer pipelines within the Specific Plan area. Policies in the Specific Plan would reduce the impact to less than significant. In addition, the TASP EIR found that no improvements are needed for the City's Main Pump Station, as wet weather flow is not expected to exceed capacity.

The TASP EIR found that citywide cumulative wastewater generation would exceed the City's current WPCP capacity rights and would be considered cumulatively considerable (Impact 3.11-4). Policies in the Specific Plan are in place that would help meet wastewater treatment capacity demands, including the purchase of additional treatment plant capacity from the cities of San Jose and Santa Clara, the owners of the WPCP. This additional capacity would enable the City to meet the cumulative wastewater treatment demands generated by cumulative growth and development throughout the City, including the net increase in demand attributable to the Specific Plan area. However, the City's need to acquire an additional 1.0 mgd of WPCP capacity is based on the ability to serve all planned growth and development within the City. The need for this additional WPCP capacity will not be triggered until such time in the future when full General Plan build-out and Transit Area Specific Plan build-out is realized.

The TASP EIR found that the build-out of the Specific Plan would generate approximately 2.20 mgd of additional sewage flows above current levels and, when added to the existing wastewater disposal rate at the WPCP, it would be below the RWQCB trigger threshold of 120 mgd. Therefore the Specific Plan estimated sewage flow would be considered less than significant. However, the RWQCB has specific requirements designed to off-set cumulative regional increases in sewer flows

and discharge into the San Francisco Bay, primarily through water recycling and water conservation. The TASP EIR concluded that the amount of recycled water demand associated with the Specific Plan is not sufficient to fully offset the increased sewer flows and discharge into the Bay. Specific Plan policies 6.16, 6.17 and 6.20 are designed to reduce this impact to a less-than-significant level.

The TASP EIR concluded that new mainlines for water recycling would need to be installed and would have a less than significant impact because they would be installed on existing and proposed roads.

The increase in residential density under the Specific Plan would cause an increase in the amount of solid waste generation by approximately 7,400 pounds per day. The TASP EIR concludes that policies to implement recycling programs as well as solid waste source and reduction programs would reduce the impacts to less than significant. The City is also required to negotiate new agreements to handle long-term solid waste disposal after closure of the Newby landfill in 2023, which would also reduce the impact to a less-than-significant level.

Since the TASP EIR adequately addresses utilities and service systems, and the development associated with the 450 Montague Project's falls within the development assumptions evaluated in the TASP EIR, the proposed project has no new impact on utilities and public services. In addition, the 450 Montague Project must comply with the Municipal Code requirements and Conditions of Approval identified by the City related to utilities and service systems, including water supply, water easement, sewer, storm drainage, solid waste and property management.

## APPLICABLE MITIGATION MEASURES

No new mitigation measures are required.

## APPLICABLE POLICIES

### Specific Plan Policies

- *Policy 6.22: Upgrade and expand the water distribution system such that it will be adequate to serve new development in the Transit Area.*
- *Policy 6.13: Provide water supply for the Transit Area from the Santa Clara Valley Water District per the Water Supply Assessment.*
- *Policy 6.17: The City of Milpitas will require that water saving devices, as required by the California Plumbing Code, be installed in all residential, commercial, industrial and institutional facilities within the Transit Area. Such devices are capable of reducing the amount of water used indoors, resulting in substantial wastewater flow reductions.*
- *Policy 6.18: Construct recycled water mains along Great Mall Parkway, Capitol Avenue, as Montague Expressway, Sango Court, and into the Piper/Montague subdistrict, as shown in Figure 6-3 [of the Specific Plan].*
- *Policy 6.19: Per the Midtown Specific Plan, require new development to include recycled water lines for irrigation.*

- *Policy 6.21: Require existing irrigation users to convert to recycled water when it becomes available.*
- *Policy 6.9: The City of Milpitas will implement improvements to the Main Sewage Pump Station and the force mains which convey flows to the WPCP in general accordance with those improvements identified in the "Functionality and Operation Report" as prepared for the City by Winzler & Kelly Engineers, November 2005.*
- *Policy 6.10: The City of Milpitas will acquire up to 1.0 mgd of wastewater treatment capacity at the WPCP if necessary. The final amount to be acquired, if any, and the timing of the acquisition will be based on studies of actual usage and the pace of development in the city. The City shall monitor the increase in actual sewage flows and the amount of new development approved on an annual basis to determine when additional capacity is required.*
- *Policy 6.16: Reduce water consumption through a program of water conservation measures, such as use of recycled water, water-saving features, and drought-tolerant landscaping.*
- *Policy 6.20: The City of Milpitas will require that recycled water be used to irrigate all parks, plazas, community facilities, linear parks, landscaped front yards and buffer zones. Recycled water may also be used for landscape irrigation on vegetated setbacks and private common areas. The City shall also require, where reasonable and feasible, that commercial uses, schools and non-residential mixed use developments be provided with dual plumbing to enable indoor recycled water use for non-potable uses to the extent feasible.*
- *Policy 6.23: All new development shall participate to the maximum extent practical in solid waste source reduction and diversion programs.*
- *Policy 6.24: Before the expiration of its current waste disposal contract, the City shall negotiate new agreements to handle the long-term disposal of its solid waste past the closure of the Newby Island Sanitary Landfill.*

**Midtown Specific Plan Policies**

- *Policy 6.17 Implement existing recycling programs in the Midtown Area.*
- *Policy 6.18 Promote recycling of demolition and construction debris*

**CONCLUSION**

The TASP EIR adequately evaluated the utilities and service system impacts of the 450 Montague Project. In addition, the 450 Montague Project must comply with the Municipal Code requirements and Conditions of Approval identified by the City related to utilities and service systems, including water supply, water easement, sewer, storm drainage, solid waste and property management.

# REPORT PREPARATION

## A. REPORT PREPARERS

**LSA Associates, Inc.**
2215 Fifth Street
Berkeley, CA 94710
Judith H. Malamut, AICP, Principal-in-Charge
Amy Paulsen, AICP, Associate/Project Manager
Nicole Catalano, Assistant Planner
Amy Fischer, Associate, Air Quality and Noise Analyst
Patty Linder, Graphics/Document Production
Charis Hanshaw, Word Processing

## B. REFERENCES


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# APPENDIX A

## CAP Development Checklist

(Appendix C of the Milpitas Climate Action Plan)

# Appendix C:
# Development Checklist

## Development Checklist

The following checklist has been developed to assist project applicants and City staff to determine whether a proposed project complies with the Climate Action Plan.

If the proposed project's expected GHG emissions were not considered in the GHG emissions 2020 and 2035 forecast included in **Appendix A** of the CAP, this checklist is provided for informational use but may not preclude preparation of separate GHG analysis for the project. Examples of projects that may not be incorporated into the City's forecast include stationary source emissions regulated by the Bay Area Air Quality Management District, General Plan amendments, new specific plans that exceed the City's proposed population and job growth forecasts, and GHG emissions used in specific manufacturing processes that are not easily tracked at a community-wide level.

### Project Description/Characteristics

Please identify the applicable land uses included in the proposed project and provide a brief description of the proposed project (or the project description to be used for the associated environmental document).

Identify the applicable land uses:

☒ Residential ☐ Commercial ☐ Industrial ☐ Manufacturing ☒ Other

Project Description:

| |
|---|
| The project is located at 400 and 450 Montague and consists of 351 units of rental apartment homes, 138 for sale stacked flats, approx. 10,000 sf of non-residential space, and multiple public parks across approximately 10 acres. The project will be located across the street from the new Milpitas BART station. |

# Appendix C: Development Checklist

## Amendments Requested

Does the project require an amendment to any of the following planning documents?

General Plan: ☐ Yes ☒ No ☐ Not Sure

Midtown Specific Plan: ☐ Yes ☒ No ☐ Not Sure

Transit Area Specific Plan: ☐ Yes ☒ No ☐ Not Sure

## GHG Emissions Incorporated Within City GHG Forecast

Was this project, and its potential GHG emissions sources, considered in the City's GHG inventory and forecast?

☒ Yes ☐ No ☐ To be determined by staff

## Project Sources of GHG Emissions Considered in City Inventory

Identify the activities and sources of GHG emissions anticipated by the proposed project during either the construction or operational phases of the project.

| **Potential GHG Emissions Sources:** | | |
|---|---|---|
| ☒ Electricity Use | ☒ Res./Comm./Ind. Waste | ☒ Gasoline or Diesel Use |
| ☒ Natural Gas Use | ☒ Wastewater Disposal | ☒ Transportation (On-Road) |
| ☒ Const. & Demolition Waste | ☒ Water Use | ☒ Off-Road Equipment |
| ☐ Other _____ | | |

## Applicable Measures/Compliance

Identify in the checklist below the applicable measures that will be implemented as part of the proposed project to demonstrate consistency with the City's Climate Action Plan.

### Required Measures

This list includes measures and actions included in the CAP that are (1) required to be included in the project design and implementation and( 2) currently being implemented by the City. By following these two conditions and meeting the requirements identified below, the project demonstrates consistency with the CAP. As the City implements additional CAP measures, they will be added to this list.

# Appendix C:
# Development Checklist

| Measure | Action | Applicability | Compliance* |
|---|---|---|---|
| **Waste reduction** | | | ☒ Yes ☐ No ☐ N/A |
| **New multi-family development** | | | ☒ Yes ☐ No ☐ N/A |
| **Bikeways master plan** | | | ☒ Yes ☐ No ☐ N/A |
| **Municipal solar power purchase agreement** | | | ☐ Yes ☐ No ☒ N/A |
| **Water conservation** | | | ☒ Yes ☐ No ☐ N/A |
| **Recycled water** | | | ☒ Yes ☐ No ☐ N/A |
| **Green building** | | | ☒ Yes ☐ No ☐ N/A |

** All measures that are considered applicable on this list are required to be implemented in order to demonstrate consistency with the CAP.*

## Recommended Measures

This list includes measures and actions identified in the CAP, or programs and regulations that have yet to be adopted by the City, which would apply to a project of this type. These measures should be included in the project design as feasible and, once implemented or adopted by the City, be included in the list of required measures above.

| Measure | Action | Applicability | Compliance* |
|---|---|---|---|
| | | | ☐ Yes ☐ No ☐ N/A |
| | | | ☐ Yes ☐ No ☐ N/A |
| | | | ☐ Yes ☐ No ☐ N/A |

# Appendix C:
# Development Checklist

| Measure | Action | Applicability | Compliance* |
|---|---|---|---|
| | | | ☐ Yes ☐ No ☐ N/A |
| | | | ☐ Yes ☐ No ☐ N/A |
| | | | ☐ Yes ☐ No ☐ N/A |

** All measures considered applicable on this list should be considered for implementation in order to demonstrate consistency with the CAP.*

## Other GHG Reduction Measures Implemented

List and describe any additional measures that this project will incorporate to reduce GHG emissions that are not included in the CAP. If available, provide the estimated GHG reductions that would occur on an annual basis from implementing the measure, in $MTCO_2e$.

| Additional Measure | Estimated Annual GHG Reductions ($MTCO_2e$) |
|---|---|
| **Project is located across the street from a VTA light rail station and the new Milpitas BART station. The project's location will reduce vehicle miles travelled for the project's residents** | TBD |
| | |
| | |
| | |

# 450 MONTAGUE

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MULTIFAMILY COMMUNITIES
Lennar Multifamily Communities
100 Pine Street, Suite 2260
San Francisco, CA 94111

LENNAR
Lennar Homes
6111 Bollinger Canyon Rd, Suite 550
San Ramon, CA 94583

MILPITAS, CA

KTGY # 2013-0551 02.26.2015

**KTGY Group, Inc.**
**Architecture+Planning**
580 Second St., Suite 200
Oakland, CA 94607
510.272.2910
ktgy.com

A0.0

Architectural

| | |
|---|---|
| A0.0 | Cover Sheet |
| A0.1 | Sheet Index |
| A0.5 | Zoning & Code Analysis & Project Conformance |
| A0.6 | Project Data |
| A1.0 | Master Site Plan |
| A1.1 | Site Section |
| A1.2 | Conceptual Perspectives |
| A1.3 | Conceptual Perspectives |
| A1.4 | Conceptual Perspectives |
| A1.5 | Conceptual Perspectives |
| A1.6 | Conceptual Perspectives |
| A1.7 | Conceptual Perspectives |
| A1.8 | Conceptual Perspectives |

Type III Podium:

| | |
|---|---|
| AP2.0 | Elevations |
| AP2.1 | Elevations |
| AP3.0 | Basement 2 Plan |
| AP3.1 | Basement 1 Plan |
| AP3.2 | Podium Level Plan (Level 1) |
| AP3.3 | Level 2 Plan |
| AP3.4 | Level 3 & 4 Plan |
| AP3.5 | Level 5 Plan |
| AP3.6 | Roof Plan |
| AP4.0 | Building Section |
| AP5.0 | Unit Plans |
| AP6.0 | Details |
| AP6.1 | Conceptual Unit Exhaust Diagram |
| AP7.0 | Color and Materials Board |

Type V Stacked Flats:

| | |
|---|---|
| AS2.0 | Building "A" 3-Plex Elevations |
| AS2.1 | Building "B" 6-Plex Elevations |
| AS2.2 | Building "B" 6-Plex Elevations |
| AS2.3 | Building "C" 9-Plex Elevations |
| AS2.4 | Building "C" 9-Plex Elevations |
| AS2.5 | Building "C Alt." 9-Plex Elevations |
| AS2.6 | Building "C Alt." 9-Plex Elevations |
| AS2.7 | Building "D" 9-Plex Elevations |
| AS2.8 | Building "D" 9-Plex Elevations |
| AS2.9 | Building "E" 6-Plex Elevations |
| AS2.10 | Building "E" 6-Plex Elevations |
| AS3.0 | Building "A" 3-Plex Building Plan |
| AS3.1 | Building "B" 6-Plex Building Plan |
| AS3.2 | Building "C" 9-Plex Building Plan |
| AS3.3 | Building "C" 9-Plex Building Plan |
| AS3.4 | Building "C Alt." 9-Plex Building Plan |
| AS3.5 | Building "C Alt." 9-Plex Building Plan |
| AS3.6 | Building "D" 9-Plex Building Plan |
| AS3.7 | Building "D" 9-Plex Building Plan |
| AS3.8 | Building "D" 9-Plex Building Plan |
| AS3.9 | Building "E" 6-Plex Building Plan |
| AS3.10 | Building "E" 6-Plex Building Plan |
| AS5.0 | Stacked Flat Unit Plans |
| AS5.1 | Stacked Flat Unit Plans |
| AS5.2 | Stacked Flat Unit Plans |
| AS5.3 | Stacked Flat Unit Plans |
| AS5.4 | Stacked Flat Unit Plans |
| AS5.5 | Stacked Flat Unit Plans |
| AS5.6 | Stacked Flat Unit Plans |
| AS5.7 | Stacked Flat Unit Plans |
| AS5.8 | Stacked Flat Unit Plans |
| AS5.9 | Stacked Flat Unit Plans |
| AS5.10 | Stacked Flat Unit Plans |
| AS5.11 | Stacked Flat Unit Plans |
| AS7.0 | Color and Materials Board - Scheme 1 |
| AS7.1 | Color and Materials Board - Scheme 2 |
| AS8.0 | Trash Enclosure Plan & Elevation |

Civil

| | |
|---|---|
| TM.01 | Vesting Tentative Subdivision Map for Condominimum Purposes |
| TM.02 | Existing Conditions |
| TM.03 | Site Plan |
| TM.04 | Preliminary Grading & Drainage Plan |
| TM.05 | Flood Plain Map |
| TM.06 | Preliminary Utility Plan |
| TM.07A | Preliminary Stormwater Control Plan |
| TM.07B | Preliminary Stormwater Control Plan Details |
| TM.08 | Fire Truck Access Plan |
| TM.09 | Solid Waste Management Plan |
| TM.10 | Parking Plan |
| TM.11 | Conditions of Approval |

Landscape

| | |
|---|---|
| L1 | Landscape Plan |
| L2 | Podium Courtyard Enlargements |
| L3 | Park Enlargement |
| L4 | Planting & Irrigation |
| L5 | Landscape Imagery |

# 450 MONTAGUE

# SHEET INDEX

# A0.1

MILPITAS, CA

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580 Second St., Suite 200
Oakland, CA 94607
510.272.2910
ktgy.com

| | MILPITAS TRANSIT AREA SPECIFIC PLAN (TASP) DEVELOPMENT STANDARDS (2008, UPDATED 2011, TABLE 5-1) | | PROPOSED IN PROJECT SITE | DEPATURES (IF ANY) | REASON FOR DEPARTURE (IF ANY) |
|---|---|---|---|---|---|
| | **Boulevard Very High Density Mixed Use (MXD3-TOD)** | **Very High Density Transit Oriented Residential (R5-TOD)** | | | |
| **Density:** | Maximum FAR: 2.5 with CUP<br>MXD3-TOD: 41-75 du/gross acre (average density)<br>Max FAR: 1.88 | 41-75 du/gross acre | Average over the project site is: 46.7 du/gross acre (acreage based on existing property boundary) | N/A | N/A |
| **Transit-Oriented Density Bonus:** | MXD3-TOD: Up to 25% additional density increase with Use Permit | Up to 25% additional density increase with Use Permit | None | N/A | N/A |
| | | | | | |
| **Block Size:** | • Min 2.0 acres<br>• Max 4.0 acres | | Block size range: +/-3.25 acres to +/-3.5 acres | N/A | N/A |
| **Block Dimension:** | Maximum 500 feet between publicly accessible paths of travel | | maximum dimension: +/-485 feet frontage on Capitol Ave. | N/A | N/A |
| **Maximum Buiding Height:** | 12 stories along Montague Expressway | 75 feet, 12 stories along Capitol Ave, Montague Expressway | 5.5 stories along Capitol Ave and ranges from 3 stories to 5.5 stories along Montague Expressway | N/A | N/A |
| | | | | | |
| **Front Setback (Major Streets):** | 45 feet landscape setback from the (original) curb on Montague Expressway, plus 15-20 feet setback from back of sidewalk | 24 feet planting strip and 10 feet sidewalk off Capitol Ave. (per figure 5-11). Plus 15 feet setback from sidewalk | Project conforms; See Site Plan sheet A1.0 for dimensions. | N/A | N/A |
| **Other Street Facing Yards:** | 12-20 feet from back fo sidewalk | 12-20 feet from back of sidewalk | Between 12 to 14 feet is provided. | N/A | N/A |
| **Side Yard minimum:** | • 10 feet minimum<br>• 15 feet when abutting residential<br>• 20 feet for portions of buildings over 60 feet or 4 stories tall | • 15 feet<br>• 20 feet for buildings over 3 stories when abuuing residential | +/-20 feet provided between buildings on site. See sheet A1.0 for exact dimensions. | Building 1 side yard less than 20 feet; Building 16 side yard less than 15 feet; +/-20 feet between Building 1 and Building 16 | Site Geometry |
| **Rear Yard minimum:** | • 15 feet minimum, 20 feet when abutting residential use.<br>• Minimum 30 feet for portions of buildings over 60 feet or 4 stories tall | • 15 feet<br>• 20 feet for buildings over 3 stories when abuting residential | N/A | N/A | N/A |
| **From Creeks:** | Minimum 25 feet from top of bank | | 25 feet from top of Creek with additional +/- 18 feet setback to buildings for +/- 43 feet total. | N/A | N/A |
| **Projections into required yards:** | Allowed up to 6 feet for porches, stairs, balconies, bay windows, and awnings | | Project conforms; See Site Plan sheet A1.0. | N/A | N/A |
| | | | | | |
| **Building Orientation & Entrances:** | Building must face the street; and primary building entrances must be oriented towards the street | | The Podium building has frontages along Capitol Ave. and Montague Expressway. The stacked flat product are alley loaded so that buildings all have a street frontage. | N/A | N/A |
| | | | | | |
| **Parking & Auto Access:** | (Per Table 5-3) | | | | |
| **Residential uses:** | **minimum** | **max** | Project meets parking requirements per development standards. See Project Data on sheet A0.6 for more information. | N/A | N/A |
| **Studio:** | 0.8 covered | 1.0 covered | | | |
| **1-bedroom:** | 1.2 covered | 1.5 covered | | | |
| **2-3 bedroom:** | 1.6 covered | 2.0 covered | | | |
| **4+bedroom:** | 2.6 plus 1.0 per each additonal bedroom (2.0 covered minimum) | Depends on min required | | | |
| **Guest:** | • Projects with parking structures: 15% of required total<br>• Projects with private garages: 20% of required total | | | | |

| | MILPITAS TRANSIT AREA SPECIFIC PLAN (TASP) DEVELOPMENT STANDARDS (2008, UPDATED 2011, TABLE 5-1) | | PROPOSED IN PROJECT SITE | DEPATURES (IF ANY) | REASON FOR DEPARTURE (IF ANY) |
|---|---|---|---|---|---|
| | **Boulevard Very High Density Mixed Use (MXD3-TOD)** | **Very High Density Transit Oriented Residential (R5-TOD)** | | | |
| **Bicycle Parking:** | • 1 for every 4 spaces (exempting units with private garages)<br>• Plus 5% of total required for short term<br>• Short-term bike parking for residential shall be located on a public street within site of a front door and spaced evenly throughout the development<br>• Long-term bike parking should be located within the parking structure | | Project meets bicycle parking requirements. See Project Data sheet on sheet A0.6 for more information, and sheet AP3.1 and L1 for location information. | N/A | N/A |
| **Parking Design Standards:** | • No parking allowed within front or street side setback areas.<br>• At least 70% of the street facing perimeter shall be wrapped with habitable space<br>• Parking may also be designed so that is partially above ground, provided that no more than 5 feet is above grade, and above grade portion is wrapped with continuous landscaping that screens parking garage openings<br>• Individual garages may not occupy more than 50% of Ground Level Frontage facing the street.<br>• Maximum of 2 curb cuts per lot per street frontage. Exceptions allowed through acrhitectural review process.<br>• Width of parking garage entrances must be minimized (20-25 feet) and the parking access point set back from the curb<br>• Tandem parking may be allowed pursuant City's Off Street Parking Requirements | | See sheet AP3.0 and AP3.1 for garage plans and sheet A1.1 for site section. | Podium building garage height above grade varies along Capitol Ave and Montague Expressway; some points will be more than 5 feet above grade | Working with the water table, topography and liveability on major arterials, the garage height above grade will vary and at some points and be above the 5 feet allowed. However, the garage is completey at or below grade at building main entry points (Lobby and Leasing along Capitol Ave.) for accessiblity. All above grade garage openings have proposed landscape screening mechanisms such as planter boxers. The additional heigh of the garage above grade will help with privacy and livability of the ground floor units along a busy street. |
| **Parks and Open Space:** | • All residential projects within the TASP shall provide park land at the ratio of 3.5 acres/1,000 population: 2.0 acres that is public park land, and 1.5 acres of it may be satisfied by provision of private recreational areas<br>• Per Figure 3-6 of the TASP, this project site in conjunction with surrounding projects totals an approximate 2.31 acres of park and open space for the area<br>• 20% of landcape buffers count towards park requirements, if they include trails or wide sidewalks connected to the City Trail System | | See sheet A0.6 for more information. | N/A | N/A |
| **Private Open Space:** | (Per Zoning Sec.XI-10-6.04.G.2.b)<br>• Balconies (above ground level): minimum 40 sq.ft.; or<br>• Patios and porches (at ground level): minimum 50 sq.ft. | (Per Zoning Sec.XI-10-4.05.E.2.b.ii)<br>• Balconies (above ground level): minimum 40 sq.ft.; or<br>• Patios and porches (at ground level): minimum 50 sq.ft.<br>• Balconies, porches, or roof decks, with a minimum dimension of 4.5 feet may be considered usable open space | See sheet A0.6 for more information. | All of the 138 units in the Stacked Flat product and 296 units out 251 units in the Podium builing (84%) provide the required private open space. Approximately 16% of units in the Podium building does not private open space. | Studio units and a few 1 bedrooms (located along Capitol Ave) do not have private open space due to overall unit size and proximity to a major arterial. Although the project deviates from the private open space requirement, ample common open space is provided in 2 courtyards and a sky deck on the podium building. Limited balconies along Capitol Ave also helps with noise attenuation in the units and offers a building design that speaks to a more urban edge fronting the VTA station and future BART station. |
| | | | | | |
| **Garbage Truck Access and Trash/Recycling Enclouses:** | • Large refuse and recycling containers used by the multifamily and mixed-use buildings shall not be visible from a public or private street. Such containers shall be stored either within the parking facility of the building or within a vehicular accessway with appropriate screening<br>• Trash receptacle pads shall be integrated within design of residential lanes (private streets)<br>• All enclosure walls shall incorporate building materials and colors to match architecture of building, and they shall include appropriate landscape for screening | | A trash compactor is located in the SE corner of the site. Location and design of waste management follows the City's Waste Management Guidelines. Also see Trash Management Plan document. | N/A | N/A |
| **Emergency Vehicle Access:** | Primary access for emergency vehicles shall be from public streets; streets shall not be eliminated because this will compromise emergency access | | See sheet TM.08 for more information | N/A | N/A |
| **Utilities** | • Utilities shall be underground or in subsurface conduits and accessible<br>• All mechanical equipment shall be adequately screened with planting, berms or with an enclosure | | • Utilities are proposed to be underground.<br>• Roof top equipment shall be screened by parapet and screens; see sheets AP3.6, AS3.0-3.7. | N/A | N/A |
| **Lighting:** | • Shall be designed and placed to direct lighting to appropriate surfaces and minimize glare onto adjacent areas<br>• The light source used in outdoor lighting should provide a white light<br>• Low pressure sodium lamps are prohibited<br>• Light standards along sidewalks should be approximately 12' to 16'<br>• Uplighitng is encouraged to accent architectural features or landscaping | | See sheet L1 for more information | N/A | N/A |




LENNAR MULTIFAMILY COMMUNITIES
Lennar Multifamily Communities
100 Pine Street, Suite 2260
San Francisco, CA 94111

LENNAR
Lennar Homes
6111 Bollinger Canyon Rd, Suite 550
San Ramon, CA 94583



MILPITAS, CA

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**KTGY Group, Inc.**
**Architecture+Planning**
580 Second St., Suite 200
Oakland, CA 94607
510.272.2910
ktgy.com

## PROJECT SUMMARY

| | | |
|---|---|---|
| **Address** | 450 Montague | |
| **Zone:** | MXD3-TOD & R5-TOD | |
| **Site Acreage:** | 10.47 ac (existing property boundary) | |
| | 10.04 net ac (after right-of-way vacations and dedications) | |
| **Total Units:** | Podium: | 351 d.u. |
| | Stacked Flats: | 138 d.u. |
| | | 489 d.u. total |
| **Density:** | 46.70 d.u./ac | |
| **F.A.R.:** | 1.36 | |

## UNIT SUMMARY

| | Unit Type | Unit Area | D.U. | Total | % |
|---|---|---|---|---|---|
| **Podium** | **Studio** | 690 | **45** | | **9%** |
| | **1 Bedroom** | 719-1,083 | **202** | **351** | **41%** |
| | **2 Bedroom** | 1,029-1,391 | **104** | | **21%** |
| **Stacked Flats** | **2 Bedroom** | 1,056-1,400 | **42** | | **9%** |
| | **3 Bedroom** | 1,453-2,030 | **92** | **138** | **19%** |
| | **4 Bedroom** | 2,289-2,344 | **4** | | **1%** |
| | **Total** | **499,502** | **489** | | **100%** |
| | **Average Unit SF** | 1,021 | | | |

Podium Building Net Area: measured to face of exterior stud +1" air gap; includes all shafts; does not reflect 2" window recess
Stacked Flat Net Area: measured to inside face of stud, includes all shafts

## PARKING SUMMARY

**Residential Parking Required:**

| | Unit Type | Ratio | Units | Required | Total Req. |
|---|---|---|---|---|---|
| **Podium** | Studio | 0.8 | 45 | 36 | |
| | 1 Bedroom | 1.2 | 202 | 242 | 444 |
| | 2 Bedroom | 1.6 | 104 | 166 | |
| **Stacked Flats** | 2 Bedroom | 1.6 | 42 | 67 | |
| | 3 Bedroom | 1.6 | 92 | 147 | 224 |
| | 4 Bedroom | 2.6 | 4 | 10 | |
| | | | | | **668** |

**Guest Parking Required:**

| | | |
|---|---|---|
| **Podium** | 15% of required | 67 |
| **Stacked Flats** | 20% of required | 45 |
| | | **112** |

**780 total spaces required**

**Parking Provided:**

| | Space Type | Residential Parking | Guest Located within Residential Parking Area | Separated Guest Parking | Total | % |
|---|---|---|---|---|---|---|
| **Podium** | Standard | 284 | 39 | 21 | 344 | 41% |
| | Compact | 33 | - | 7 | 40 | 5% |
| | Tandem (Parking Structure) | 128 | - | - | 128 | 33% |
| **Stacked Flats** | Tandem Garage | 144 | - | - | 144 | |
| | Side-by-side Garage | 126 | - | - | 126 | 15% |
| | Surface Parking | - | - | 52 | 52 | 6% |
| | **Total** | | | | **834 provided** | |
| | **Parking Ratio** | | | | **1.71 sp/d.u.** | |

**Bicycle Parking:**

| | | Ratio | Required | Provided |
|---|---|---|---|---|
| **Podium** | Long Term | 1 per every 4 units | 88 | 88 |
| | Short Term | 5% Res. Required | 26 | 26 |
| **Stacked Flats** | Long Term | n/a | 0 | 0 |
| | Short Term | 5% Res. Required | 13 | 13 |
| | **Total** | | **127** | **127** |

## NON-RESIDENTIAL AREA SUMMARY

| | SF |
|---|---|
| **Podium** | 8,840 |
| **Stacked Flats** | 0 |
| **Total** | **8,840** |

## FLOOR AREA CALCULATIONS

| | Building Level | Residential |
|---|---|---|
| **Podium** | Level 1 | 74,600 |
| | Level 2 | 67,214 |
| | Level 3 | 75,979 |
| | Level 4 | 75,979 |
| | Level 5 | 72,790 |
| | Total | 366,562 |

| | | Area Per Building | Total Bldgs | Total Area |
|---|---|---|---|---|
| **Stacked Flats** | Type A | 5,639 | 1 | 5,639 |
| | Type B | 9,785 | 1 | 9,785 |
| | Type C | 15,794 | 6 | 94,764 |
| | Type C Alt. | 15,832 | 6 | 94,992 |
| | Type D | 20,987 | 1 | 20,987 |
| | Type E | 14,356 | 2 | 28,712 |
| | | | Total | 254,879 |

| | |
|---|---|
| **Combined Floor Area** | **621,441** |

## OPEN SPACE SUMMARY

**Private Open Space:**

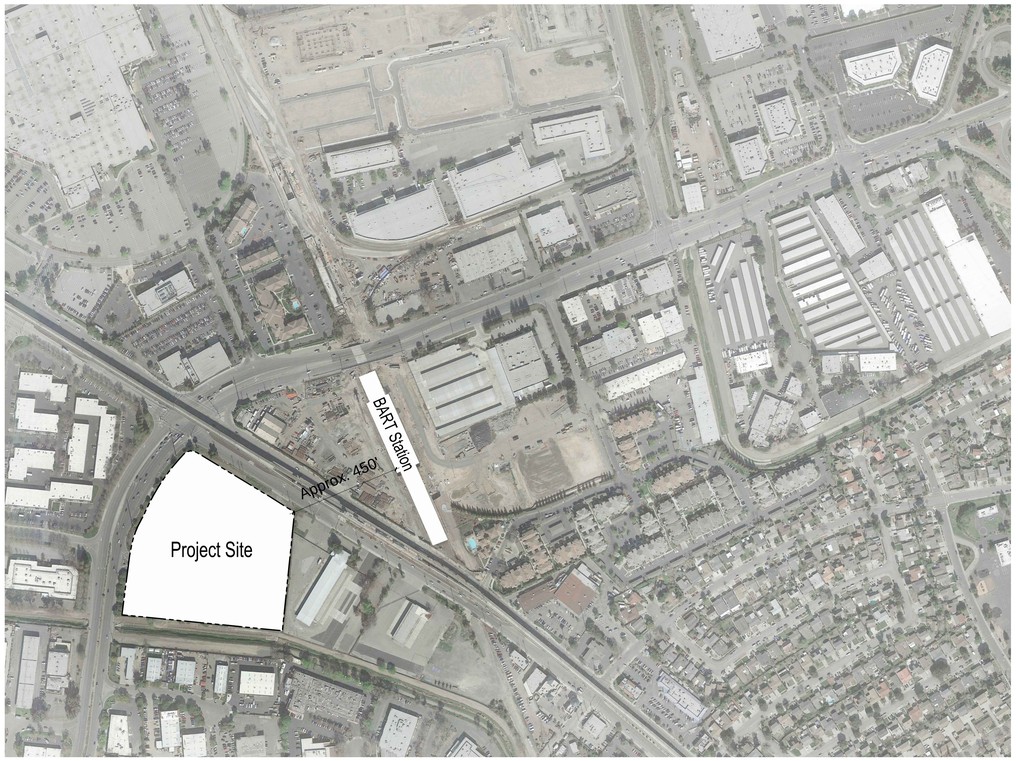
| | |
|---|---|
| **Podium** | 296 d.u. out of 351 d.u. have balconies complying with the minimum area and dimension requirements* |
| **Stacked Flats** | All 138 d.u. have balconies complying with the minimum area and dimension requirements* |

*Per Zoning XI-10-4.05.E: minimum dimension 4.5 feet, balconies above ground level: minimum 40 SF, patios at ground level: minimum 50 SF

**Parks and Common Open Space:**

| | Common | SF |
|---|---|---|
| **Podium** | Courtyard A | 7,231 SF |
| | Courtyard B | 14,949 SF |

| | | |
|---|---|---|
| **Site Open Space** | Park | 1.46 ac |




Vicinity Map N.T.S.

# 450 MONTAGUE

# PROJECT DATA

# A0.6

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KTGY # 2013-0551 02.26.2015

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*Refer to civil sheets TM.01-TM.11 for all site dimensions, property line, easements, and setbacks.

0 20 40 80

# 450 MONTAGUE

## SITE PLAN

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A1.0


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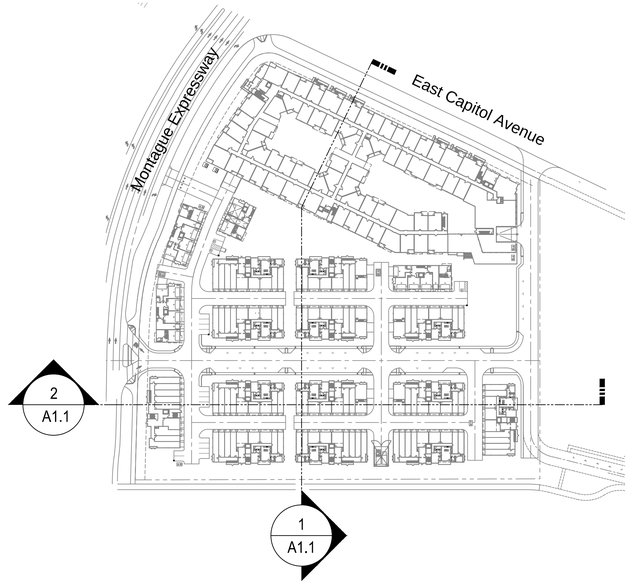
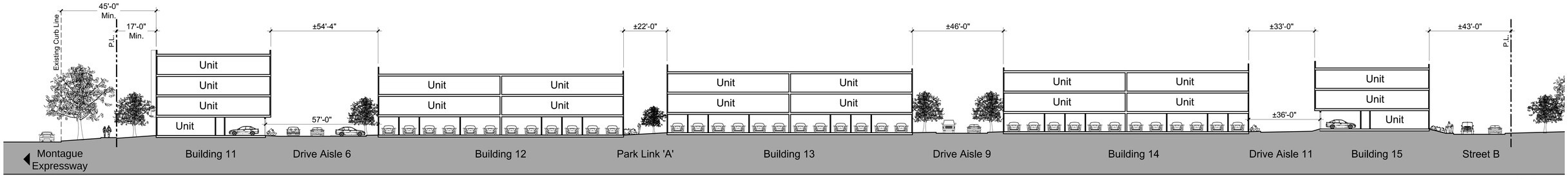
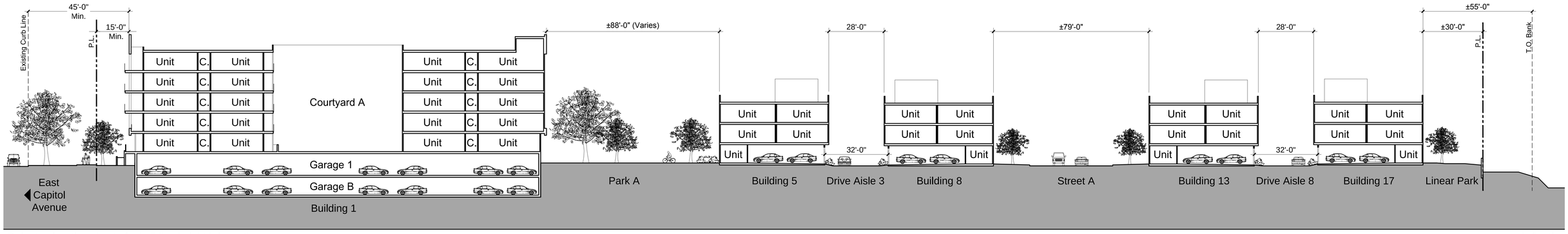



2. Section




*Refer to elevation sheets for building height information

1. Section

0 10 20 40

# 450 MONTAGUE

# SITE SECTION

# A1.1

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Key Map n.t.s.

1. View of Leasing Lobby and Amenities from Capitol Avenue

*Refer to Landscape sheets for plant species and placement

# 450 MONTAGUE

# CONCEPTUAL PERSPECTIVES

A1.2

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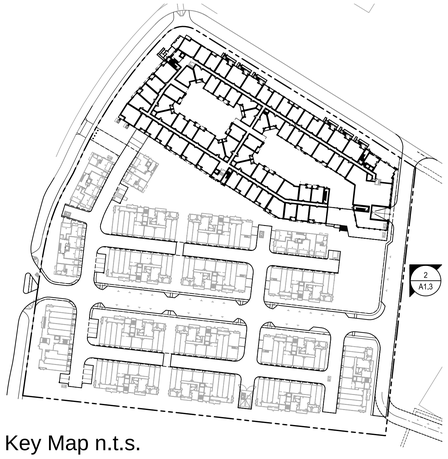


Key Map n.t.s.

2. Corner View of Amenity Terrace and Park 'B'

*Refer to Landscape sheets for plant species and placement

# 450 MONTAGUE

## CONCEPTUAL PERSPECTIVES

A1.3

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3. Leasing Lobby View from Capitol Avenue

Key Map n.t.s.

*Refer to Landscape sheets for plant species and placement

# 450 MONTAGUE

# CONCEPTUAL PERSPECTIVES

# A1.4

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Key Map n.t.s.

4. View from Montague Expressway and Capitol Avenue

*Refer to Landscape sheets for plant species and placement

# 450 MONTAGUE

## CONCEPTUAL PERSPECTIVES

## A1.5

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Key Map n.t.s.

5. View from Capitol Avenue

*Refer to Landscape sheets for plant species and placement

# 450 MONTAGUE

# CONCEPTUAL PERSPECTIVES

# A1.6

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Key Map n.t.s.

6. View of Townhomes from Internal Road

*Refer to Landscape sheets for plant species and placement

# 450 MONTAGUE

# CONCEPTUAL PERSPECTIVES

# A1.7

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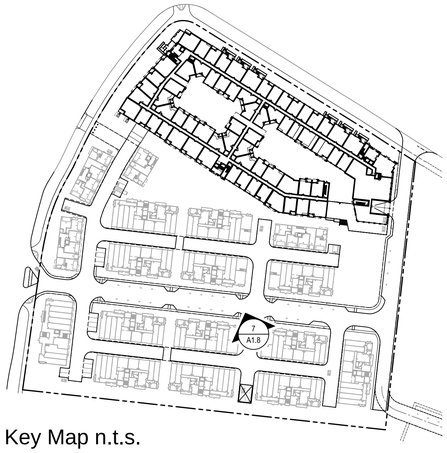


Key Map n.t.s.

7. View of Townhomes from Internal Road

*Refer to Landscape sheets for plant species and placement

# 450 MONTAGUE

# CONCEPTUAL PERSPECTIVES

# A1.8

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3. EVA Elevation

Material Legend

1. Stucco
2. Trim
3. Fiber Cement Siding
4. Smooth Plaster
5. Decorative Panel
6. Metal Panel
7. Metal Awning
8. Masonry Veneer
9. Metal Railing
10. Metal Railing w/ Decorative Panel
11. Glass Railing
12. Decorative Light Fixture
13. Vinyl Window
14. Storefront Window
15. Window Wall System

Key Map n.t.s.

2. Capitol Elevation

1. Montague Elevation

*Refer to Landscape sheets for plant species and placement

# 450 MONTAGUE

# PODIUM BUILDING - ELEVATIONS

MILPITAS, CA

KTGY # 2013-0551 02.26.2015

0 8 16 32

AP2.0

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Material Legend

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2. Trim
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4. Smooth Plaster
5. Decorative Panel
6. Metal Panel
7. Metal Awning
8. Masonry Veneer
9. Metal Railing
10. Metal Railing w/ Decorative Panel
11. Glass Railing
12. Decorative Light Fixture
13. Vinyl Window
14. Storefront Window
15. Window Wall System

Key Map n.t.s.

5. Park 'A' Elevation

4. Park 'B' Elevation

*Refer to Landscape sheets for plant species and placement

# 450 MONTAGUE

# PODIUM BUILDING - ELEVATIONS

MILPITAS, CA

KTGY # 2013-0551

02.26.2015

0 8 16 32

AP2.1

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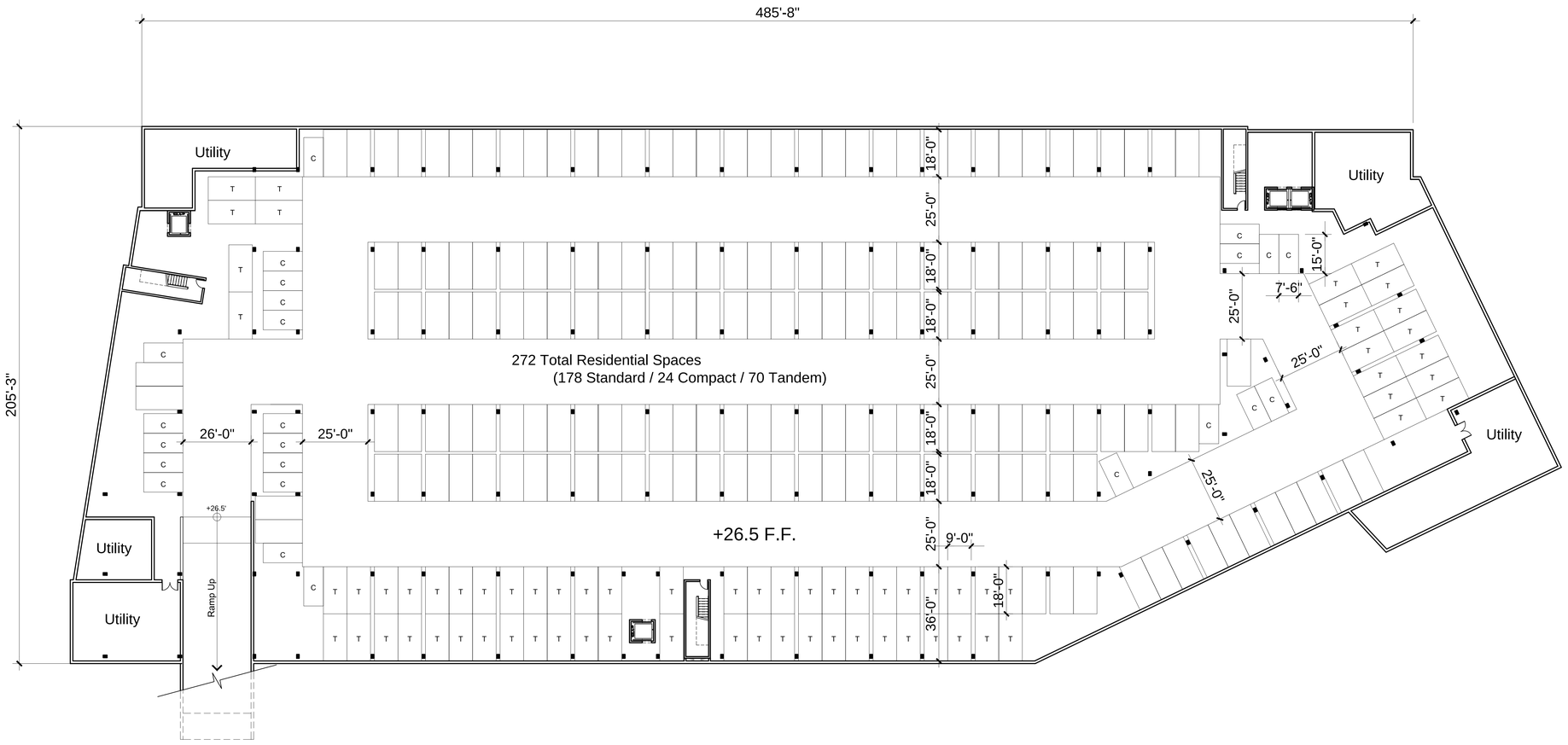


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# BASEMENT 2 PLAN

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0 10 20 40

# AP3.0

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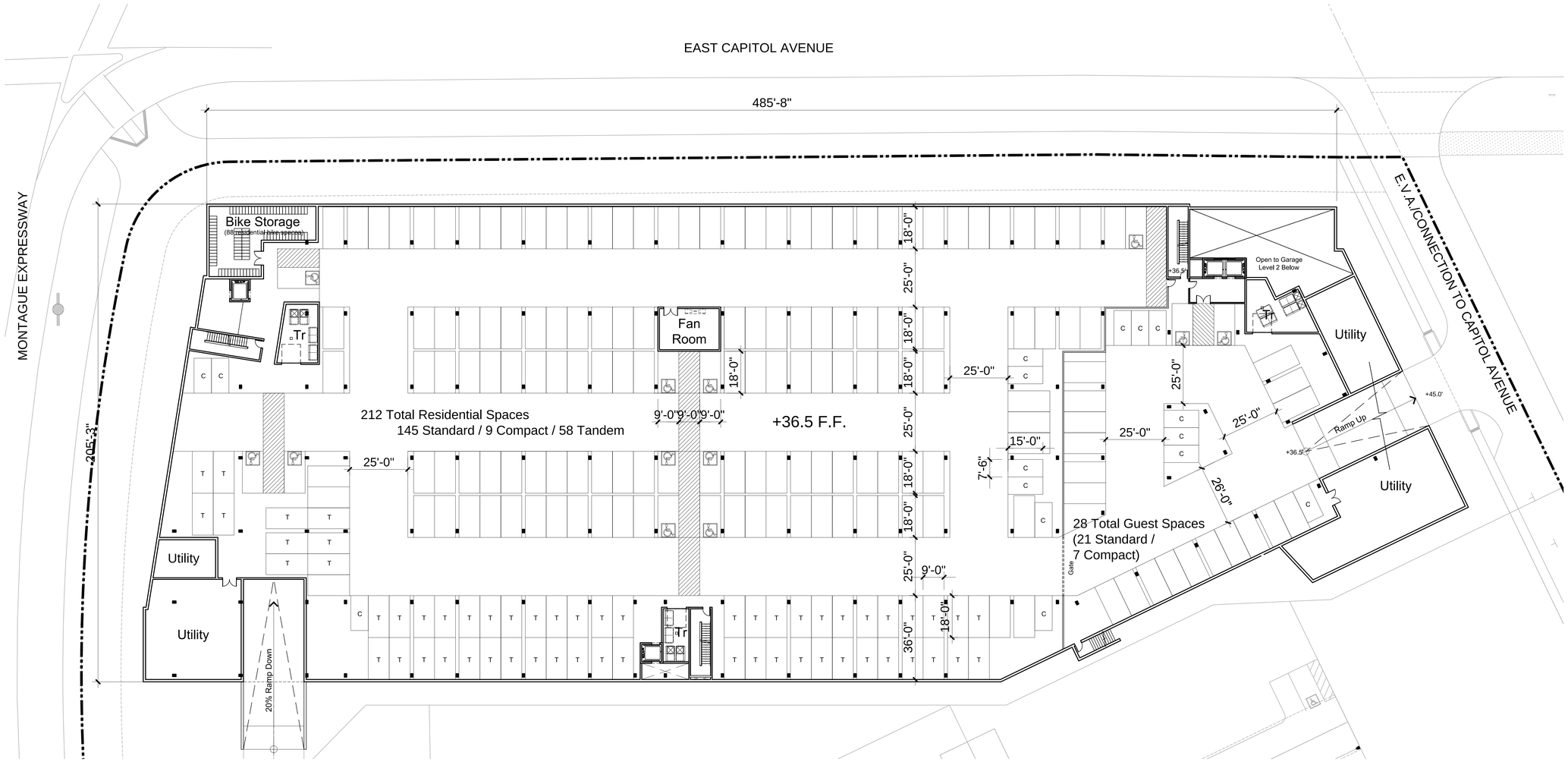


# 450 MONTAGUE

# BASEMENT 1 PLAN

# AP3.1

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# 450 MONTAGUE

# PODIUM LEVEL PLAN (LEVEL 1)

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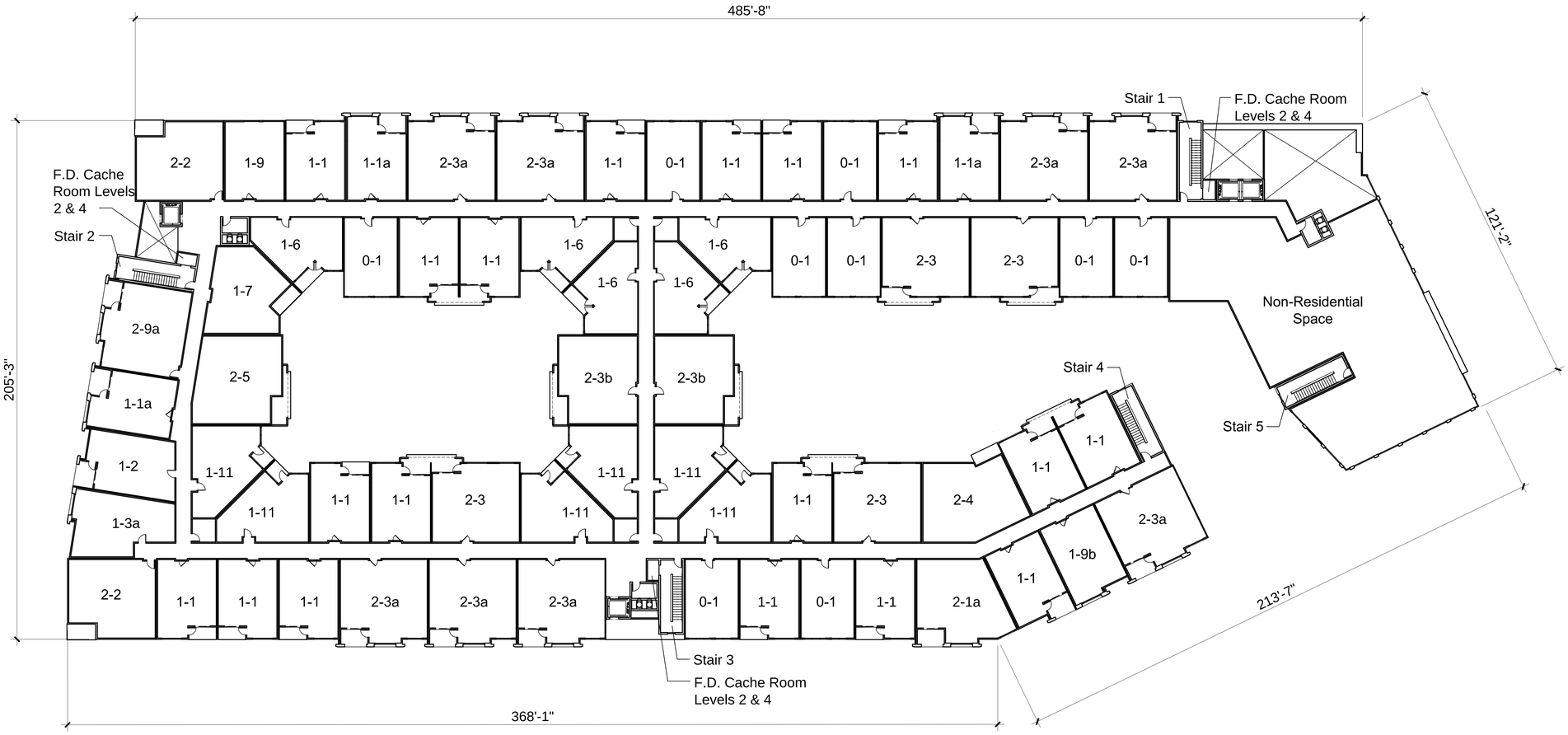


0 10 20 40

# 450 MONTAGUE

# LEVEL 2 PLAN

# AP3.3

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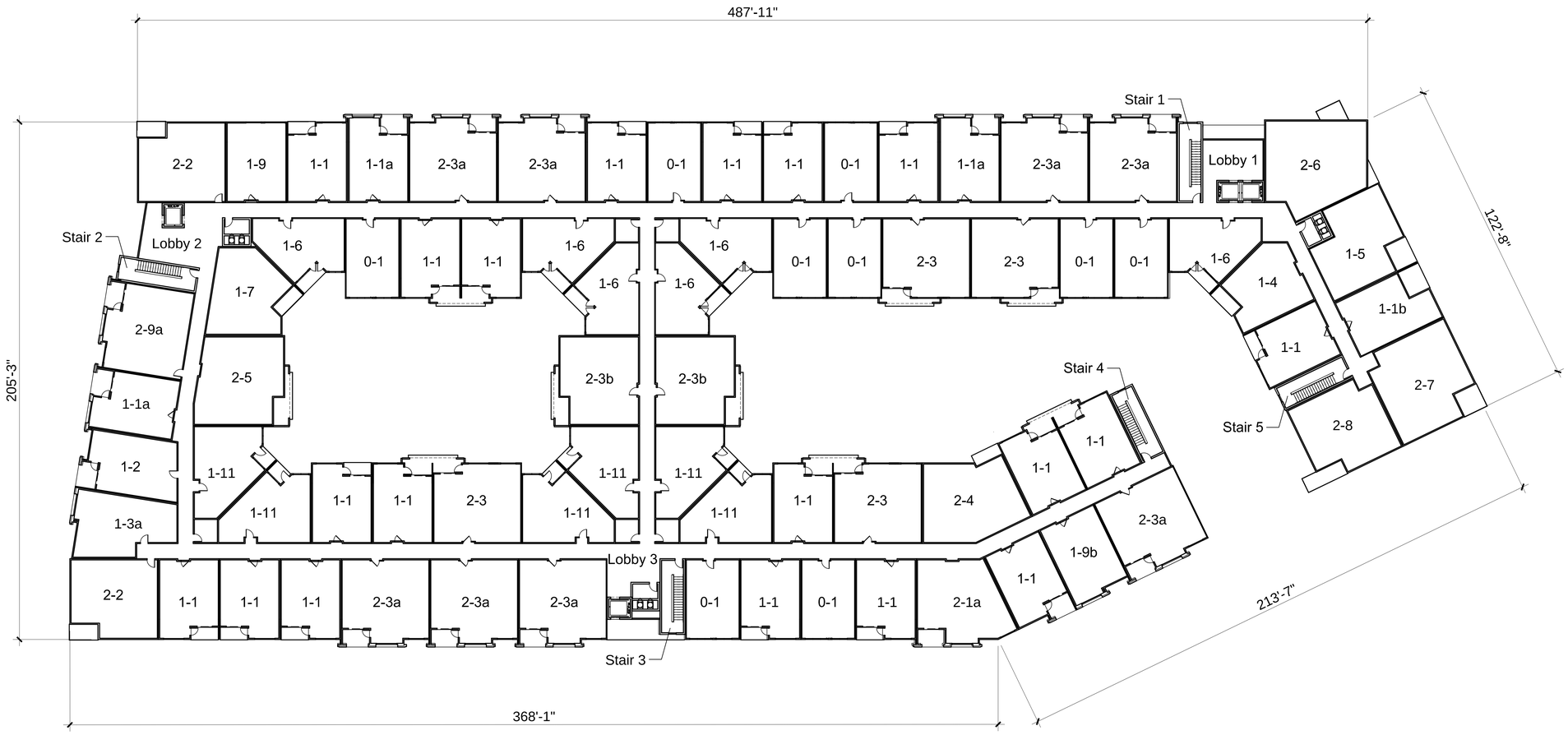


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## LEVEL 3 & 4 PLAN

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0 10 20 40

AP3.4

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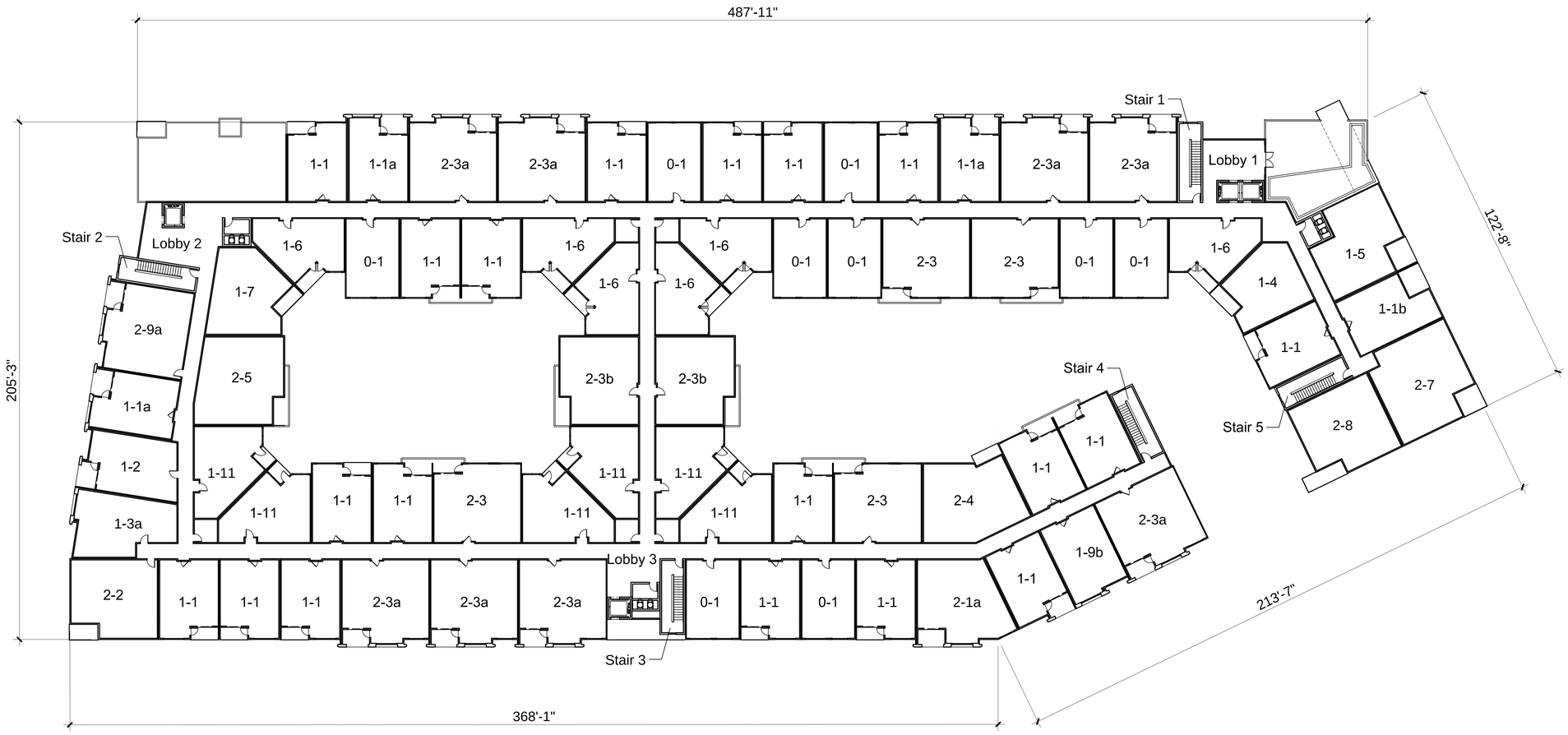


# 450 MONTAGUE

# BUILDING PLAN - LEVEL 5

# AP3.5

0 10 20 40

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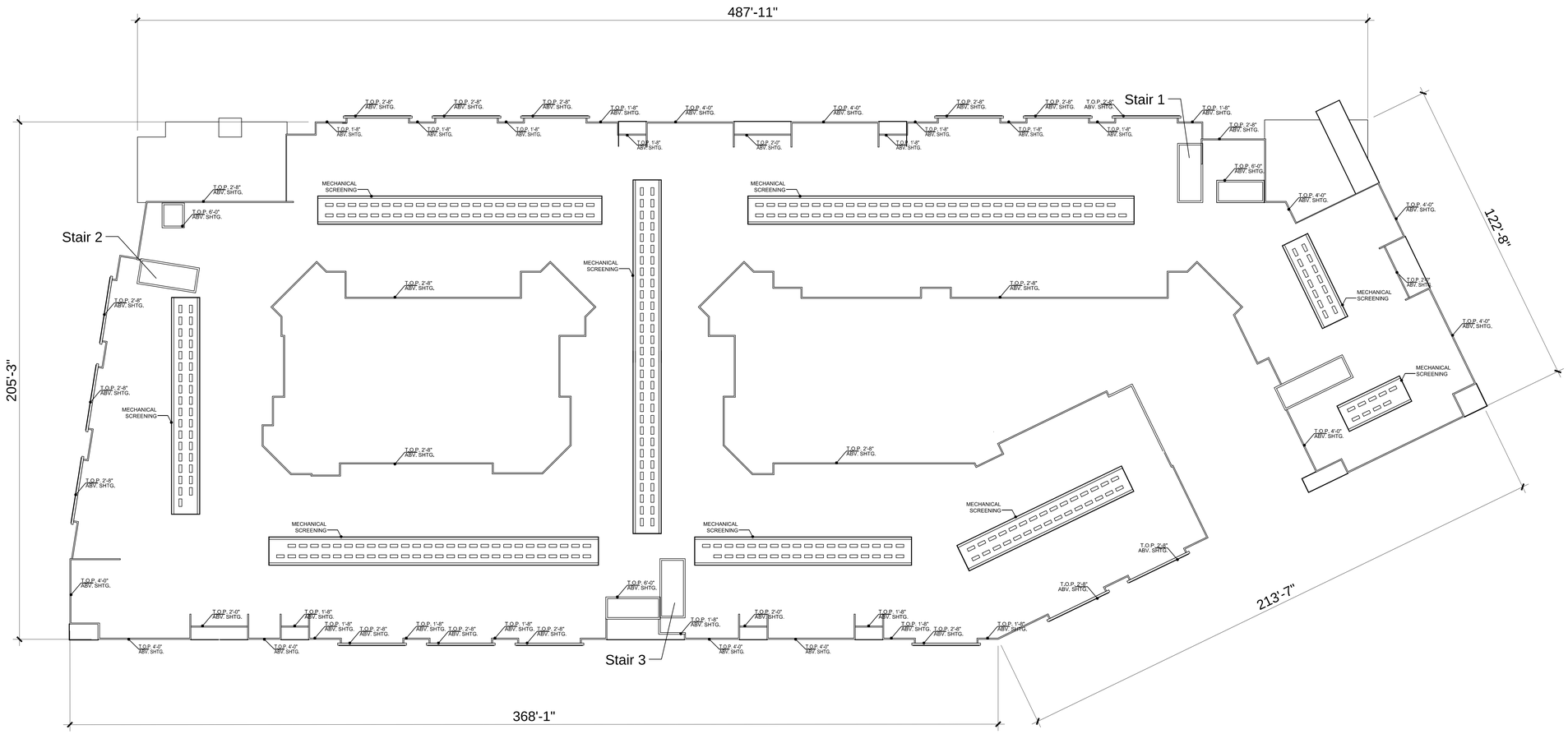


*All mechanical equipment to be screened

# 450 MONTAGUE

# ROOF PLAN

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0 10 20 40

# AP3.6

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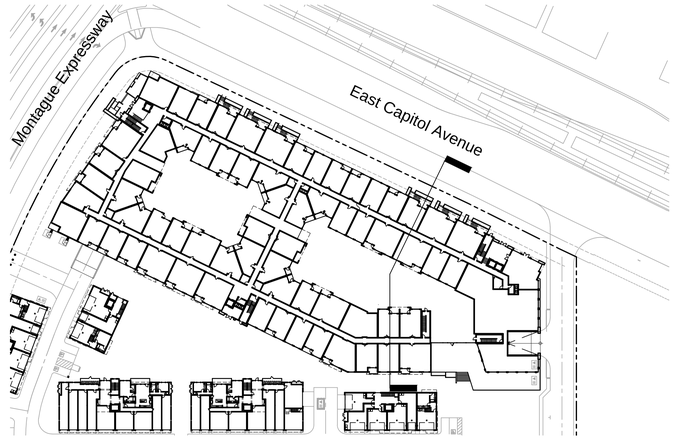


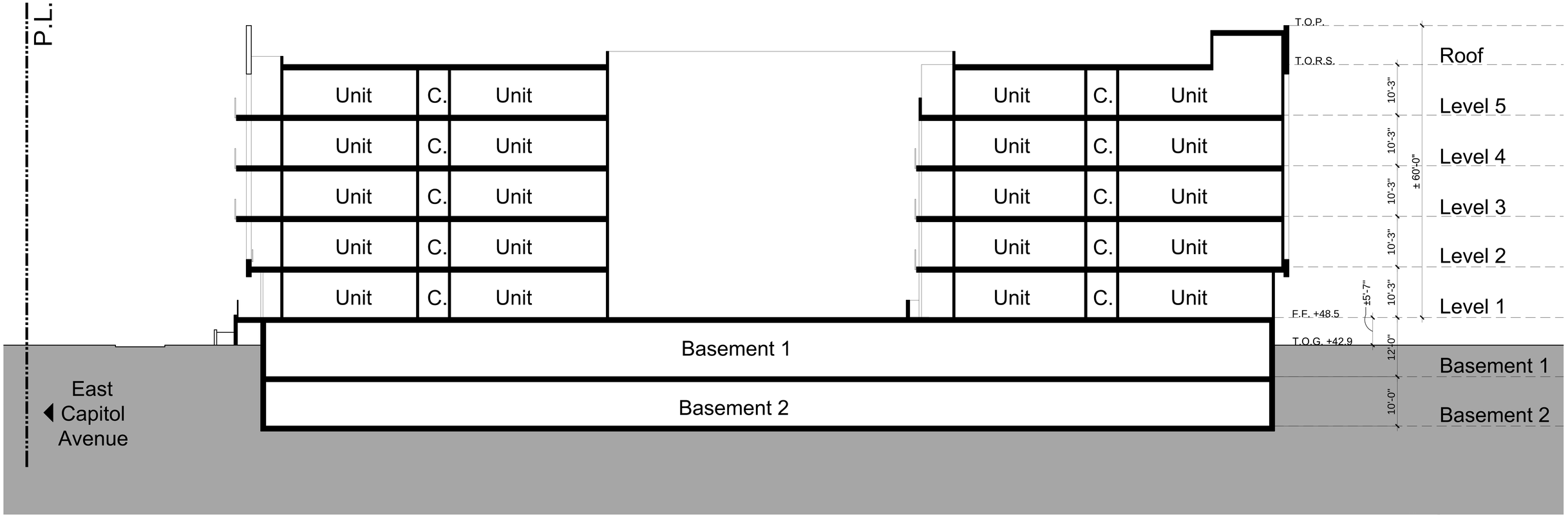


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## BUILDING SECTION

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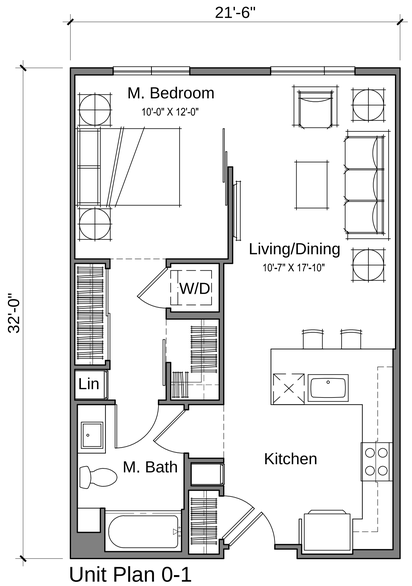
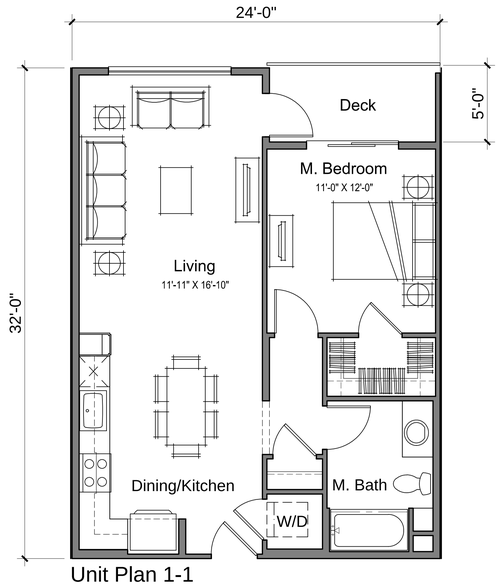



## Unit Plan 0-1

JR 1 BR / 1 BA
UNIT AREA: 690 NSF
DECK AREA: 0 SF

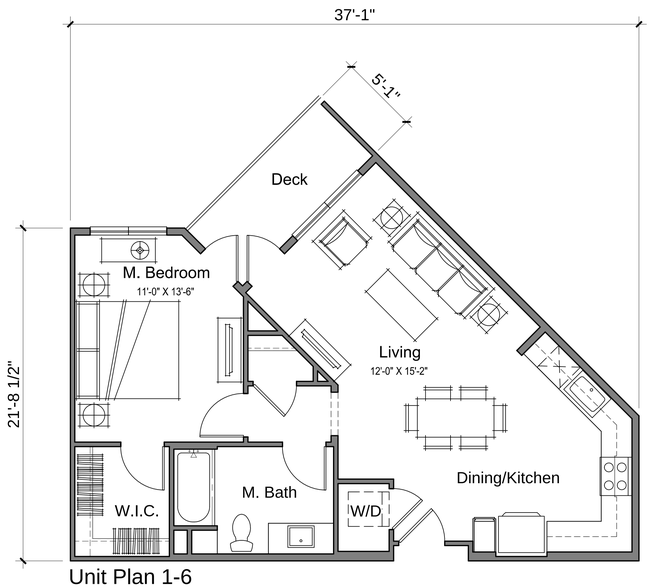
45 D.U.
13% of total units




## Unit Plan 1-1

1 BR / 1 BA
UNIT AREA: 719 NSF
DECK AREA: 54 SF

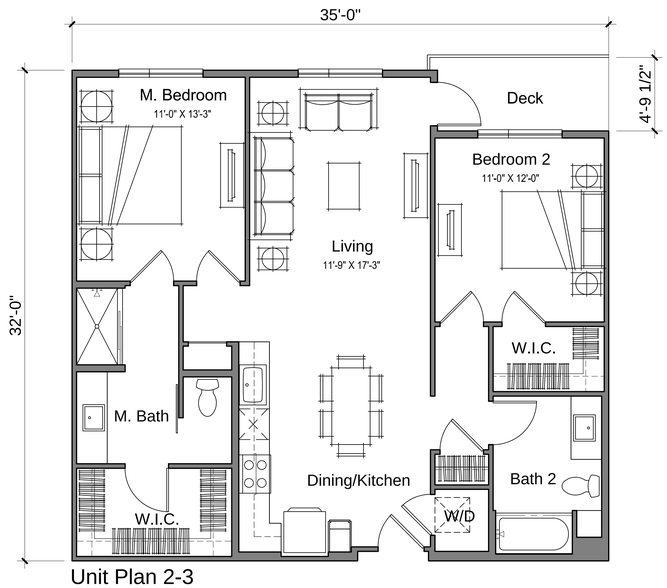
96 D.U.
27% of total units




## Unit Plan 1-6

1 BR / 1 BA
UNIT AREA: 740 NSF
DECK AREA: 61 SF

28 D.U.
8% of total units




## Unit Plan 2-3

2 BR / 2 BA
UNIT AREA: 1078 NSF
DECK AREA: 54 SF

28 D.U.
8% of total units

*Net rentable area: face of exterior stud +1" air gap; does not reflect 2" recess at windows; includes all shafts

0 2 4 8

# 450 MONTAGUE

# UNIT PLANS

MILPITAS, CA

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AP5.0

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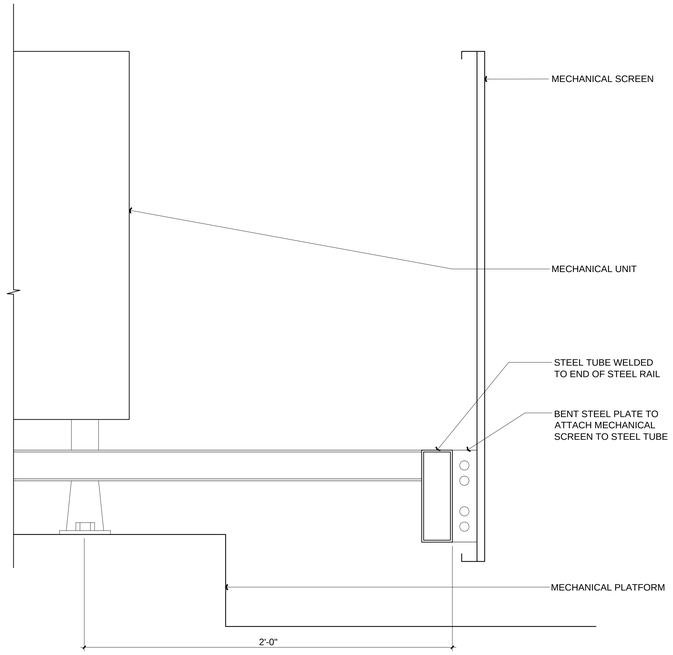
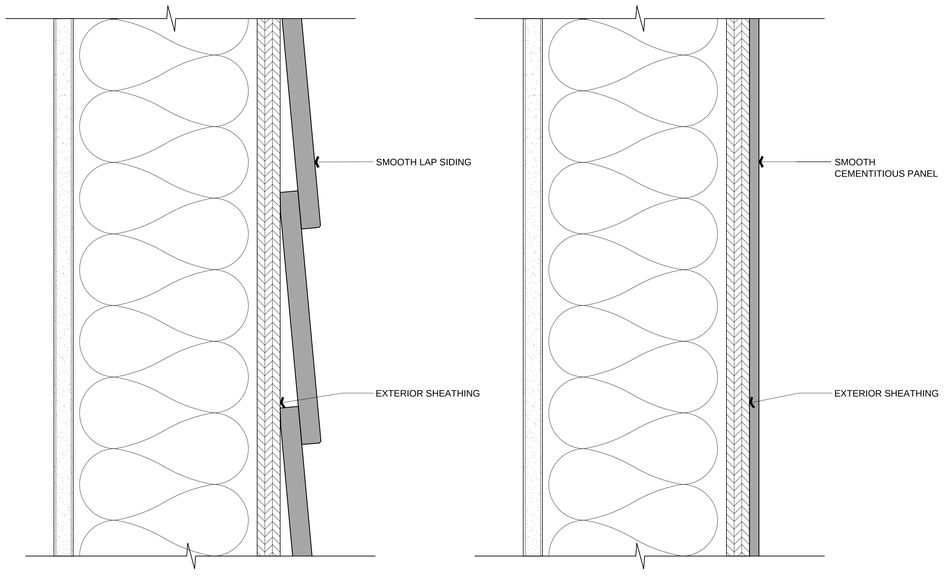
EXAMPLE: CEMENTITIOUS LAP SIDING

EXAMPLE: CEMENTITIOUS PANEL



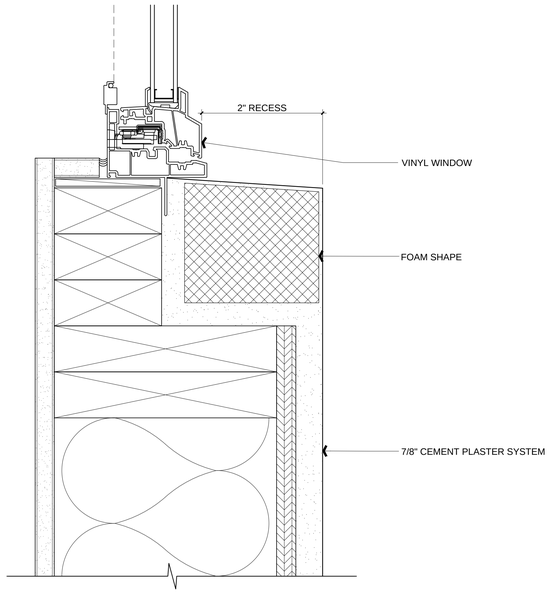

3 MECHANICAL SCREEN
6" = 1'-0"



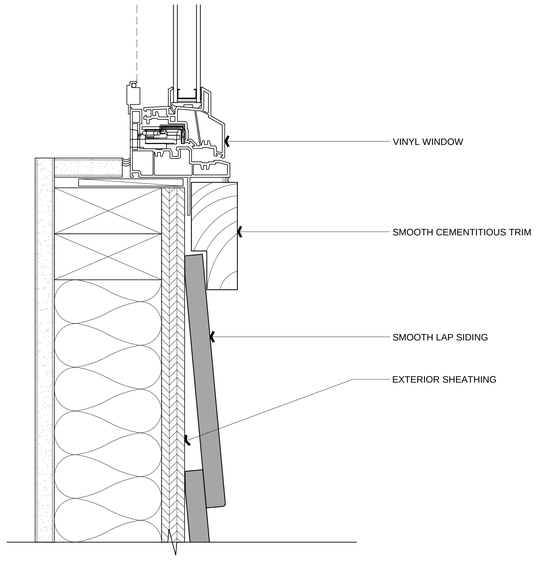

LAP SIDING

CEMENTITIOUS PANEL

4 TYPICAL WALL DETAILS
6" = 1'-0"




1 RECESSED WINDOW SILL @ CEMENT PLASTER
6" = 1'-0"




2 WINDOW SILL AT SIDING
6" = 1'-0"

Note: Details are conceptual and will continue to develop. Final review will occur at building permit submittal.

0 2 4 8

# 450 MONTAGUE

# DETAILS

# AP6.0

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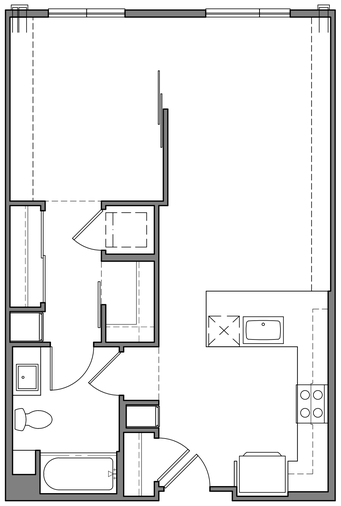
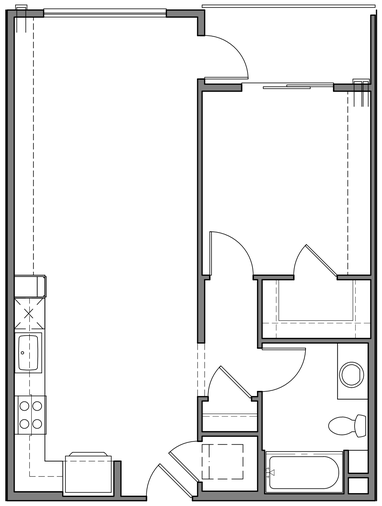
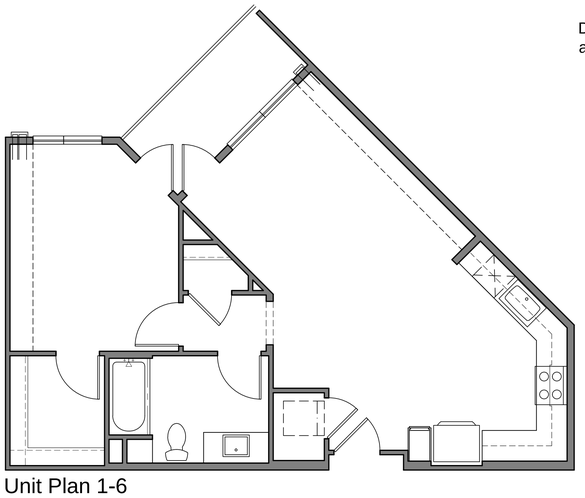


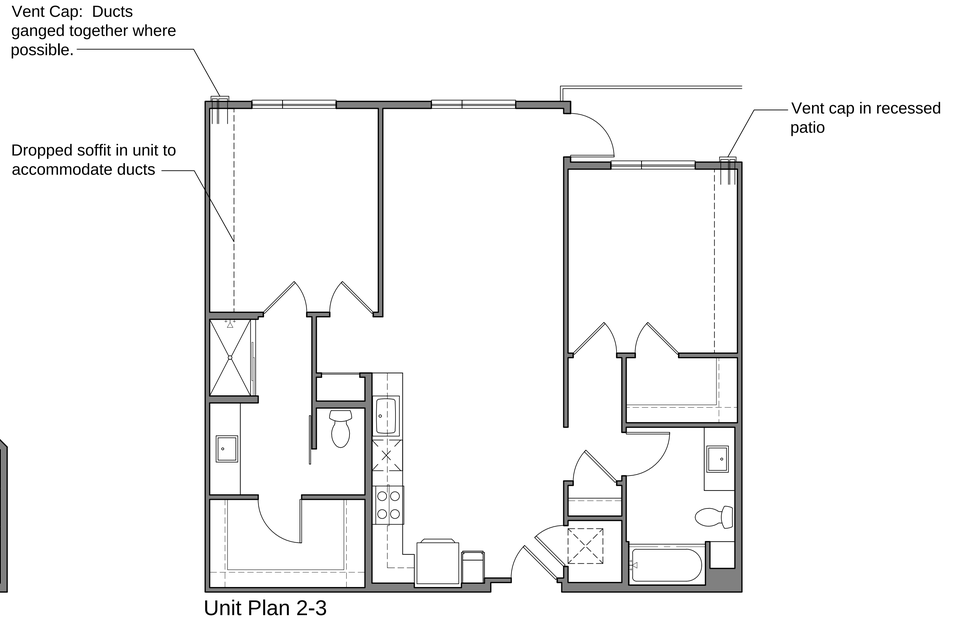
Unit Plan 0-1
JR 1 BR / 1 BA



Unit Plan 1-1
1 BR / 1 BA



Unit Plan 1-6
1 BR / 1 BA




Unit Plan 2-3
2 BR / 2 BA

# 450 MONTAGUE

# CONCEPTUAL UNIT EXHAUST DIAGRAM

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AP6.1

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STUCCO 1
SW 7671

STUCCO 2
SW 7065

SMOOTH PLASTER 1
SW 7671

SMOOTH PLASTER 2
SW 2839

MASONRY VENEER
MONSOON

CEMENTITIOUS SIDING/TRIM 1
SW 7068

CEMENTITIOUS SIDING/TRIM 2
SW 7066

METAL 1
SW 7073

METAL 2
SW 7027

METAL 3
SW 7008

METAL 4
RAL 7040

METAL 5
SW 2839

METAL 6
SW 2802

ACCENT 1
SW 7675

VINYL WINDOW
TAN

Building A - Capitol Street Elevation
NTS

# 450 MONTAGUE

# COLOR AND MATERIALS BOARD

# AP7.0

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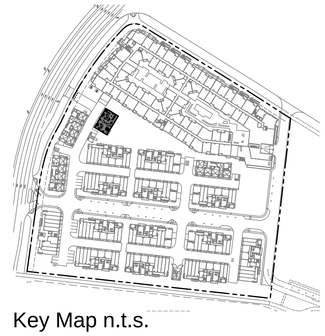
Front Elevation - Dark Color Scheme

Rear Elevation - Dark Color Scheme



Key Map n.t.s.

## Material Legend

1. Stucco
2. Cementitious Lap Siding
3. Cementitious Panel
4. Metal Awning
5. Metal Railing
6. Vinyl Window
7. Metal Column
8. Metal Panel Garage Door

Right Elevation - Dark Color Scheme

Left Elevation - Dark Color Scheme

# 450 MONTAGUE

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# STYLE 1
# BUILDING "A" 3-PLEX - ELEVATIONS

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# AS2.0

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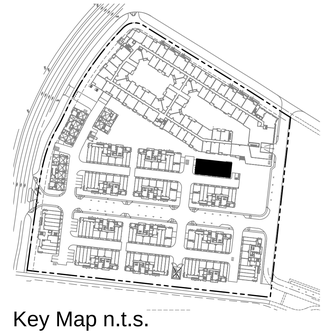
Front Elevation - Light Color Scheme

Right Elevation - Light Color Scheme



Key Map n.t.s.

## Material Legend

1. Stucco
2. Cementitious Lap Siding
3. Cementitious Panel
4. Metal Awning
5. Metal Railing
6. Vinyl Window
7. Metal Column
8. Metal Panel Garage Door

# 450 MONTAGUE

# STYLE 1
# BUILDING "B" 6-PLEX - ELEVATIONS

MILPITAS, CA

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AS2.1

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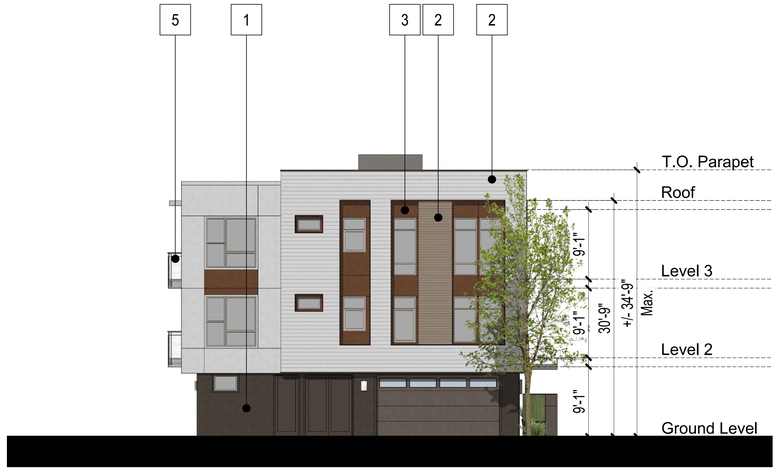
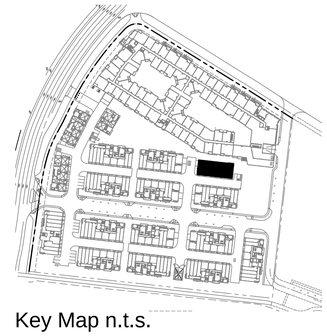
Rear Elevation - Light Color Scheme




Left Elevation - Light Color Scheme



Key Map n.t.s.

## Material Legend

1. Stucco
2. Cementitious Lap Siding
3. Cementitious Panel
4. Metal Awning
5. Metal Railing
6. Vinyl Window
7. Metal Column
8. Metal Panel Garage Door

# 450 MONTAGUE

# STYLE 1
# BUILDING "B" 6-PLEX - ELEVATIONS

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AS2.2

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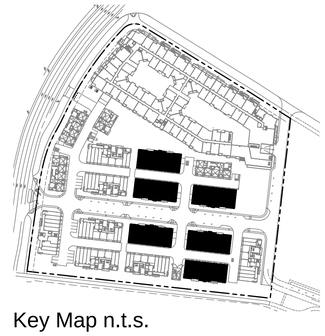
Front Elevation - Dark Color Scheme

Right Elevation - Dark Color Scheme



Key Map n.t.s.

## Material Legend

1. Stucco
2. Cementitious Lap Siding
3. Cementitious Panel
4. Metal Awning
5. Metal Railing
6. Vinyl Window
7. Metal Column
8. Metal Panel Garage Door

# 450 MONTAGUE

# STYLE 1
# BUILDING "C" 9-PLEX - ELEVATIONS

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KTGY # 2013-0551 02.26.2015

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AS2.3

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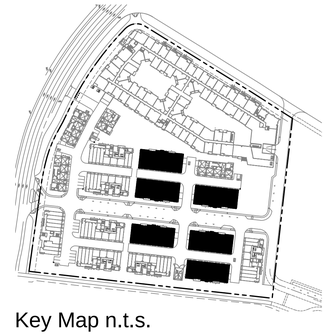
Rear Elevation - Dark Color Scheme

Left Elevation - Dark Color Scheme



Key Map n.t.s.

## Material Legend

1. Stucco
2. Cementitious Lap Siding
3. Cementitious Panel
4. Metal Awning
5. Metal Railing
6. Vinyl Window
7. Metal Column
8. Metal Panel Garage Door

# 450 MONTAGUE

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# STYLE 1
# BUILDING "C" 9-PLEX - ELEVATIONS

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# AS2.4

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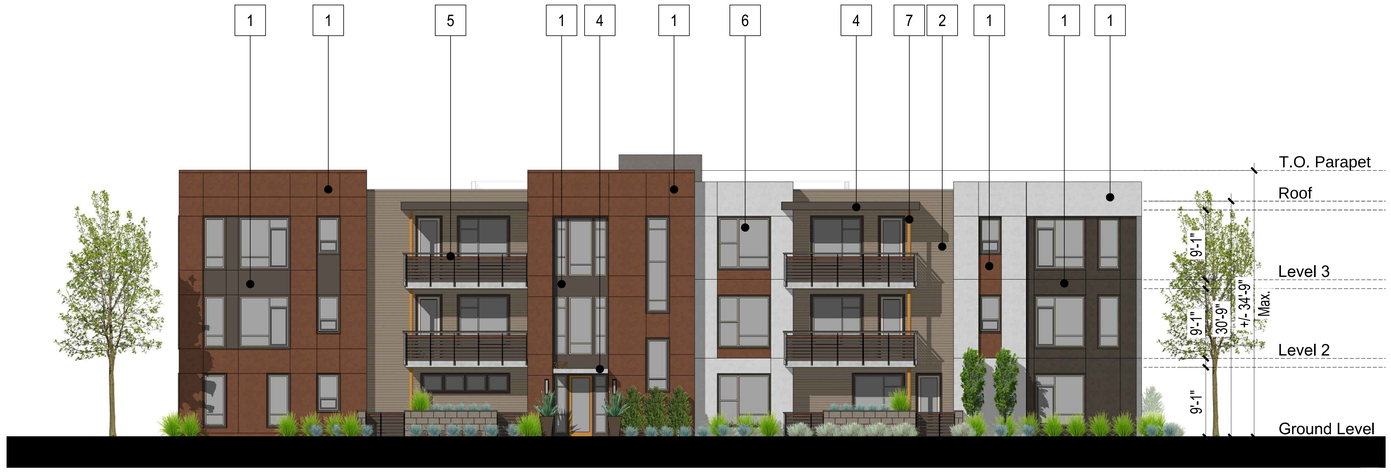
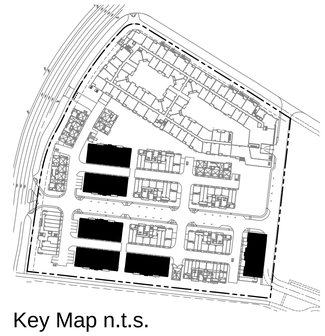



Front Elevation - Light Color Scheme

Right Elevation - Light Color Scheme



Key Map n.t.s.

## Material Legend

1. Stucco
2. Cementitious Lap Siding
3. Cementitious Panel
4. Metal Awning
5. Metal Railing
6. Vinyl Window
7. Metal Column
8. Metal Panel Garage Door

# 450 MONTAGUE

# STYLE 2
# BUILDING "C ALT." 9-PLEX - ELEVATIONS

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AS2.5

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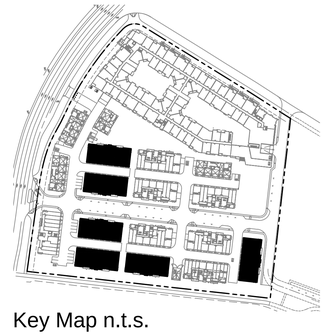
Rear Elevation - Light Color Scheme

Left Elevation - Light Color Scheme



Key Map n.t.s.

## Material Legend

1. Stucco
2. Cementitious Lap Siding
3. Cementitious Panel
4. Metal Awning
5. Metal Railing
6. Vinyl Window
7. Metal Column
8. Metal Panel Garage Door

# 450 MONTAGUE

# STYLE 2
# BUILDING "C ALT." 9-PLEX - ELEVATIONS

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AS2.6

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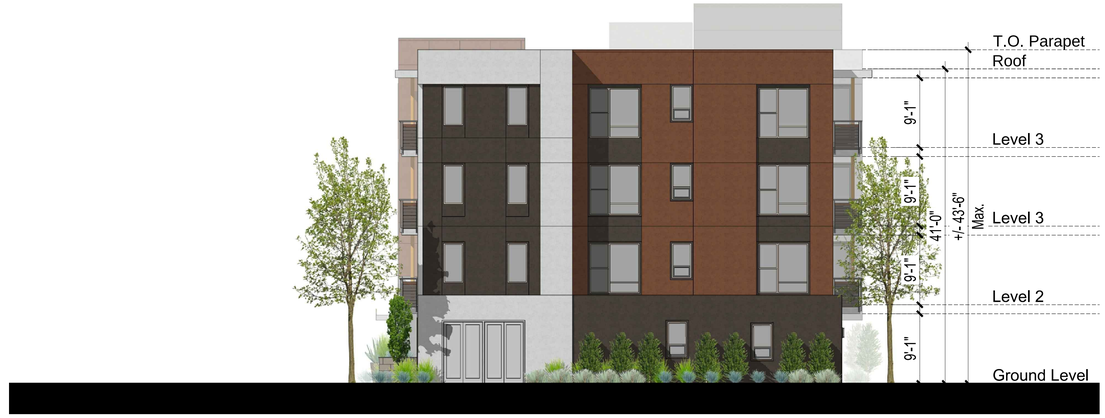
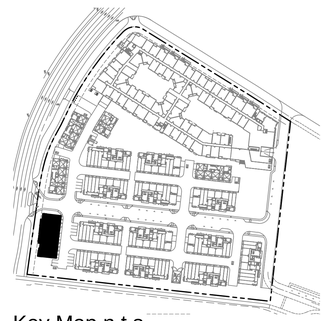
Front Elevation - Light Color Scheme




Right Elevation - Light Color Scheme



Key Map n.t.s.

## Material Legend

1. Stucco
2. Cementitious Lap Siding
3. Cementitious Panel
4. Metal Awning
5. Metal Railing
6. Vinyl Window
7. Metal Column
8. Metal Panel Garage Door

# 450 MONTAGUE

# BUILDING "D" 9-PLEX - ELEVATIONS

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AS2.7

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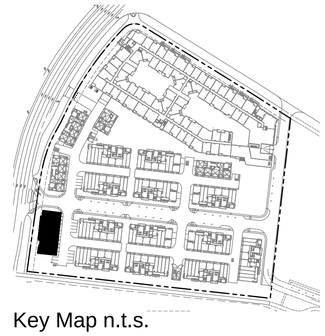
Rear Elevation - Light Color Scheme

Left Elevation - Light Color Scheme



Key Map n.t.s.

## Material Legend

1. Stucco
2. Cementitious Lap Siding
3. Cementitious Panel
4. Metal Awning
5. Metal Railing
6. Vinyl Window
7. Metal Column
8. Metal Panel Garage Door

# 450 MONTAGUE

# BUILDING "D" 9-PLEX - ELEVATIONS

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0 4 8 16

AS2.8

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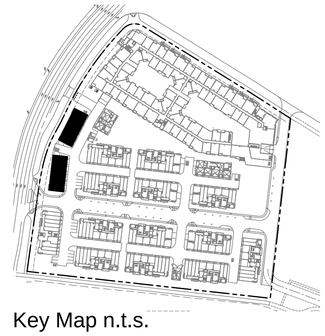
Front Elevation - Light Color Scheme

Right Elevation - Light Color Scheme



Key Map n.t.s.

## Material Legend

1. Stucco
2. Cementitious Lap Siding
3. Cementitious Panel
4. Metal Awning
5. Metal Railing
6. Vinyl Window
7. Metal Column
8. Metal Panel Garage Door

# 450 MONTAGUE

# STYLE I
# BUILDING "E" 6-PLEX - ELEVATIONS

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AS2.9

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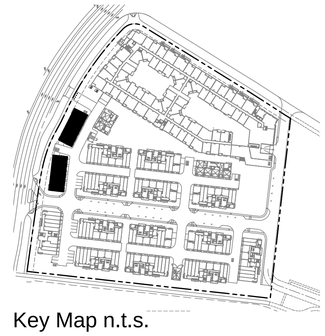
Rear Elevation - Light Color Scheme

Left Elevation - Light Color Scheme



Key Map n.t.s.

## Material Legend

1. Stucco
2. Cementitious Lap Siding
3. Cementitious Panel
4. Metal Awning
5. Metal Railing
6. Vinyl Window
7. Metal Column
8. Metal Panel Garage Door

# 450 MONTAGUE

# STYLE 1
# BUILDING "E" 6-PLEX - ELEVATIONS

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AS2.10

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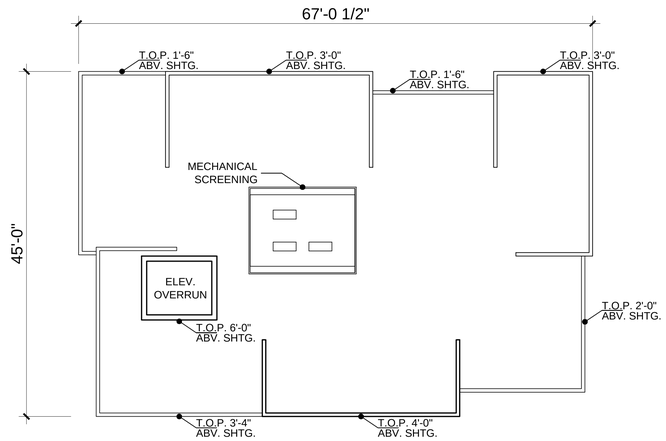
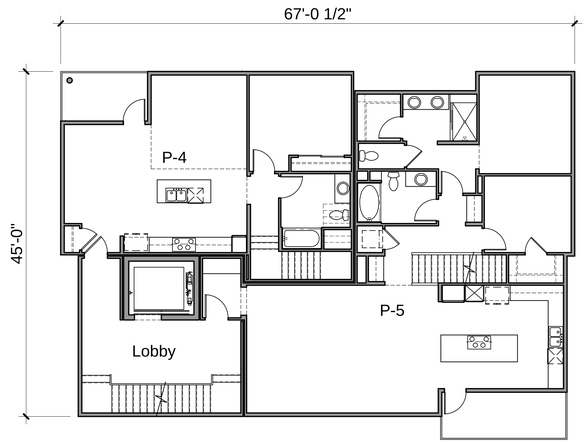
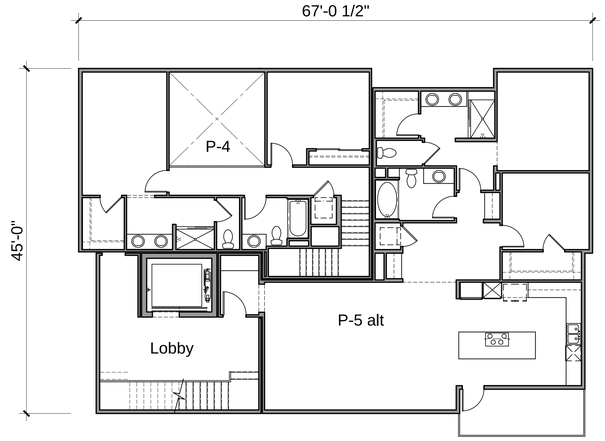


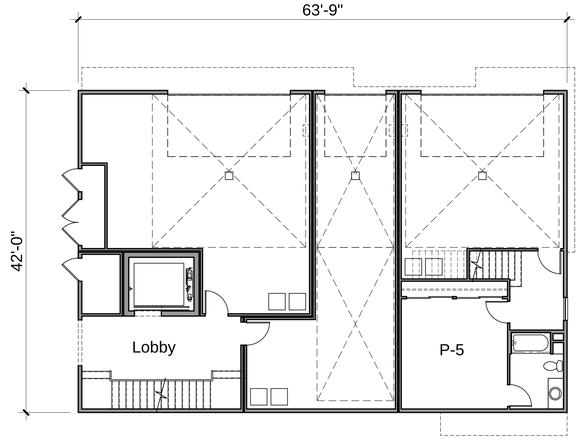

Roof




Level 2




Level 3




Ground Level

Note: All rooftop mechanical equipment to be screened.

# 450 MONTAGUE

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## BUILDING "A" 3-PLEX - PLANS

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AS3.0

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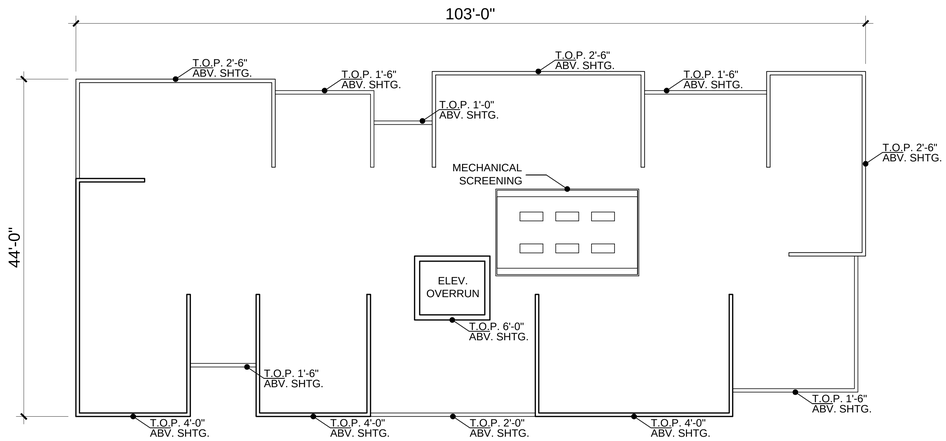
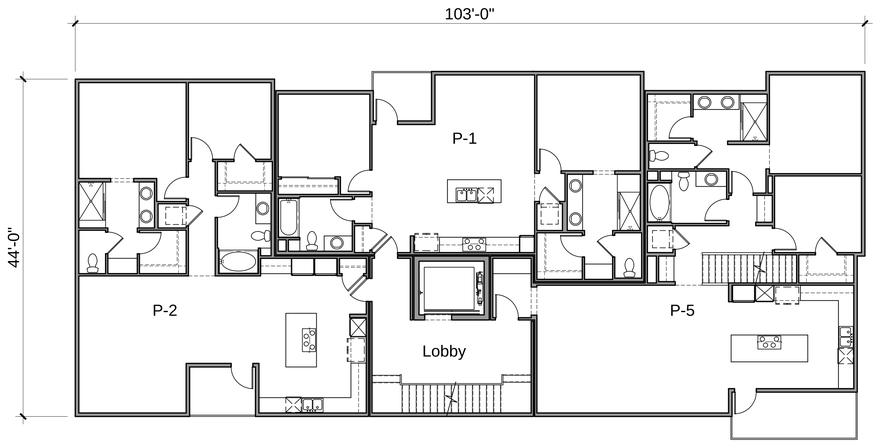
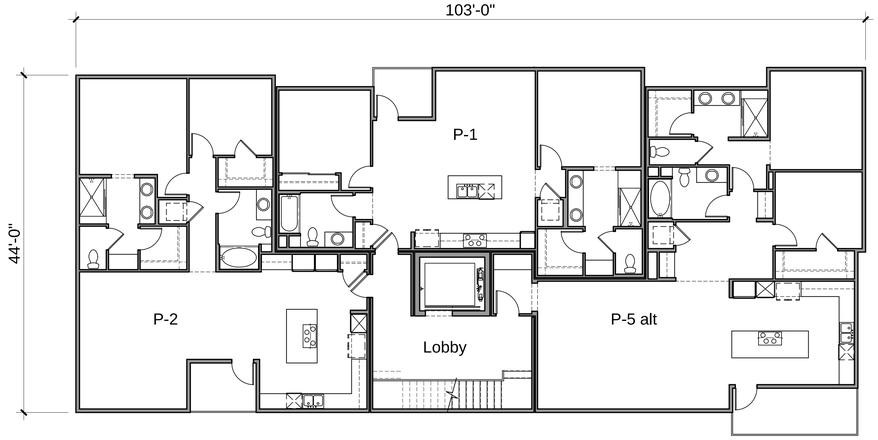


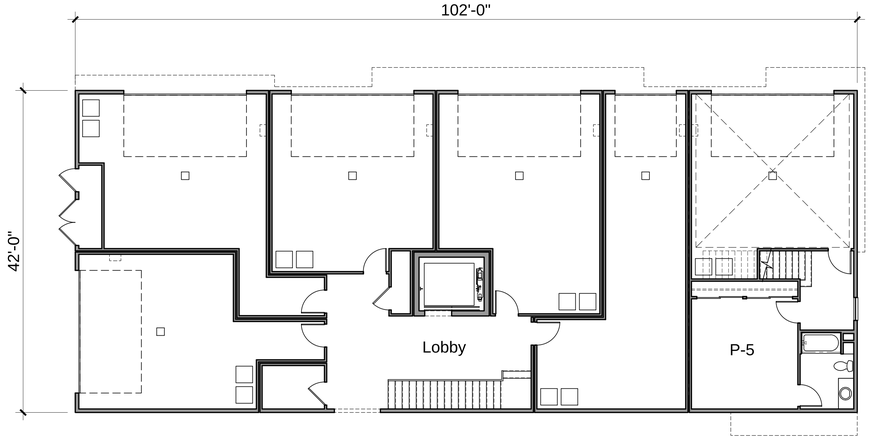

Roof




Level 2




Level 3




Ground Level

Note: All rooftop mechanical equipment to be screened.

# 450 MONTAGUE

# BUILDING "B" 6-PLEX - PLANS

MILPITAS, CA

KTGY # 2013-0551 02.26.2015

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AS3.1

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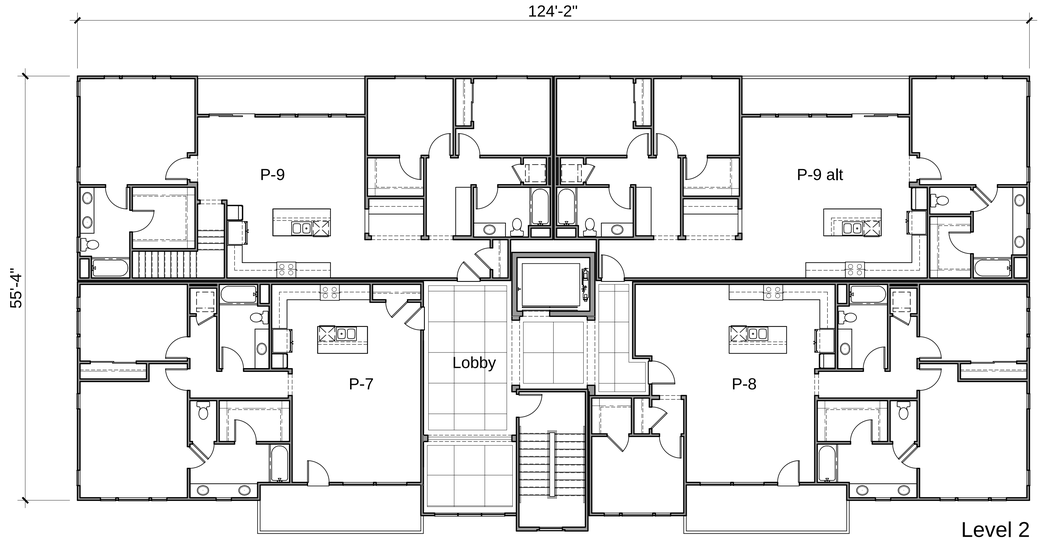
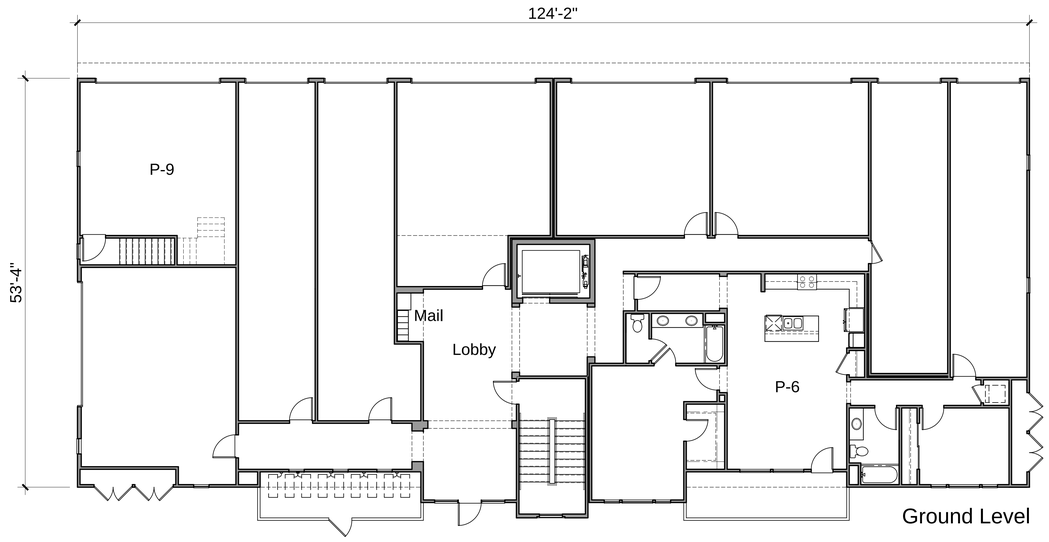



Level 2




Ground Level

# 450 MONTAGUE

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# BUILDING "C" 9-PLEX - PLANS

MILPITAS, CA

KTGY # 2013-0551 02.26.2015

0 4 8 16

AS3.2

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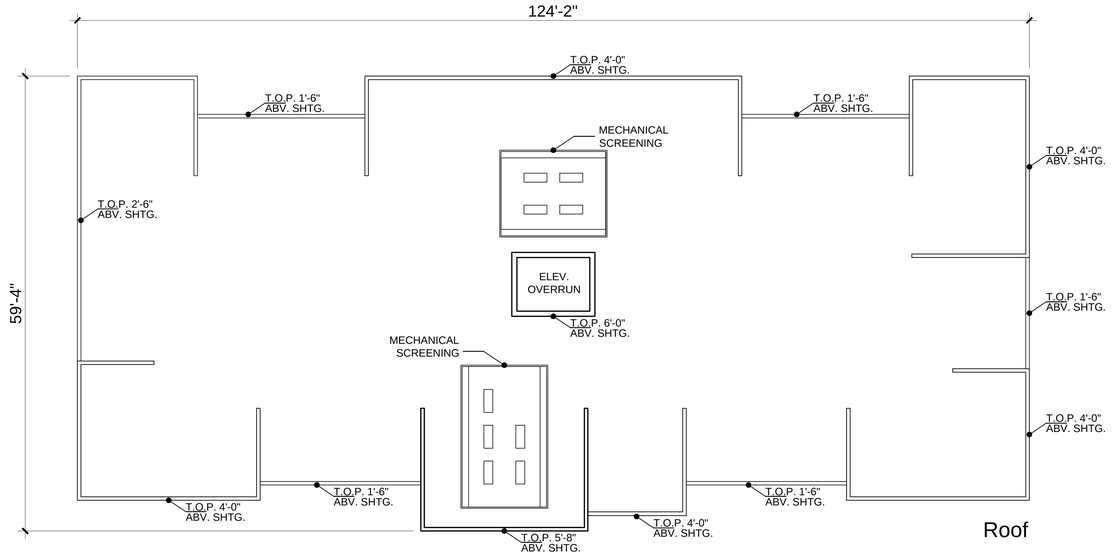


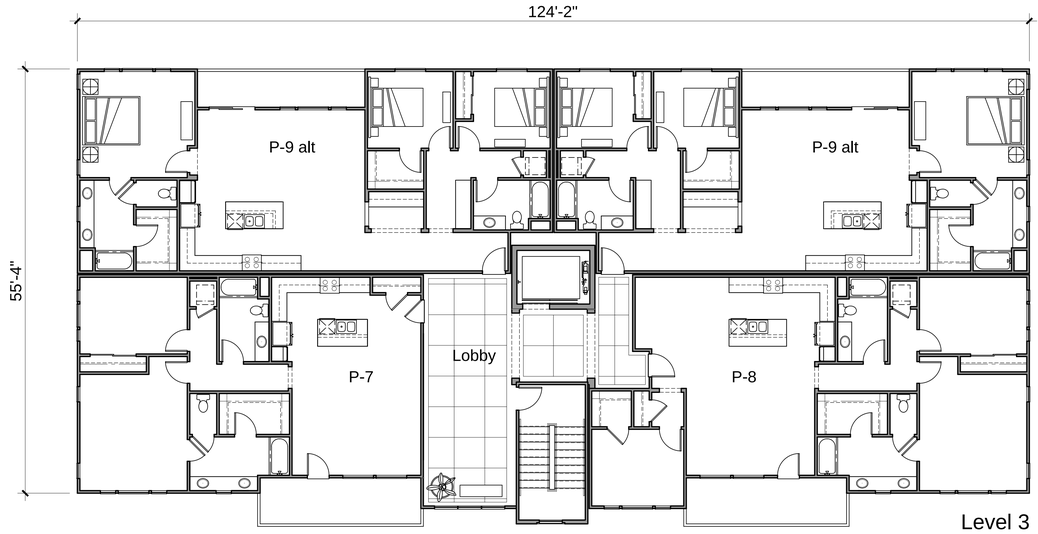


Note: All rooftop mechanical equipment to be screened.

# 450 MONTAGUE

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## BUILDING "C" 9-PLEX - PLANS

MILPITAS, CA

KTGY # 2013-0551 02.26.2015

0 4 8 16

AS3.3

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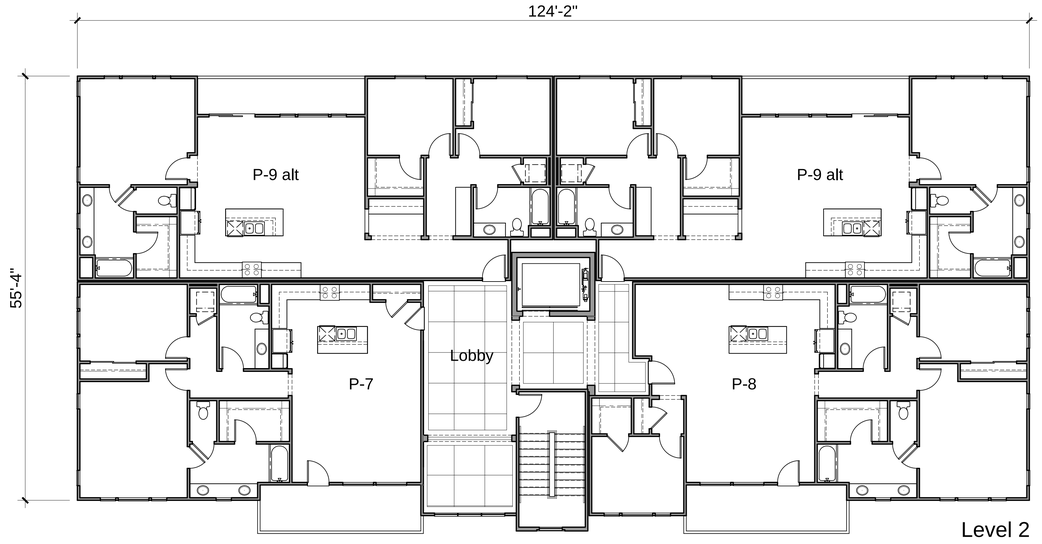


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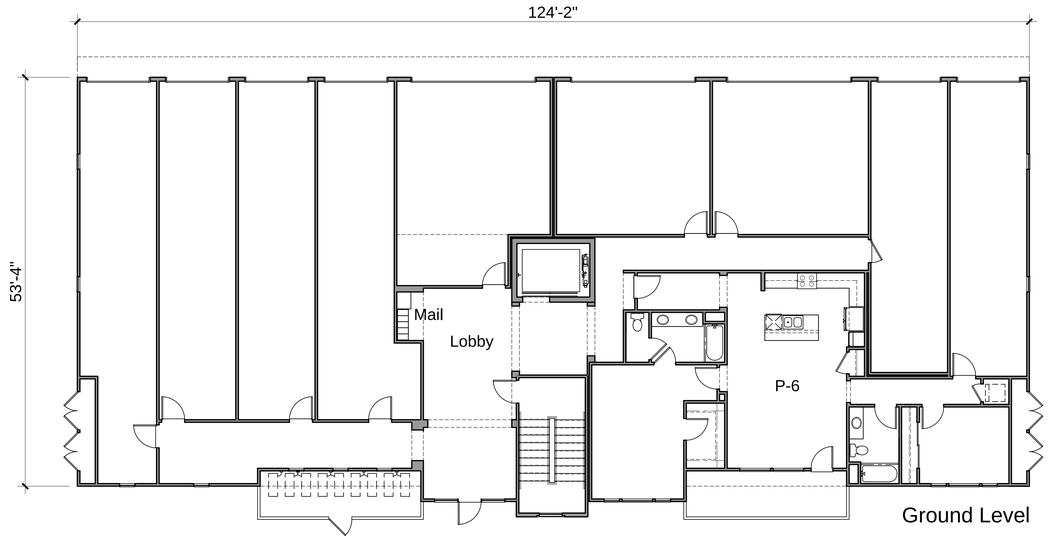


Ground Level

# 450 MONTAGUE

# BUILDING "C ALT." 9-PLEX - PLANS

MILPITAS, CA

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0 4 8 16

AS3.4

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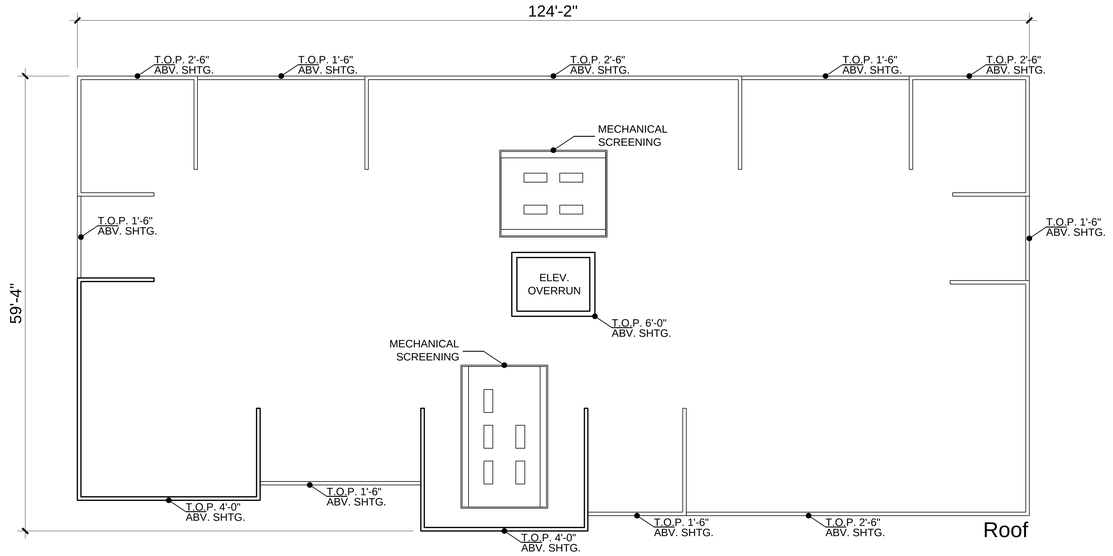


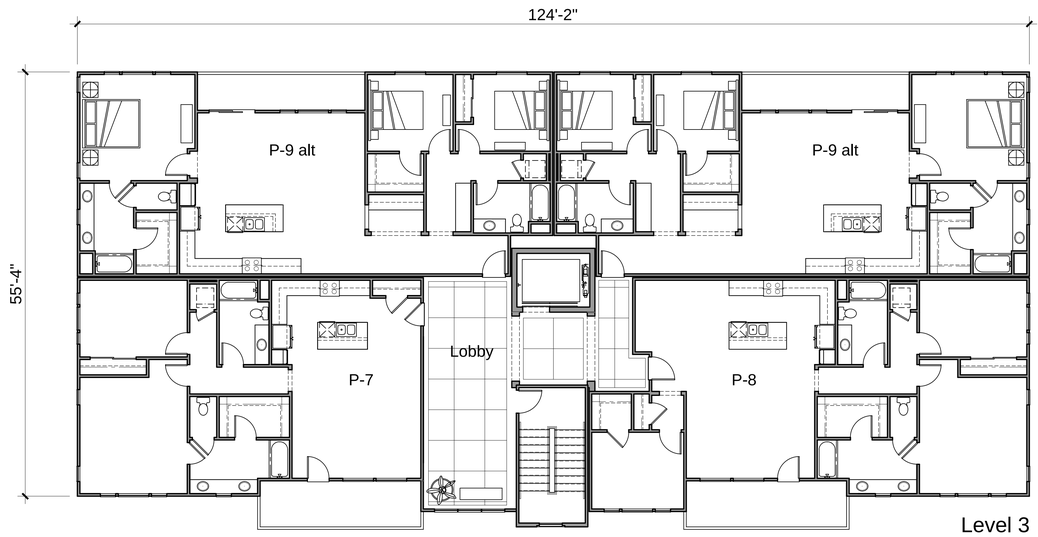


Note: All rooftop mechanical equipment to be screened.

# 450 MONTAGUE

## BUILDING "C ALT." 9-PLEX - PLANS

MILPITAS, CA

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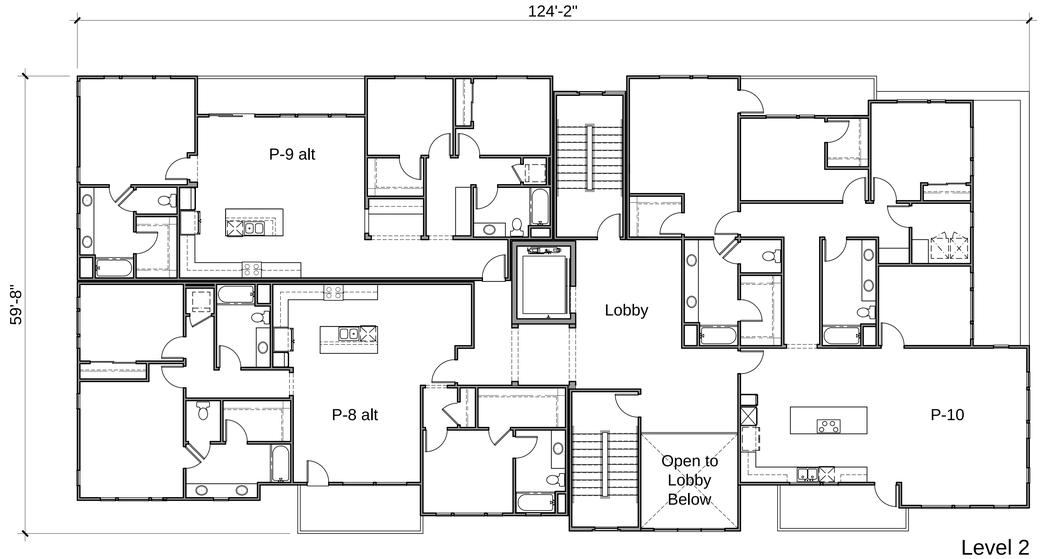


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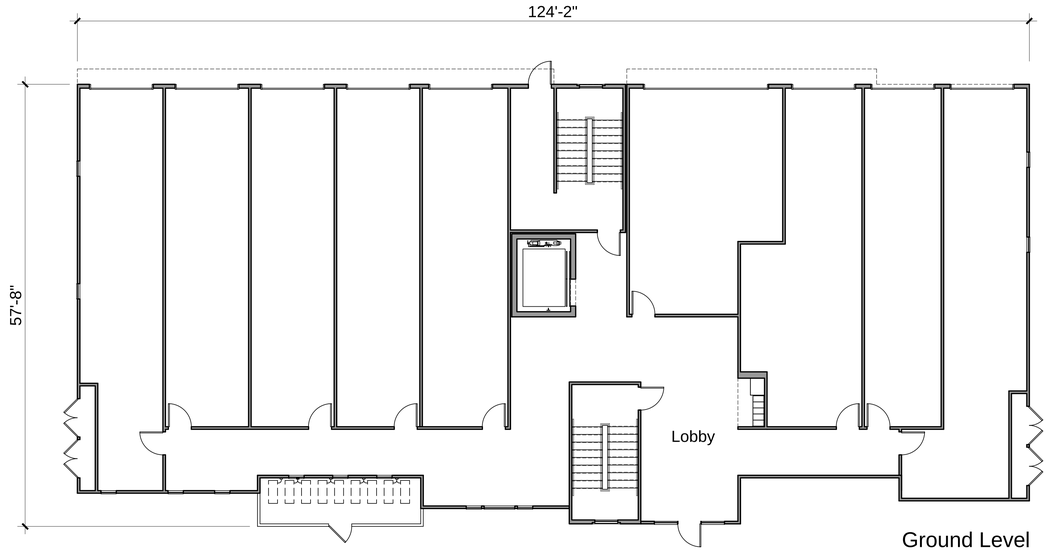


Ground Level

# 450 MONTAGUE

# BUILDING "D" 9-PLEX - PLANS

MILPITAS, CA

KTGY # 2013-0551

02.26.2015

0 4 8 16

AS3.6

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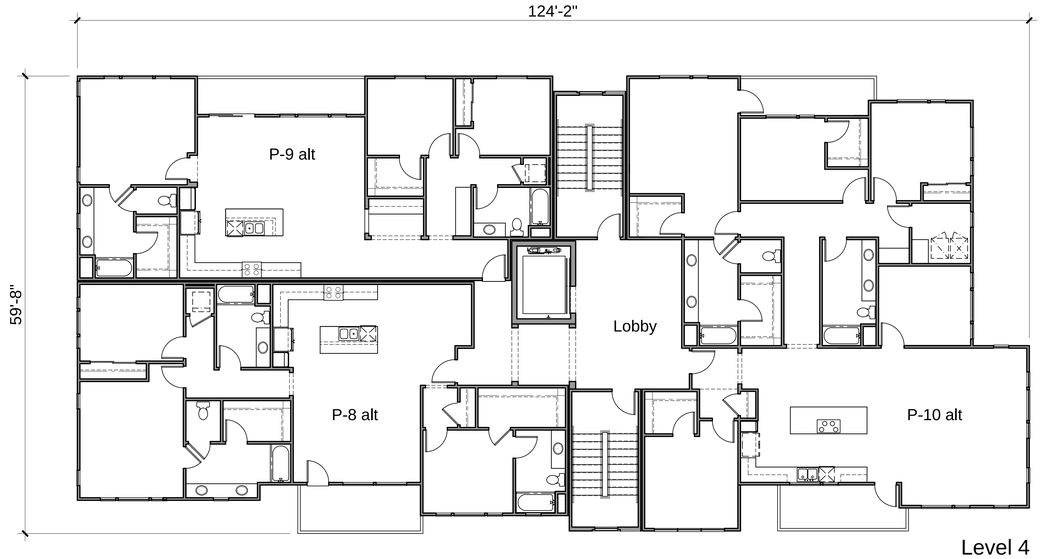


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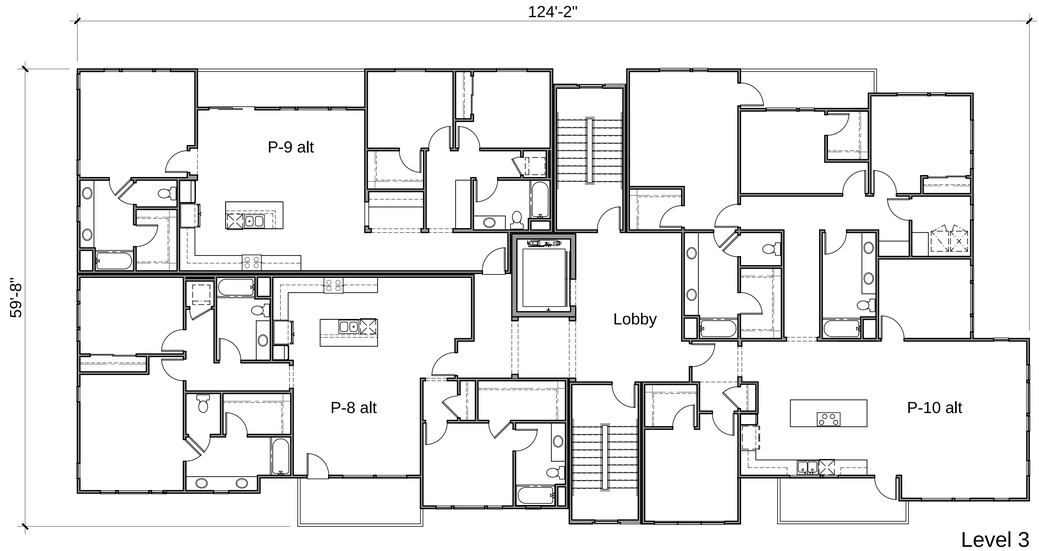


Level 3

# 450 MONTAGUE

# BUILDING "D" 9-PLEX - PLANS

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AS3.7

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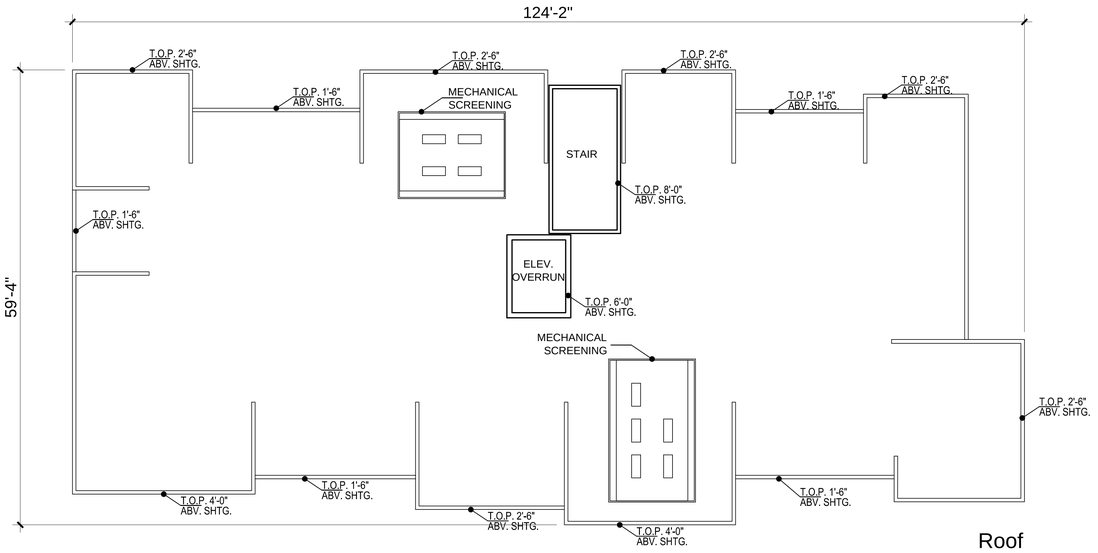


Roof

Note: All rooftop mechanical equipment to be screened.

# 450 MONTAGUE

# BUILDING "D" 9-PLEX - PLANS

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AS3.8

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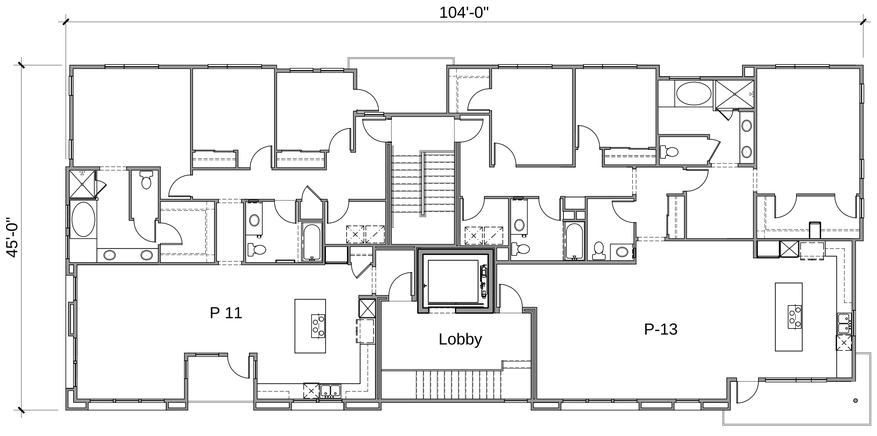


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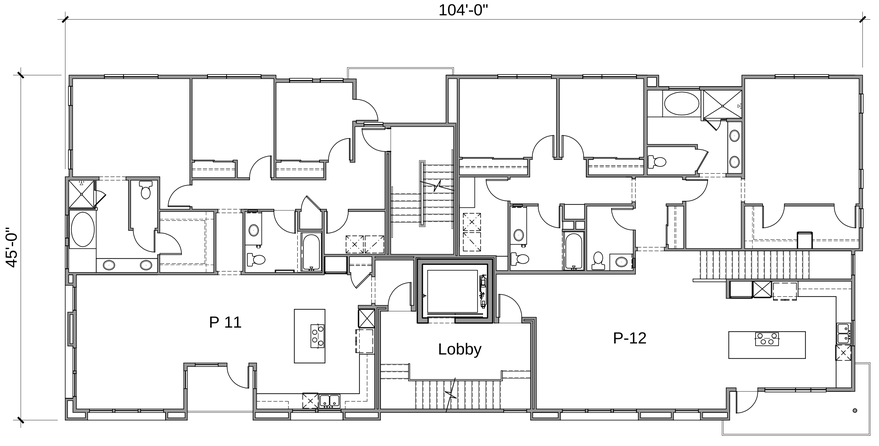


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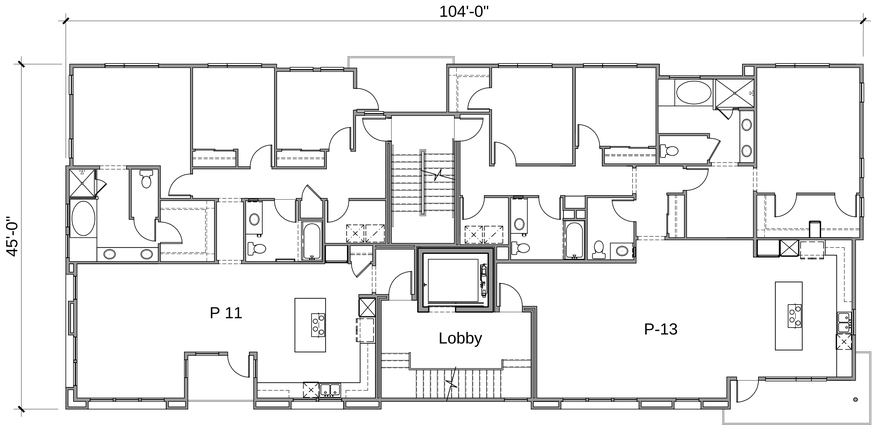


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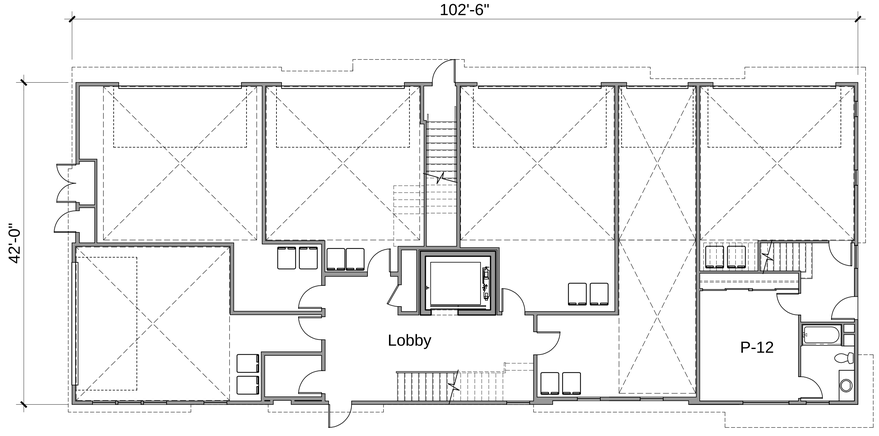


Ground Level

# 450 MONTAGUE

# BUILDING "E" 6-PLEX - PLANS

MILPITAS, CA

KTGY # 2013-0551 02.26.2015

0 4 8 16

AS3.9

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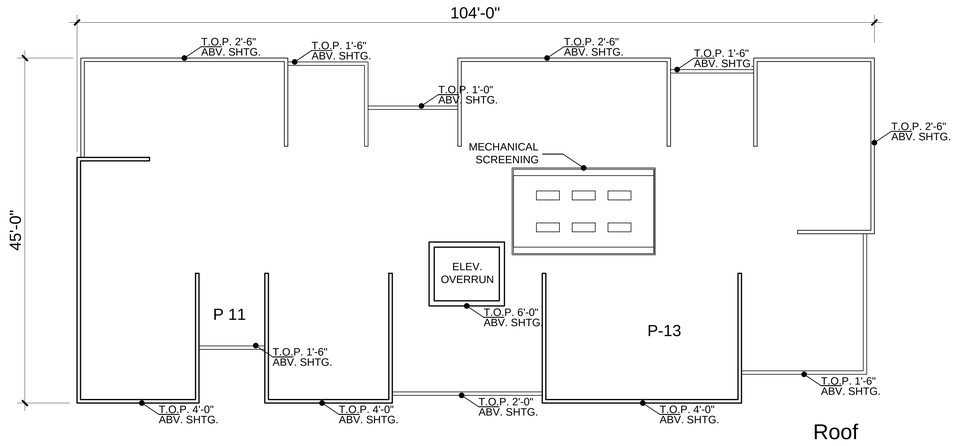


Note: All rooftop mechanical equipment to be screened.

# 450 MONTAGUE

# BUILDING "E" 6-PLEX - PLANS

MILPITAS, CA

KTGY # 2013-0551 02.26.2015

0 4 8 16

AS3.10

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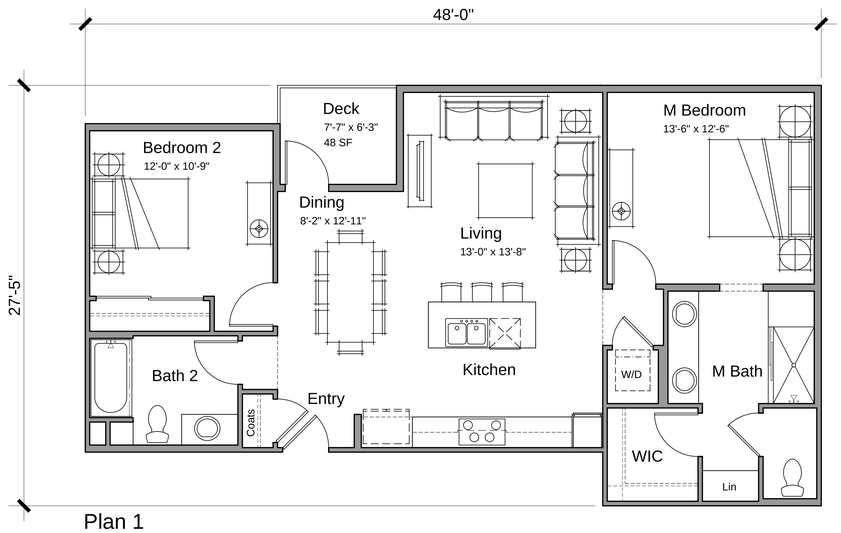
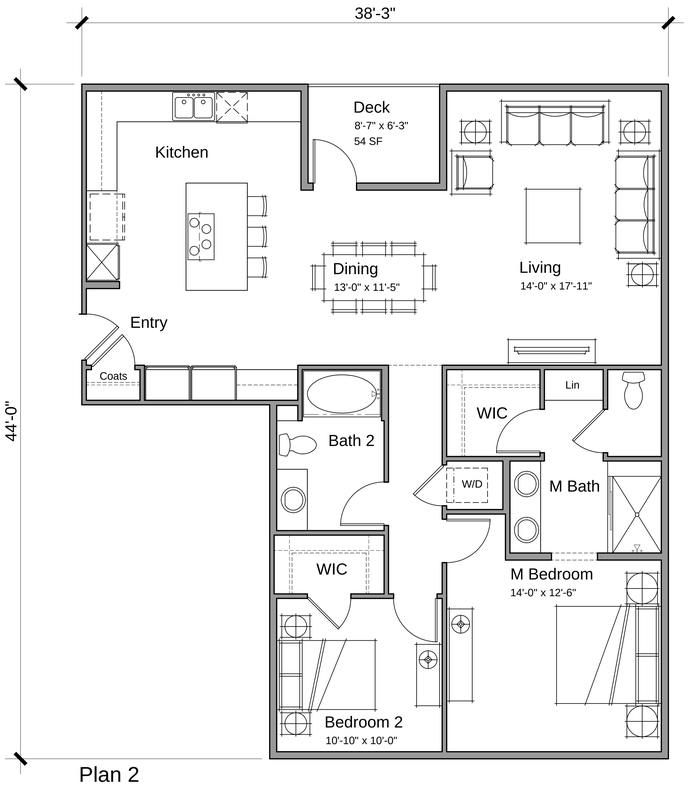



Plan 1
2 Bedroom / 2 Bathroom
1056 NSF




Plan 2
2 Bedroom / 2 Bathroom
1270 NSF

*Net rentable area: measured to inside face of stud, includes all shafts; does not reflect 2" window recess; excludes furred wall

# 450 MONTAGUE

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# STACKED FLATS - UNIT PLANS

MILPITAS, CA

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0 2 4 8

AS5.0

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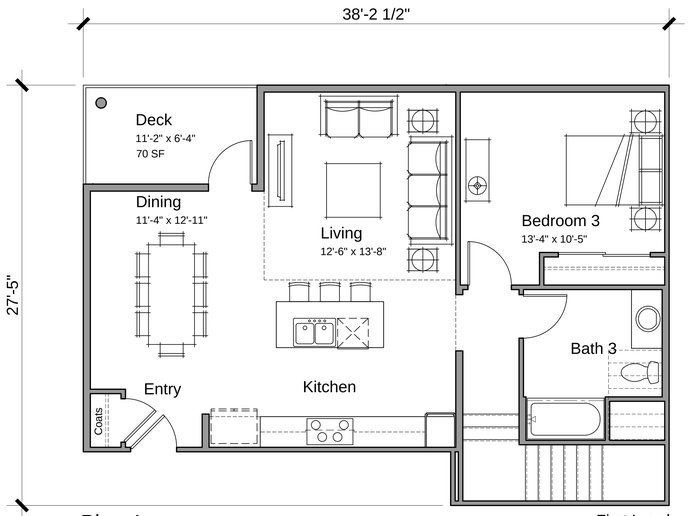
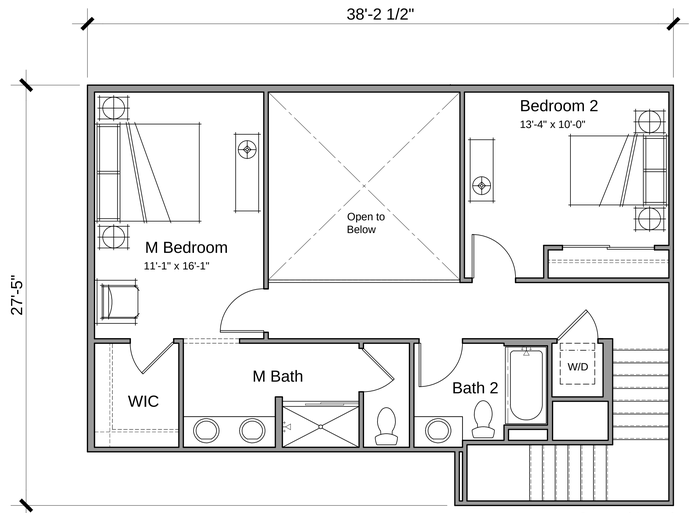



Plan 4
3 Bedroom / 3 Bathroom
1531 NSF

First Level




Second Level

*Net rentable area: measured to inside face of stud, includes all shafts; does not reflect 2" window recess; excludes furred wall

# 450 MONTAGUE

# STACKED FLATS - UNIT PLANS

MILPITAS, CA

KTGY # 2013-0551 02.26.2015

0 2 4 8

AS5.1

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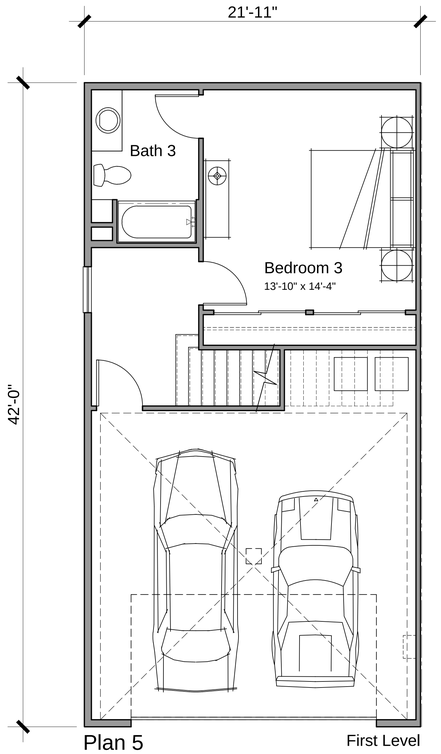
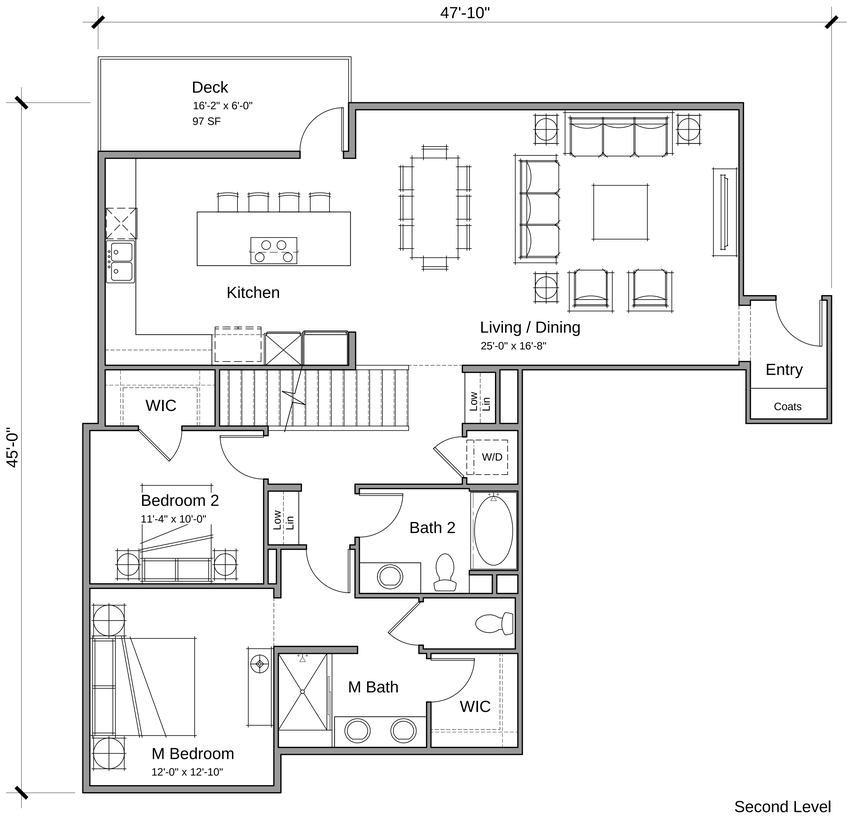


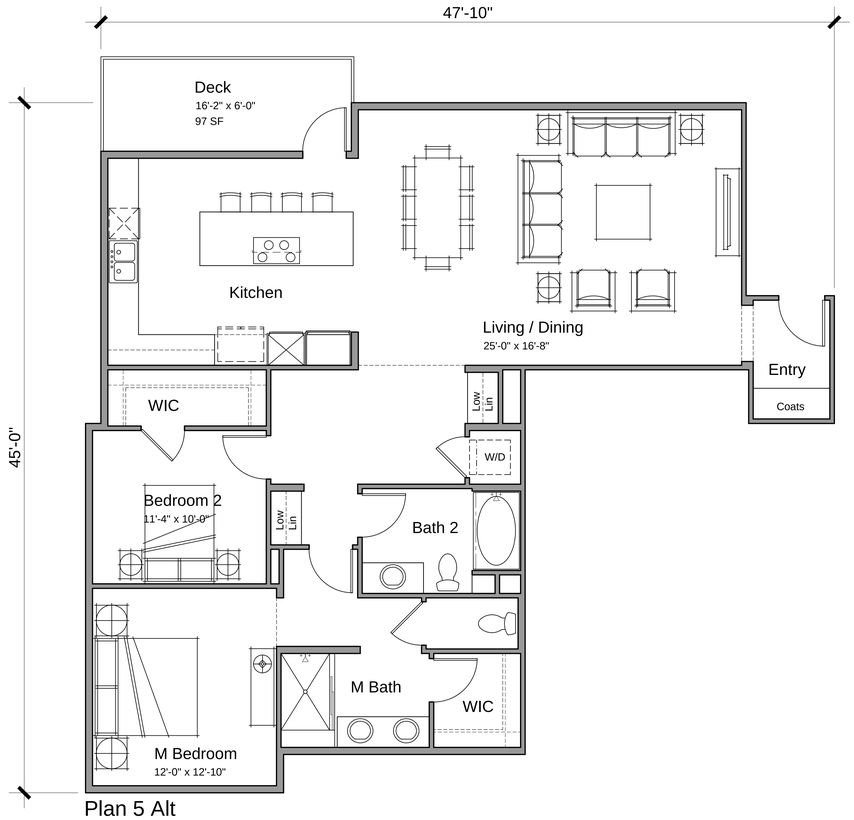

Plan 5

3 Bedroom / 3 Bathroom

1779 NSF

First Level

Second Level




Plan 5 Alt

2 Bedroom / 2 Bathroom

1400 NSF

*Net rentable area: measured to inside face of stud, includes all shafts; does not reflect 2" window recess; excludes furred wall

# 450 MONTAGUE

# STACKED FLATS - UNIT PLANS

# AS5.2

0 2 4 8

MILPITAS, CA

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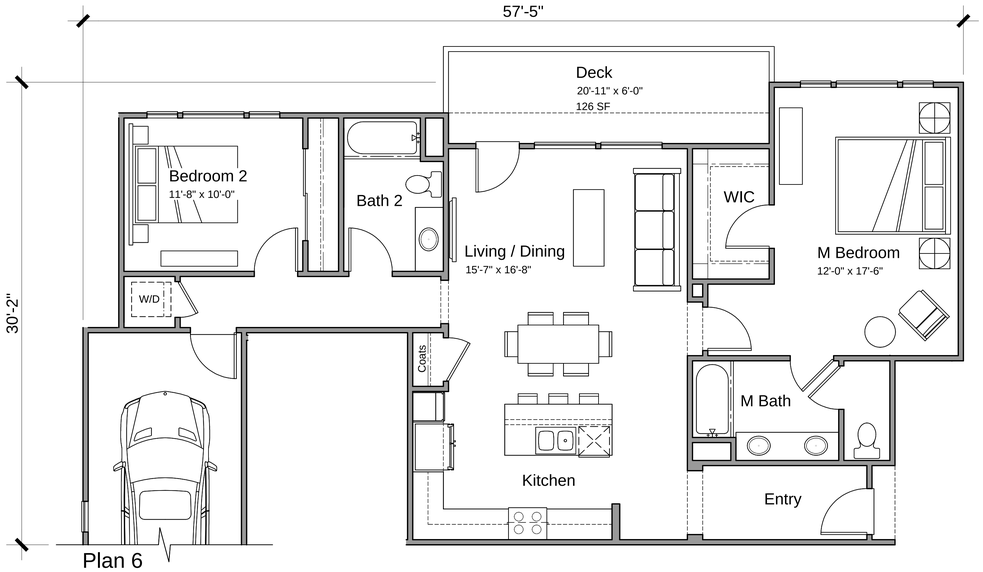
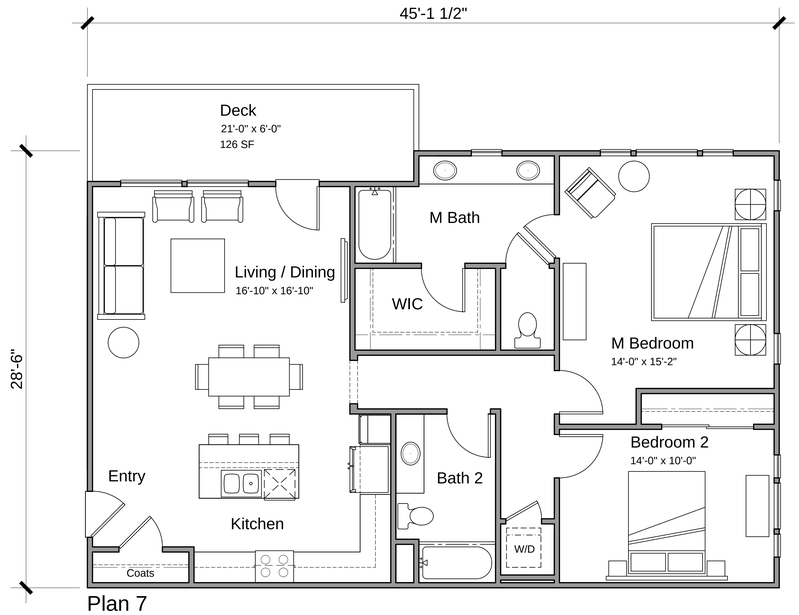



Plan 6
2 Bedroom / 2 Bathroom
1156 NSF




Plan 7
2 Bedroom / 2 Bathroom
1195 NSF

*Net rentable area: measured to inside face of stud, includes all shafts; does not reflect 2" window recess; excludes furred wall

# 450 MONTAGUE

# STACKED FLATS - UNIT PLANS

MILPITAS, CA

KTGY # 2013-0551 02.26.2015

0 2 4 8

AS5.3

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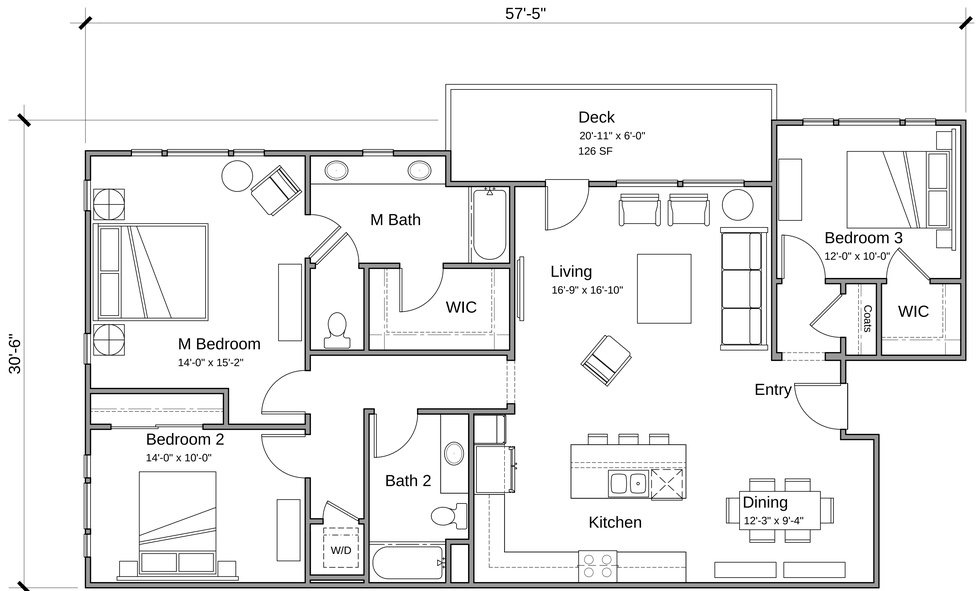


Plan 8

3 Bedroom / 2 Bathroom

1464 NSF

*Net rentable area: measured to inside face of stud, includes all shafts; does not reflect 2" window recess; excludes furred wall

# 450 MONTAGUE

# STACKED FLATS - UNIT PLANS

MILPITAS, CA

KTGY # 2013-0551 02.26.2015

0 2 4 8

AS5.4

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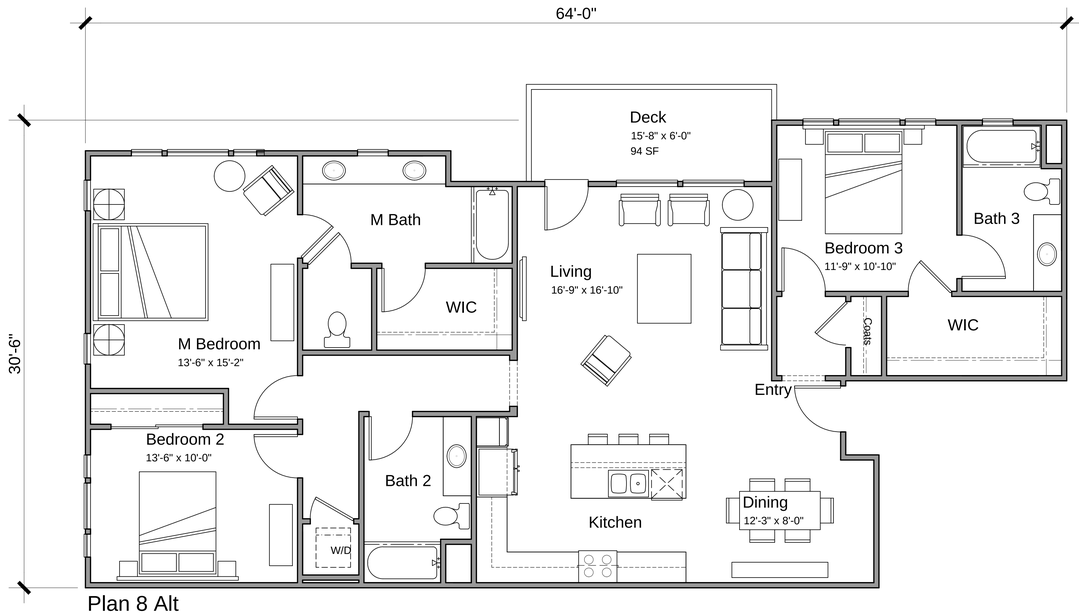


Plan 8 Alt

3 Bedroom / 3 Bathroom

1573 NSF

*Net rentable area: measured to inside face of stud, includes all shafts; does not reflect 2" window recess; excludes furred wall

# 450 MONTAGUE

# STACKED FLATS - UNIT PLANS

MILPITAS, CA

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0 2 4 8

AS5.5

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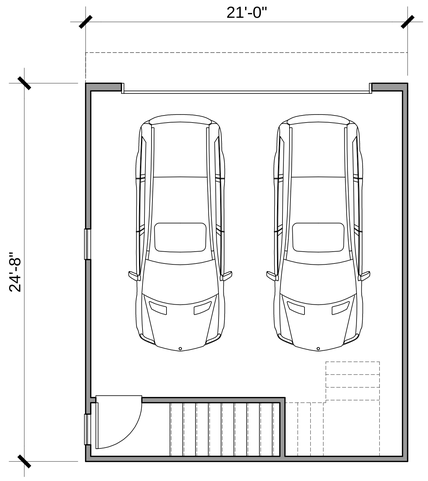
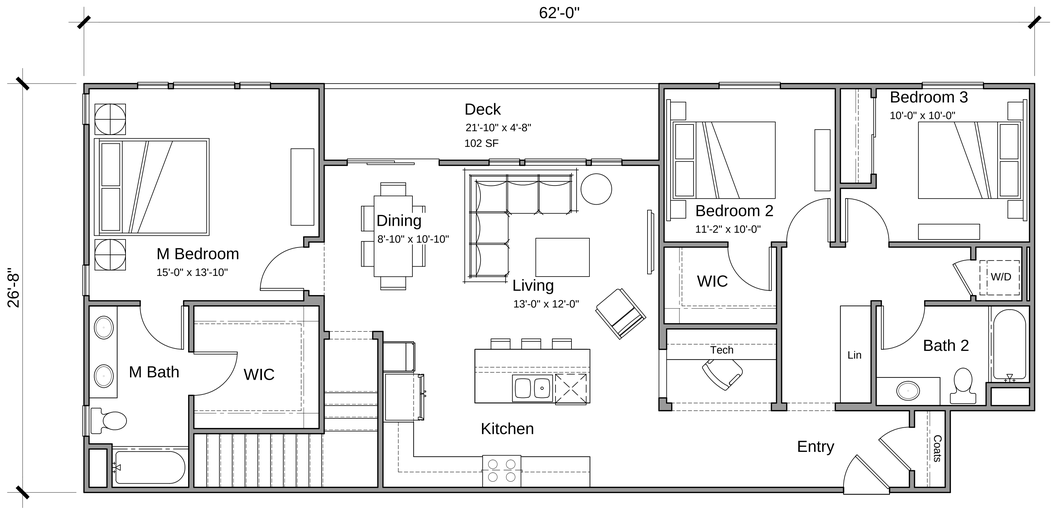



Plan 9
3 Bedroom / 2 Bathroom
1474 NSF

First Level




Second Level

*Net rentable area: measured to inside face of stud, includes all shafts; does not reflect 2" window recess; excludes furred wall

# 450 MONTAGUE

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# STACKED FLATS - UNIT PLANS

MILPITAS, CA

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AS5.6

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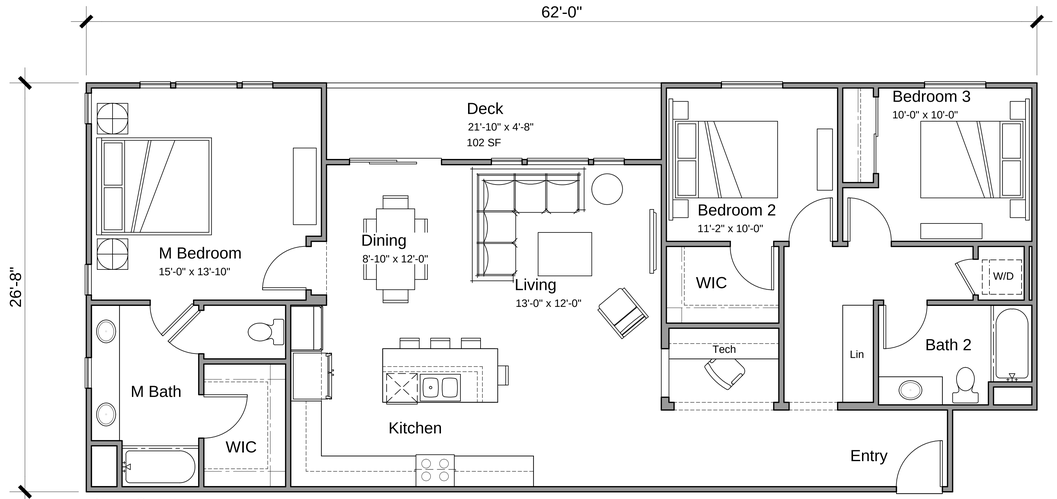


Plan 9 Alt

3 Bedroom / 2 Bathroom

1453 NSF

*Net rentable area: measured to inside face of stud, includes all shafts; does not reflect 2" window recess; excludes furred wall

# 450 MONTAGUE

# STACKED FLATS - UNIT PLANS

MILPITAS, CA

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0 2 4 8

AS5.7

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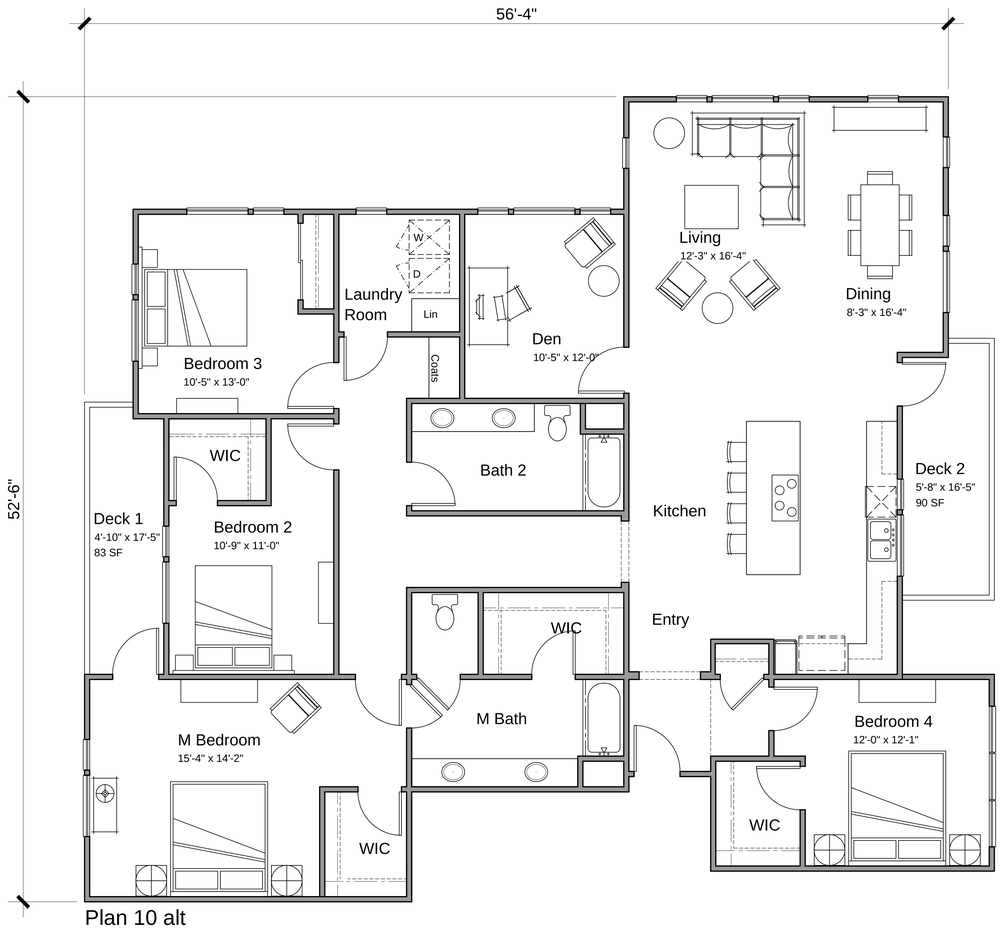
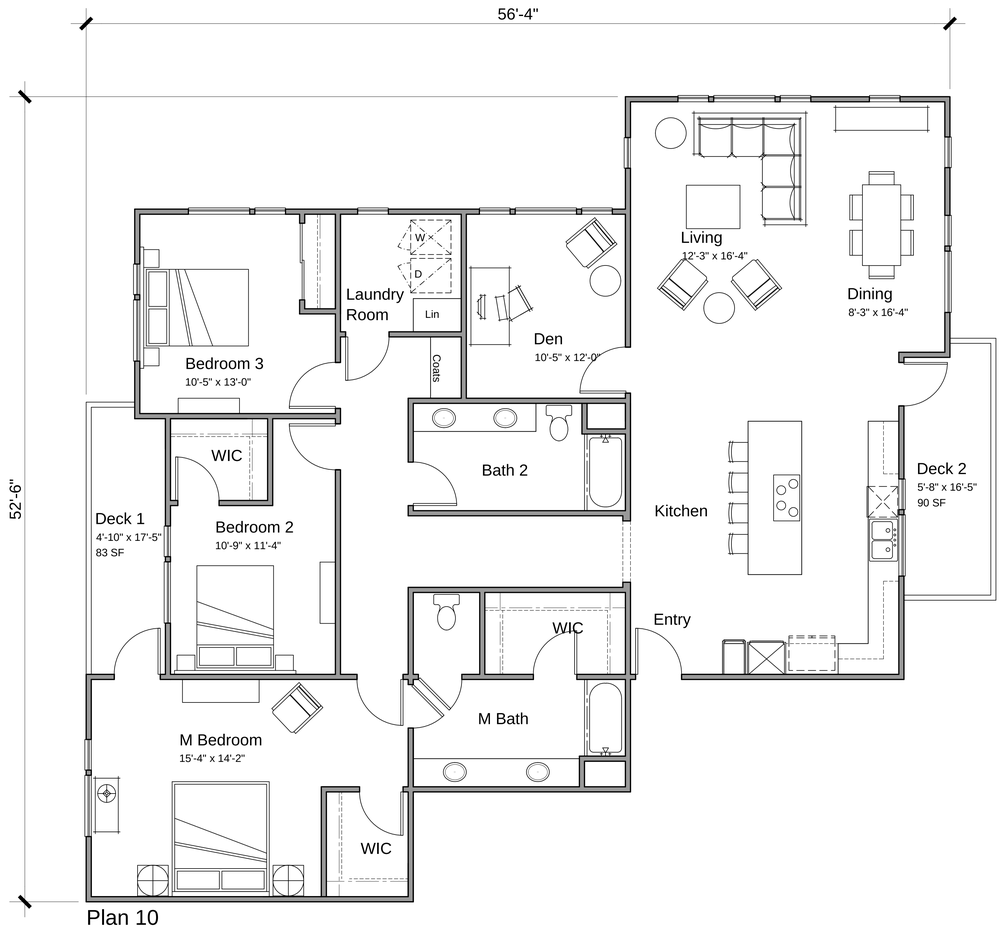



Plan 10 alt
4 Bedroom / 2 Bathroom
2289 NSF




Plan 10
3 Bedroom / 2 Bathroom
2030 NSF

*Net rentable area: measured to inside face of stud, includes all shafts; does not reflect 2" window recess; excludes furred wall

# 450 MONTAGUE

# STACKED FLATS - UNIT PLANS

0 2 4 8

AS5.8

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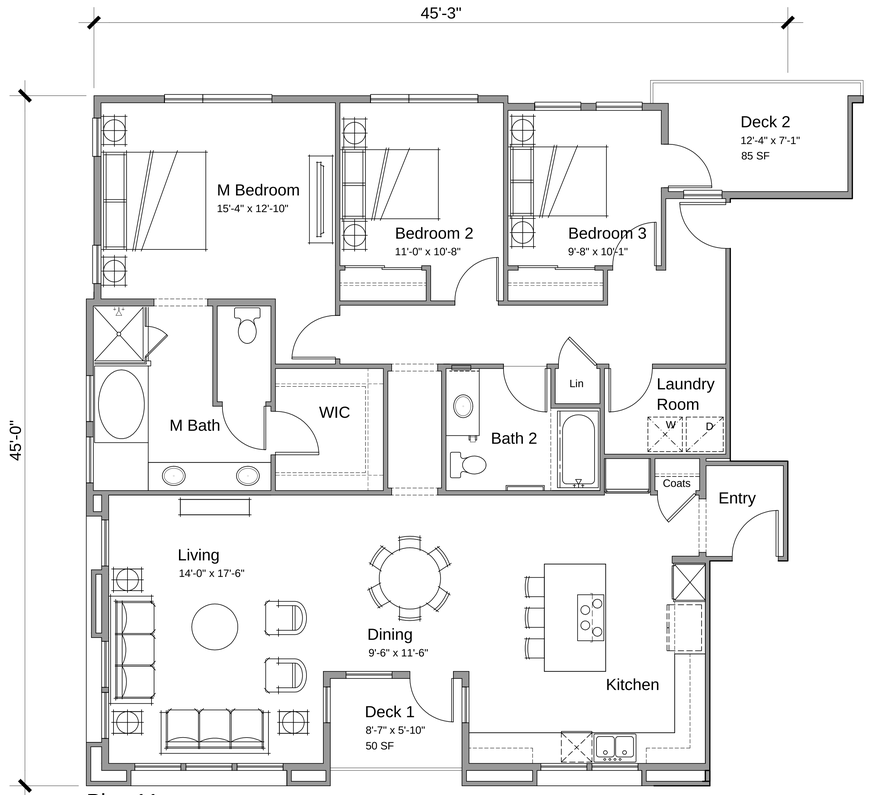


Plan 11
3 Bedroom / 2 Bathroom
1669 NSF

*Net rentable area: measured to inside face of stud, includes all shafts; does not reflect 2" window recess; excludes furred wall

# 450 MONTAGUE

LENNAR MULTIFAMILY COMMUNITIES
Lennar Multifamily Communities
100 Pine Street, Suite 2260
San Francisco, CA 94111

LENNAR
Lennar Homes
6111 Bollinger Canyon Rd, Suite 550
San Ramon, CA 94583

## STACKED FLATS - UNIT PLANS

MILPITAS, CA

KTGY # 2013-0551 02.26.2015

0 2 4 8

AS5.9

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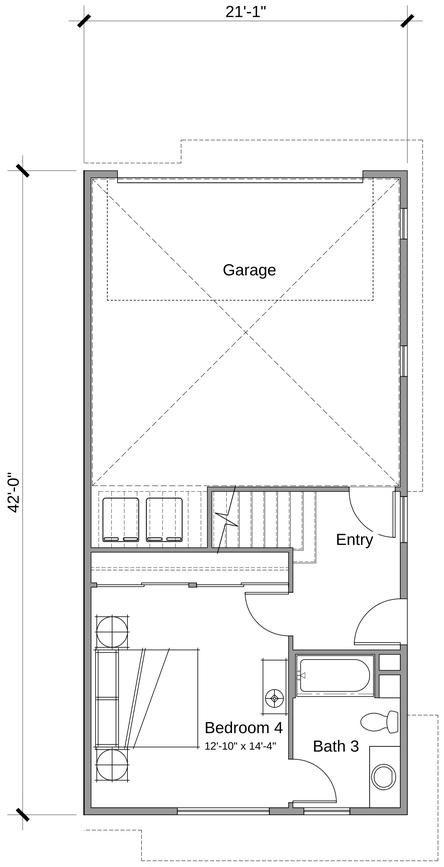
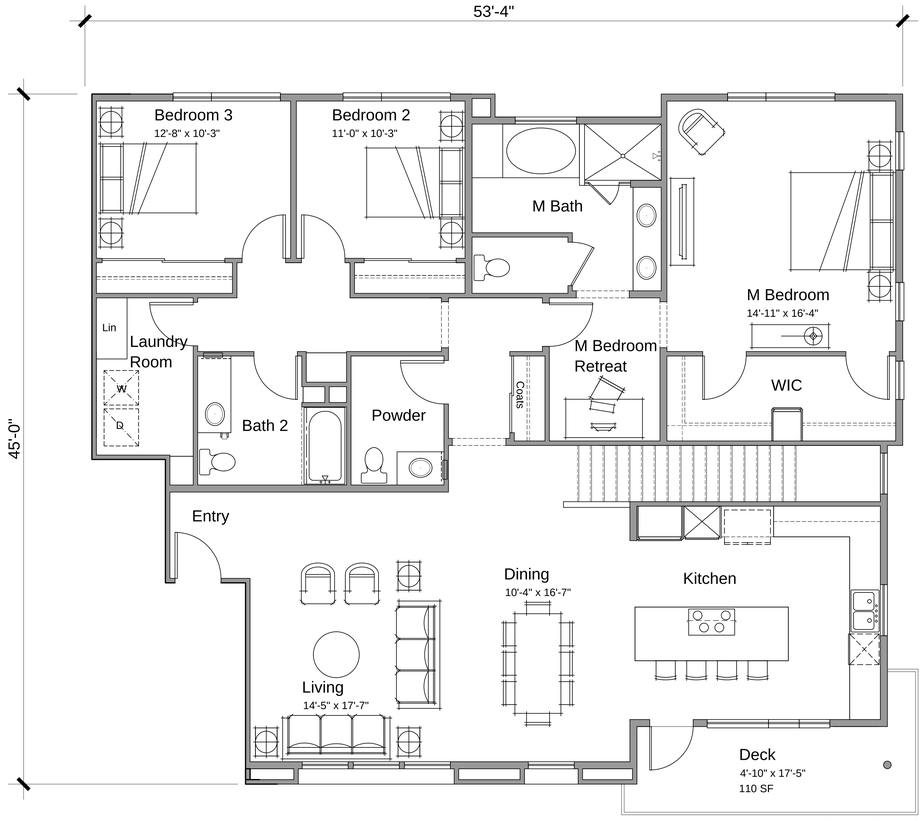



Plan 12
4 Bedroom / 3.5 Bathroom
2344 NSF

First Level




Second Level

*Net rentable area: measured to inside face of stud, includes all shafts; does not reflect 2" window recess; excludes furred wall

# 450 MONTAGUE

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# STACKED FLATS - UNIT PLANS

MILPITAS, CA

KTGY # 2013-0551 02.26.2015

0 2 4 8

AS5.10

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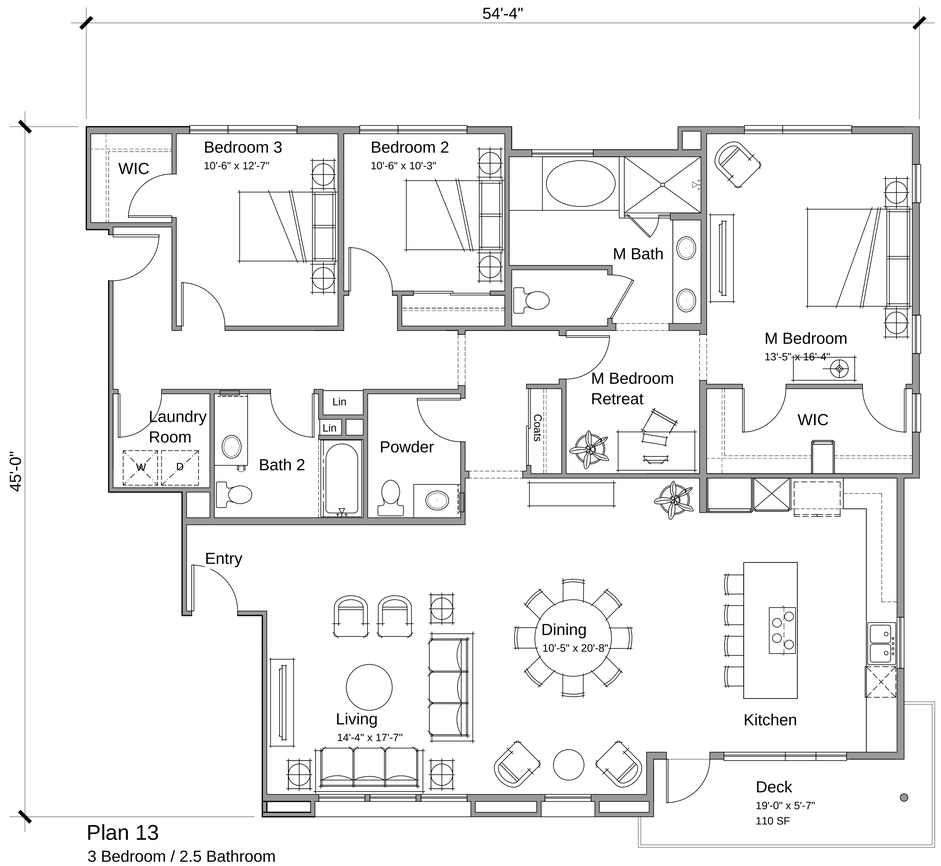


Plan 13
3 Bedroom / 2.5 Bathroom
2013 NSF

*Net rentable area: measured to inside face of stud, includes all shafts; does not reflect 2" window recess; excludes furred wall




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Architecture+Planning
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Oakland, CA 94607
510.272.2910
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STUCCO 1
SW 7048

STUCCO 2
SW 6062

STUCCO 3
SW 7064

STUCCO 4
SW 7054

CEMENTITIOUS PANEL
SW 6062

CEMENTITIOUS SIDING/TRIM 1
SW 7064

CEMENTITIOUS SIDING/TRIM 2
SW 7038

ACCENT 1
SW 7023

ACCENT 2
SW 7038

ACCENT 3
SW 7509

ACCENT 4
SW 6670

ACCENT 5
SW 7054

ACCENT 6
SW 6062

METAL 1
SW 7064

VINYL WINDOW
TAN

Rear Elevation

Building C Alt - Style 2 - Front Elevation
NTS

Rear Elevation

Building B - Style 1 - Front Elevation
NTS

# 450 MONTAGUE

# COLOR AND MATERIALS BOARD - SCHEME 1

AS7.0

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MULTIFAMILY COMMUNITIES

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MILPITAS, CA

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STUCCO 1
SW 7041

STUCCO 2
SW 7038

CEMENTITIOUS PANEL
SW 7041

CEMENTITIOUS SIDING/TRIM 1
SW 7615

CEMENTITIOUS SIDING/TRIM 2
SW 7044

ACCENT 1
SW 7674

ACCENT 2
SW 7509

ACCENT 3
SW 6902

ACCENT 4
SW 7041

METAL 1
SW 7064

VINYL WINDOW
TAN

Rear Elevation

Building C - Style 1 - Front Elevation
NTS

Rear Elevation

Building A - Style 1 - Front Elevation
NTS

# 450 MONTAGUE

# COLOR AND MATERIALS BOARD - SCHEME 2

AS7.1

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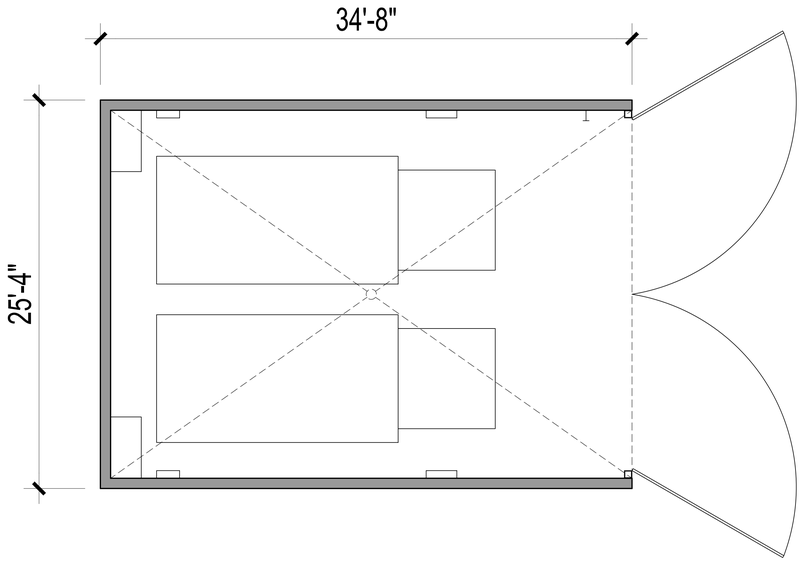
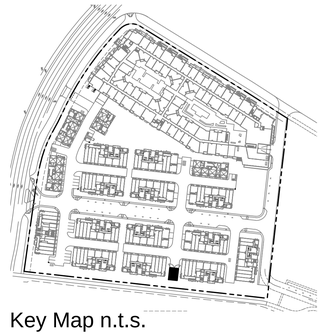


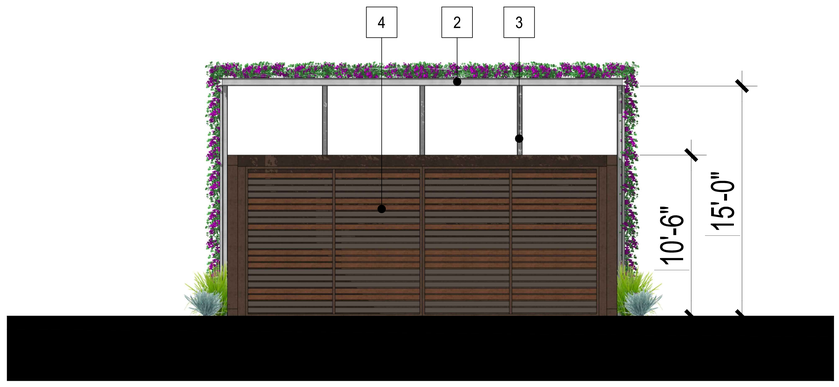

Plan



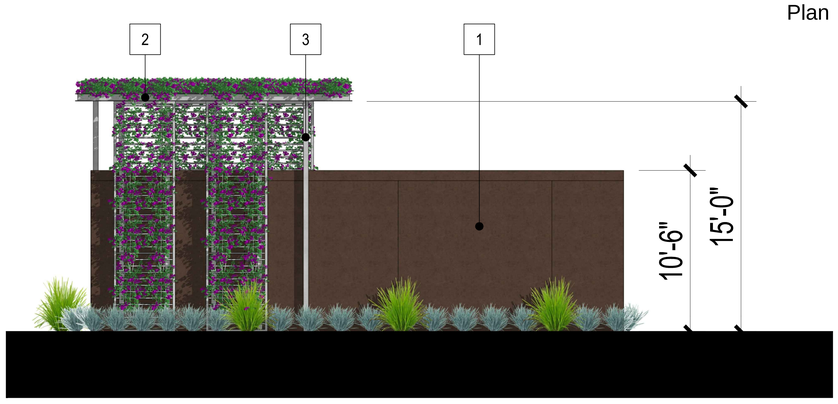
Key Map n.t.s.

## Material Legend

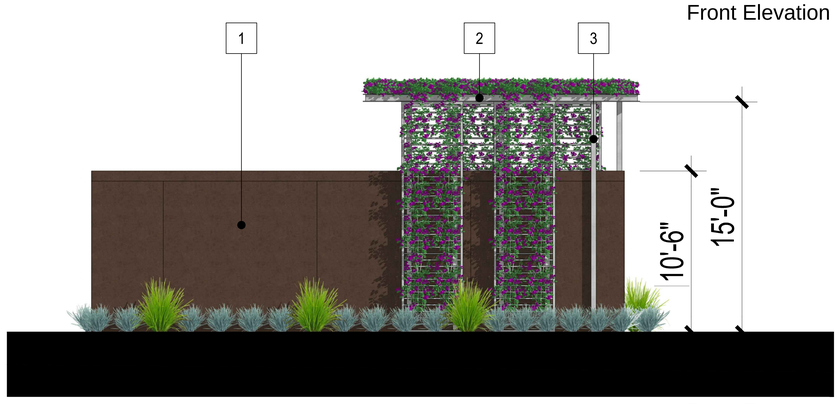
1. Stucco
2. Metal Trellis
3. Metal Column
4. Metal Gate



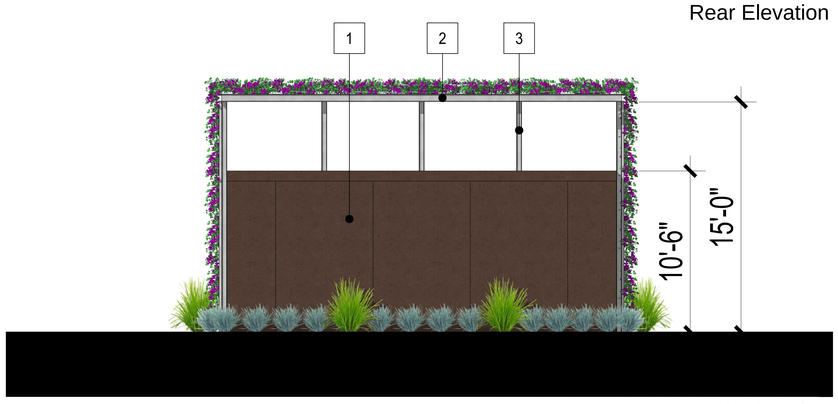

Front Elevation




Rear Elevation




Right Elevation




Left Elevation

# 450 MONTAGUE

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# TRASH ENCLOSURE PLAN & ELEVATIONS

MILPITAS, CA

KTGY # 2013-0551 02.26.2015

0 2 4 8

AS8.0

**KTGY Group, Inc.**
**Architecture+Planning**
580 Second St., Suite 200
Oakland, CA 94607
510.272.2910
ktgy.com

## CONTACTS

1. SUBDIVIDER: LENNAR MULTIFAMILY COMMUNITIES, LLC
100 PINE STREET, SUITE 2260
SAN FRANCISCO, CA 94111
(415) 975-4989
KEVIN MA

2. ENGINEER: CARLSON, BARBEE & GIBSON, INC
2633 CAMINO RAMON, SUITE 350
SAN RAMON, CA 94583
(925) 866-0322
JASON NERI, RCE 59136

3. SOILS ENGINEER: ROCKRIDGE GEOTECHNICAL
270 GRAND AVENUE
OAKLAND, CA 94610
(510) 420-5738

## GENERAL NOTES

1. ASSESSORS PARCEL NO: 086-37-004, 086-37-019, 086-37-020, 086-37-021
2. SITE ADDRESS: 400 & 450 MONTAGUE EXPRESSWAY MILPITAS, CA
3. SITE AREA: 10.47± ACRES
4. DWELLING UNITS: 351 APARTMENTS
138 STACKED FLATS
489 TOTAL UNITS
5. EXISTING ZONING: LIGHT INDUSTRIAL/ R&D DISTRICT
PROPOSED ZONING: MIXED USE VERY HIGH DENSITY WITH TRANSIT ORIENTED DEVELOPMENT OVERLAY (MXD3-TOD)
DENSITY: 46.7 DU/AC
NET DENSITY: 48.7 DU/AC
6. EXISTING USE: INDUSTRIAL
PROPOSED USE: MULTI-FAMILY RESIDENTIAL
7. MINIMUM LOT SIZE: 7,500 SF (LOT 3)
8. BASIS OF BEARINGS: CENTERLINE OF McCANDLESS DRIVE PER PARCEL MAP 536 M 41
9. BENCHMARK: CITY OF MILPITAS BENCHMARK "CED-MAI": BRASS DISK IN MONUMENT WELL AT THE INTERSECTION OF CEDAR WAY AND SOUTH MAIN STREET.
EL 33.940 FEET (NGVD 29)
CITY OF MILPITAS LEVEL GPS SURVEY 12/1999 TO 2/2000
10. EXISTING STRUCTURES: ALL EXISTING BUILDINGS, PAVEMENT AND TREES WITHIN BOUNDARY TO BE REMOVED UNLESS OTHERWISE NOTED.
11. EXISTING UTILITIES: ALL EXISTING UTILITIES WITHIN THE BOUNDARY TO BE REMOVED UNLESS OTHERWISE NOTED.
12. STREETS: ALL STREETS WITHIN THE SUBDIVISION WILL BE PRIVATE STREETS AND WILL BE PRIVATELY MAINTAINED. ALL PRIVATE STREETS WILL BE WITHIN PSUE'S (MINIMUM LONGITUDINAL SLOPE = 0.6%). ACCESS EASEMENTS WILL BE PROVIDED TO UTILITY OWNERS AS REQUIRED. RECIPROCAL ACCESS EASEMENTS WILL BE PROVIDED OVER STREETS FOR THE BENEFIT OF THE DEVELOPMENT.
13. STREET LIGHTS: EXISTING STREET LIGHTS ALONG EAST CAPITOL AVENUE AND MONTAGUE EXPRESSWAY TO REMAIN, UNLESS OTHERWISE NOTED, AND WILL BE PUBLICLY OWNED AND MAINTAINED. STREET LIGHTS ALONG PRIVATE STREETS WILL BE PRIVATELY MAINTAINED.
14. WALLS: ALL WALLS WILL BE PRIVATE FACILITIES AND WILL BE PRIVATELY MAINTAINED.
15. UTILITIES: ALL UTILITIES WITHIN EAST CAPITOL AVENUE, MONTAGUE EXPRESSWAY, AND THE RECYCLED WATER MAIN IN STREET A WILL BE PUBLIC FACILITIES TO BE OWNED AND MAINTAINED BY THE CITY OF MILPITAS.
ALL OTHER UTILITIES WITHIN THE PROPOSED SUBDIVISION ARE PRIVATELY OWNED AND MAINTAINED, INCLUDING BUT NOT LIMITED TO, WATER, STORM AND SEWER.
16. EASEMENTS: EXISTING EASEMENTS MAY REQUIRE VACATION OR RELOCATION TO FACILITATE DEVELOPMENT. ALL PROPOSED, EXISTING, RELOCATED AND VACATED EASEMENTS TO BE SHOWN ON THE FINAL MAP.
17. LANDSCAPING: LANDSCAPING WITHIN THE CITY RIGHT-OF-WAY TO BE OWNED AND MAINTAINED BY THE CITY OF MILPITAS.
ALL LANDSCAPING OUTSIDE OF THE PUBLIC RIGHT-OF-WAY TO BE PRIVATELY OWNED AND MAINTAINED.
18. FLOOD ZONE: ZONE AO (DEPTH 1')
REFER TO:
FLOOD INSURANCE RATE MAP
06085C0067J (FEBRUARY 19, 2014)
ALL PROPOSED STRUCTURES TO BE REMOVED FROM SPECIAL FLOOD HAZARD AREA (SFHA).
19. WELLS ONSITE: ALL EXISTING WELLS TO BE DECOMMISSIONED PER CITY OF MILPITAS REQUIREMENTS.
20. WATER: CITY OF MILPITAS
21. STORM: CITY OF MILPITAS
22. SEWER: CITY OF MILPITAS
23. GAS & ELECTRIC: PG&E
24. TELEPHONE: AT&T
25. CABLE TV: AT&T BROADBAND
26. CONDOMINIUM MAP: A CONDOMINIUM MAP WILL BE RECORDED FOR LOTS 1 THRU 18. PARCELS A, B & C WILL BE COMMON AREA PARCELS. PARCEL D WILL BE DEDICATED TO THE CITY OF MILPITAS AS RIGHT-OF-WAY. PARCELS E & F WILL BE DEDICATED TO THE SANTA CLARA COUNTY RIGHT-OF-WAY. THE SUBDIVISION IS A CONDOMINIUM PROJECT AS DEFINED IN SECTION 1350 ET SEQ OF THE CIVIL CODE OF THE STATE OF CALIFORNIA AND FILED PURSUANT TO THE SUBDIVISION MAP ACT. THE TOTAL NUMBER OF CONDOMINIUM DWELLING UNITS SHALL BE NO MORE THAN 489 UNITS.
27. PHASING: THE PROJECT MAY INCLUDE MULTIPLE PHASES AND FINAL MAPS.
28. DIMENSIONS: ALL DIMENSIONS ARE PRELIMINARY AND SUBJECT TO THE FINAL SUBDIVISION MAP.

## EXISTING EASEMENTS

1. 10' PUBLIC SERVICE UTILITY EASEMENT IN FAVOR OF SANTA CLARA COUNTY TRANSIT DISTRICT PER 15084324
2. SLOPE EASEMENT IN FAVOR OF CITY OF MILPITAS PER B842 OR 712
3. 15' PUBLIC SERVICE UTILITY EASEMENT IN FAVOR OF SANTA CLARA COUNTY TRANSIT DISTRICT PER 15084322
4. 10' PUBLIC SERVICE UTILITY EASEMENT IN FAVOR OF CITY OF MILPITAS PER 420 M 22
5. ABUTTER'S RIGHTS RELINQUISHMENT PER H639 OR 655 AND H639 OR 660
6. 10' SANITARY SEWER EASEMENT IN FAVOR OF MILPITAS SANITARY DISTRICT PER 8694 OR 326
7. 10' SANITARY SEWER EASEMENT IN FAVOR OF MILPITAS SANITARY DISTRICT PER 8879 OR 480
8. 12' PUBLIC SERVICE UTILITY EASEMENT IN FAVOR OF CITY OF MILPITAS PER 420 M 22
9. ROADWAY, SIDEWALK & UTILITY EASEMENT IN FAVOR OF STUART LEEB, ROBERT J BRAUD & CHRISTINE BRAUD PER H653 OR 471
10. ABUTTER'S RIGHTS RELINQUISHMENT PER H639 OR 665

## LEGEND

| EXISTING | PROPOSED | |
|---|---|---|
| | | PROJECT BOUNDARY |
| | | RIGHT-OF-WAY LINE |
| | | PROPERTY LINE |
| | | EASEMENT LINE |
| | | RELINQUISHMENT OF ABUTTERS RIGHTS |
| | | CURB, GUTTER & SIDEWALK |
| | | ADJACENT PROPERTY COORDINATION AREAS |

## ABBREVIATIONS

| | |
|---|---|
| BD | BOUNDARY |
| BFE | BASE FLOOD ELEVATION |
| BRC | BACK OF ROLLED CURB |
| DW | DRIVEWAY |
| EX | EXISTING |
| EVAE | EMERGENCY VEHICLE ACCESS EASEMENT |
| FC | FACE OF CURB |
| OB | OVERBUILD |
| PSUE | PUBLIC SERVICE UTILITY EASEMENT |
| R | RADIUS |
| RW | RECYCLED WATER |
| R/W | RIGHT-OF-WAY |
| SCVWD | SANTA CLARA VALLEY WATER DISTRICT |
| SD | STORM DRAIN |
| SS | SANITARY SEWER |
| SSE | SANITARY SEWER EASEMENT |
| W | WATER |

| LINE TABLE | | |
|---|---|---|
| NO | BEARING | LENGTH |
| L2 | N58°09'20"W | 33.54' |
| L3 | N56°18'29"W | 65.61' |
| L4 | N83°42'50"W | 13.69' |
| L6 | N70°36'57"W | 10.00' |
| L8 | N06°17'10"E | 40.00' |
| L9 | N83°42'50"W | 10.39' |
| L10 | N06°17'10"E | 43.00' |
| L12 | N58°06'37"W | 21.89' |
| L13 | N57°06'54"W | 110.78' |
| L14 | N08°09'19"E | 77.55' |
| L15 | N07°58'55"E | 181.82' |
| L16 | N06°26'55"E | 30.83' |

| CURVE TABLE | | | |
|---|---|---|---|
| NO | RADIUS | DELTA | LENGTH |
| C2 | 606.03' | 1°50'51" | 19.54' |
| C3 | 70.00' | 10°34'32" | 12.92' |
| C4 | 255.00' | 5°26'28" | 24.22' |
| C5 | 100.00' | 3°16'19" | 5.71' |
| C6 | 40.00' | 103°05'53" | 71.98' |
| C7 | 40.00' | 87°24'53" | 61.03' |
| C8 | 923.00' | 2°35'22" | 41.71' |
| C9 | 46.00' | 34°06'42" | 27.39' |
| C10 | 46.00' | 43°25'37" | 34.87' |
| C11 | 428.00' | 5°49'39" | 43.53' |
| C12 | 372.00' | 17°11'20" | 111.60' |
| C13 | 844.00' | 3°41'16" | 54.32' |
| C14 | 46.00' | 77°32'18" | 62.25' |

## SHEET INDEX


| | |
|---|---|
| TM.01 | VESTING TENTATIVE SUBDIVISION MAP FOR CONDOMINIUM PURPOSES |
| TM.02 | EXISTING CONDITIONS |
| TM.03 | SITE PLAN |
| TM.04 | PRELIMINARY GRADING & DRAINAGE PLAN |
| TM.05 | FLOOD PLAIN MAP |
| TM.06 | PRELIMINARY UTILITY PLAN |
| TM.07A | PRELIMINARY STORMWATER CONTROL PLAN |
| TM.07B | PRELIMINARY STORMWATER CONTROL PLAN DETAILS |
| TM.08 | FIRE TRUCK ACCESS PLAN |
| TM.09 | SOLID WASTE MANAGEMENT PLAN |
| TM.10 | PARKING PLAN |
| TM.11 | CONDITIONS OF APPROVAL |

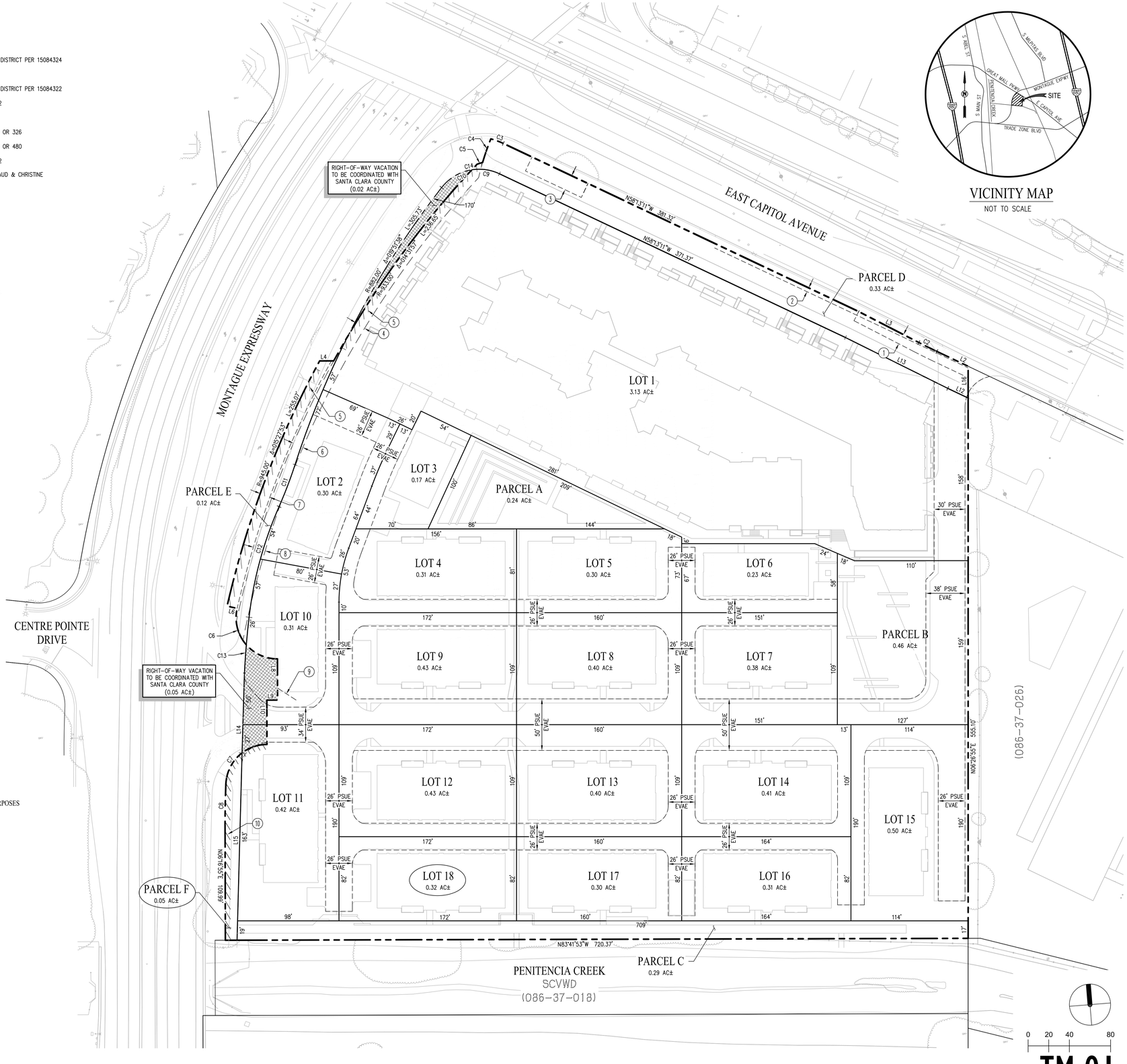

**SUBDIVISION TENTATIVE MAP**

**This Map has been reviewed by the City Engineer.**

_____
**City Engineer** **Date**

**Recommended for Approval by the Milpitas Planning Commission, this _____ day of _____ 20____, and Approved by the Milpitas City Council this_____ day of _____ 20 _____.**

_____
**Planning and Neighborhood Services Director** **Date**




## VICINITY MAP

NOT TO SCALE




0 20 40 80

# 450 MONTAGUE

# VESTING TENTATIVE SUBDIVISION MAP FOR CONDOMINIUM PURPOSES

# TM.01

LENNAR MULTIFAMILY COMMUNITIES

Lennar Multifamily Communities
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Oakland, CA 94607

LENNAR

Lennar Homes
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San Ramon, CA 94583

MILPITAS, CA

KTGY # 2013-0551

02.26.2015 3rd SUBMITTAL
12.12.2014 2nd SUBMITTAL


cbg Carlson, Barbee & Gibson, Inc.
CIVIL ENGINEERS • SURVEYORS • PLANNERS
2633 CAMINO RAMON, SUITE 350
SAN RAMON, CALIFORNIA 94583
(925) 866-0322
www.cbandg.com


2/26/2015 10:10 AM

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| LINE TABLE | | |
|---|---|---|
| NO | BEARING | LENGTH |
| L1 | N58°09'20"W | 33.54' |
| L2 | N56°18'29"W | 65.61' |
| L3 | N83°42'50"W | 13.69' |
| L4 | N70°36'57"W | 10.00' |
| L5 | N06°17'10"E | 40.00' |
| L6 | N83°42'50"W | 10.39' |
| L7 | N06°17'10"E | 43.00' |

| CURVE TABLE | | | |
|---|---|---|---|
| NO | RADIUS | DELTA | LENGTH |
| C1 | 606.03' | 1°50'51" | 19.54' |
| C2 | 70.00' | 10°34'32" | 12.92' |
| C3 | 255.00' | 5°26'28" | 24.22' |
| C4 | 100.00' | 3°16'19" | 5.71' |
| C5 | 40.00' | 103°05'53" | 71.98' |
| C6 | 40.00' | 87°24'53" | 61.03' |
| C7 | 923.00' | 2°35'22" | 41.71' |

## EXISTING EASEMENTS

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10. ABUTTER'S RIGHTS RELINQUISHMENT PER H639 OR 665

## LEGEND

- PROJECT BOUNDARY
- EASEMENT LINE
- EXISTING UTILITY TO BE REMOVED
- EXISTING BUILDING TO BE DEMOLISHED
- EXISTING PAVEMENT/CONCRETE TO BE DEMOLISHED
- EXISTING TREE TO BE REMOVED

0 20 40 80

# 450 MONTAGUE

# EXISTING CONDITIONS

# TM.02


LENNAR MULTIFAMILY COMMUNITIES
Lennar Multifamily Communities
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Oakland, CA 94607

LENNAR
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MILPITAS, CA

KTGY # 2013-0551

02.26.2015 3rd SUBMITTAL
12.12.2014 2nd SUBMITTAL


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SAN RAMON, CALIFORNIA 94583
(925) 866-0322
www.cbandg.com


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## LEGEND

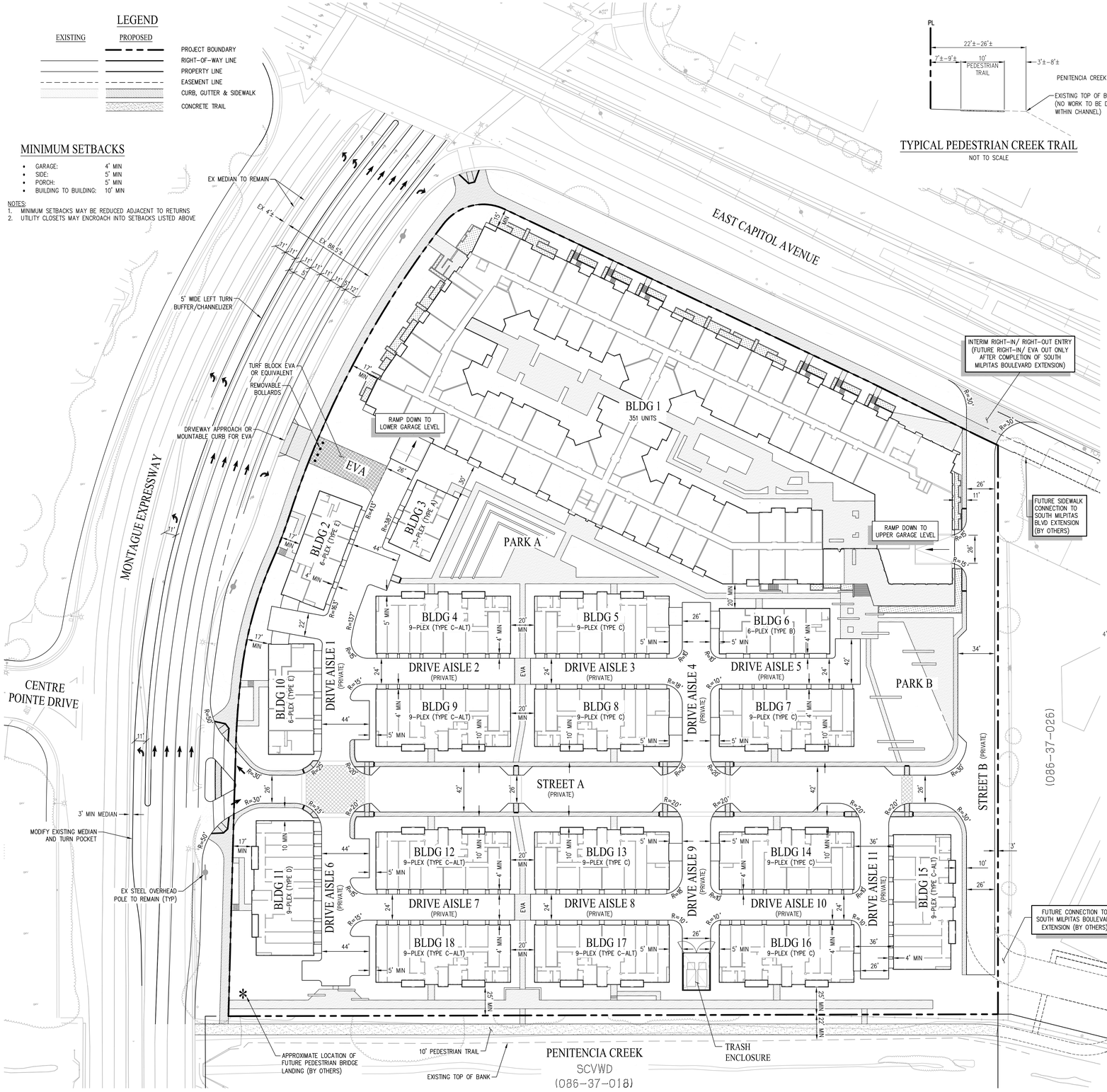
EXISTING / PROPOSED

- PROJECT BOUNDARY
- RIGHT-OF-WAY LINE
- PROPERTY LINE
- EASEMENT LINE
- CURB, GUTTER & SIDEWALK
- CONCRETE TRAIL

## MINIMUM SETBACKS

- GARAGE: 4' MIN
- SIDE: 5' MIN
- PORCH: 5' MIN
- BUILDING TO BUILDING: 10' MIN

NOTES:
1. MINIMUM SETBACKS MAY BE REDUCED ADJACENT TO RETURNS
2. UTILITY CLOSETS MAY ENCROACH INTO SETBACKS LISTED ABOVE



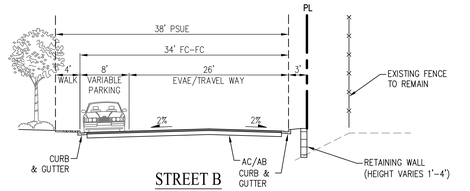




## TYPICAL PEDESTRIAN CREEK TRAIL
NOT TO SCALE

## UNIT SUMMARY

| BUILDING TYPE | | | BUILDING COUNT | UNIT COUNT |
|---|---|---|---|---|
| STACKED FLATS | TYPE A | 3-PLEX | 1 | 3 |
| | TYPE B | 6-PLEX | 1 | 6 |
| | TYPE C | 9-PLEX | 6 | 54 |
| | TYPE C-ALT | 9-PLEX | 6 | 54 |
| | TYPE D | 9-PLEX | 1 | 9 |
| | TYPE E | 6-PLEX | 2 | 12 |
| | SUBTOTAL | | 17 | 138 |
| PODIUM APARTMENTS | | | 1 | 351 |
| TOTAL | | | 18 | 489 |

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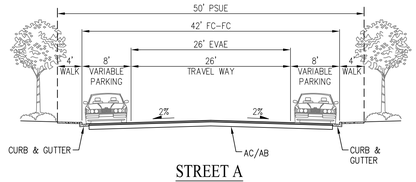
NOT TO SCALE

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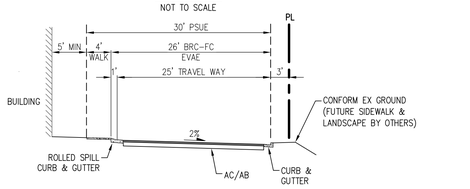
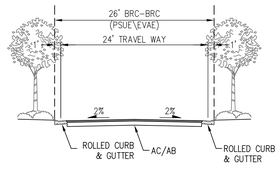
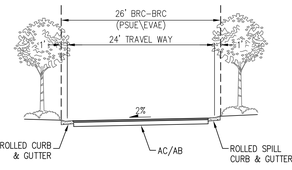
NOT TO SCALE



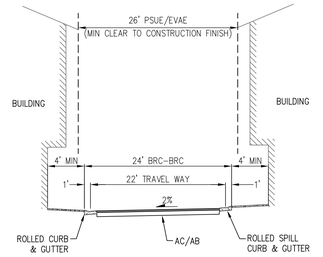

## STREET B (AT BUILDING 15)
NOT TO SCALE



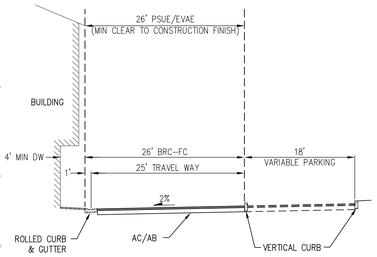

## TYPICAL 26' DRIVE AISLE (CROWN)
(DRIVE AISLES 4 & 9)
NOT TO SCALE



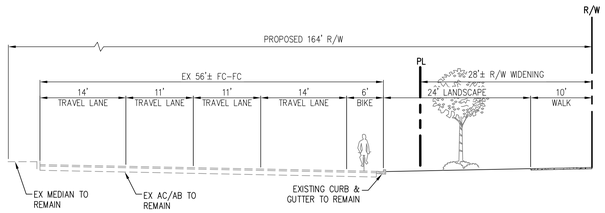

## TYPICAL 26' DRIVE AISLE (CROSS SLOPE)
(DRIVE AISLE 11)
NOT TO SCALE



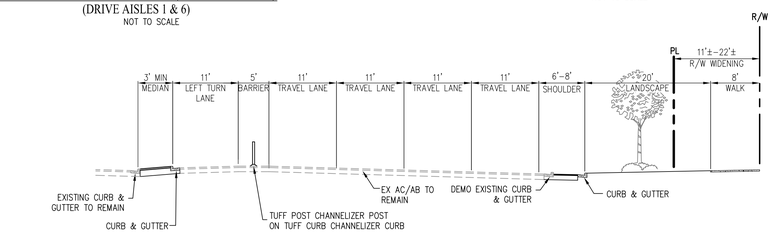

## TYPICAL 24' DRIVE AISLE (CROSS SLOPE)
(DRIVE AISLES 2, 3, 5, 7, 8 & 10)
NOT TO SCALE



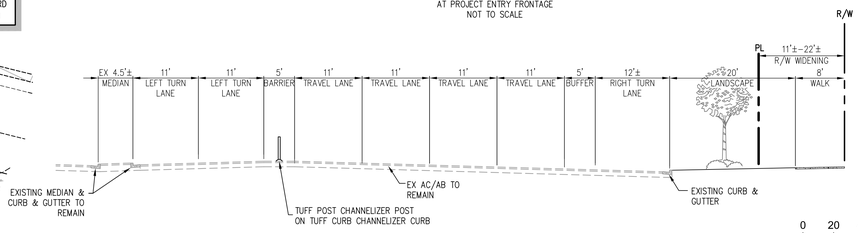

## TYPICAL 26' DRIVE AISLE (CROSS SLOPE)
(DRIVE AISLES 1 & 6)
NOT TO SCALE




## EAST CAPITOL AVENUE (HALF-STREET SECTION)
NOT TO SCALE




## MONTAGUE EXPRESSWAY (HALF-STREET SECTION)
AT PROJECT ENTRY FRONTAGE
NOT TO SCALE




## MONTAGUE EXPRESSWAY (HALF-STREET SECTION)
AT GREAT MALL PARKWAY/EAST CAPITOL AVENUE INTERSECTION
NOT TO SCALE

0 20 40 80

# 450 MONTAGUE

# SITE PLAN

TM.03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LENNAR
Lennar Homes
6111 Bollinger Canyon Rd, Suite 550
San Ramon, CA 94583


MILPITAS, CA

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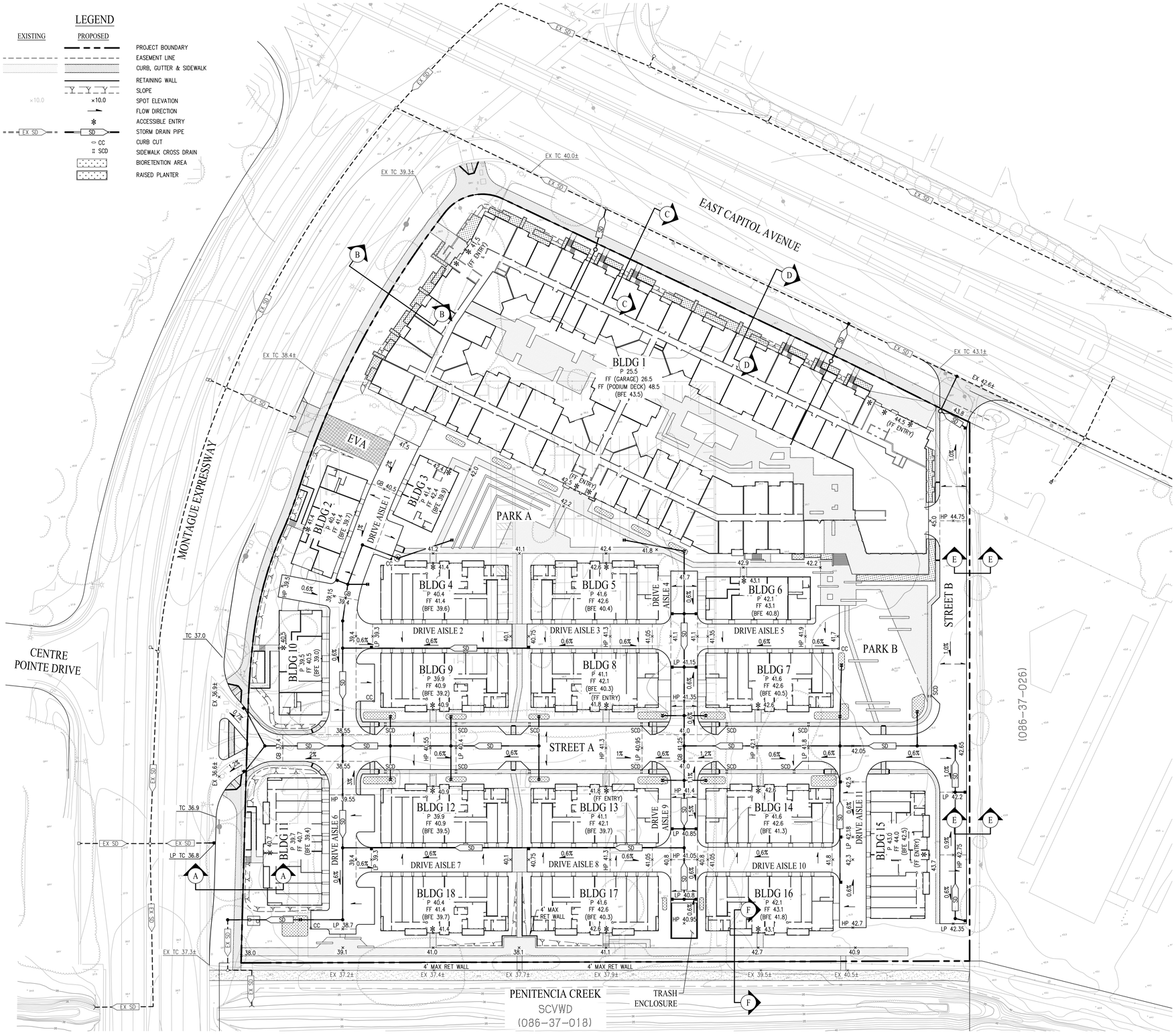
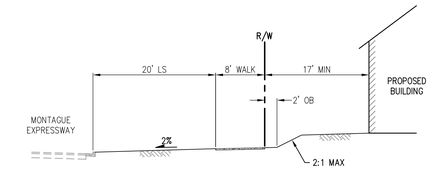
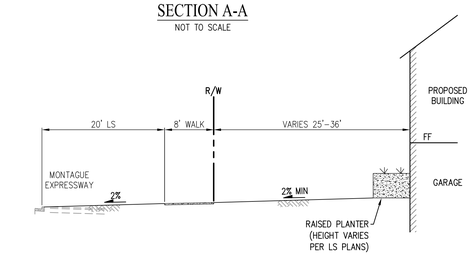



SECTION A-A
NOT TO SCALE

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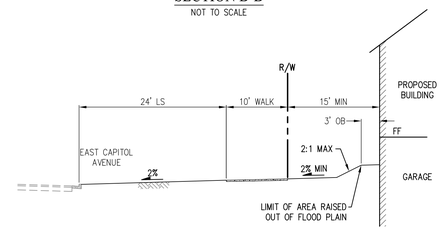
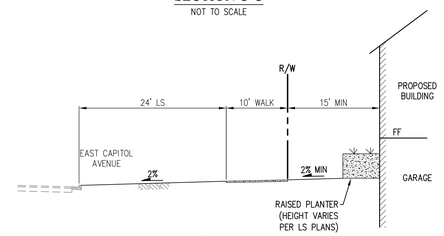
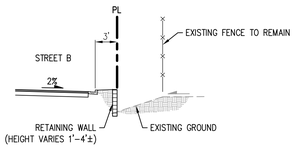



SECTION C-C
NOT TO SCALE




SECTION D-D
NOT TO SCALE




SECTION E-E
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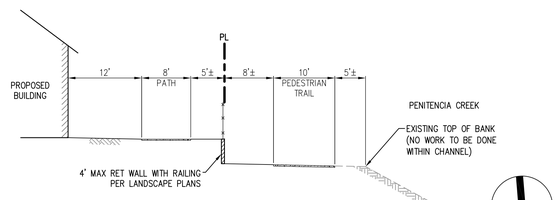


SECTION F-F
NOT TO SCALE

0 20 40 80

# 450 MONTAGUE

# PRELIMINARY GRADING & DRAINAGE PLAN

TM.04

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Lennar Multifamily Communities
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Oakland, CA 94607

LENNAR
Lennar Homes
6111 Bollinger Canyon Rd, Suite 550
San Ramon, CA 94583

MILPITAS, CA

KTGY # 2013-0551

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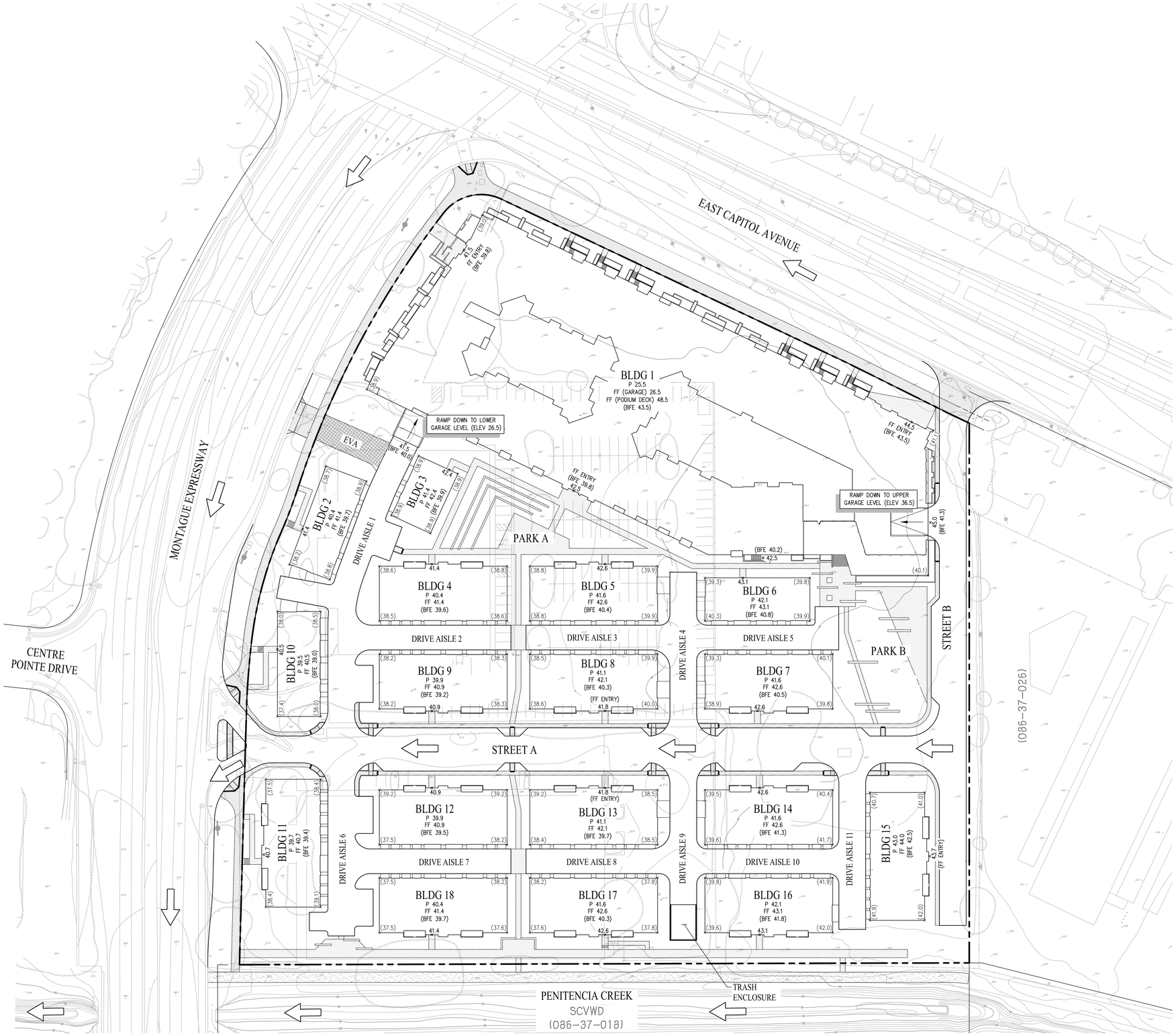


## LEGEND

| EXISTING | PROPOSED | |
|---|---|---|
| | | PROJECT BOUNDARY |
| | | EASEMENT LINE |
| | | CURB, GUTTER & SIDEWALK |
| ×10.0 | ×10.0 | SPOT ELEVATION |
| ×(10.0) | | APPROXIMATE ELEVATION AT BUILDING CORNERS |
| | | FLOOD WATER OVERLAND FLOW PATH |

## BASE FLOOD ELEVATION (BFE) SUMMARY

| BUILDING NUMBER | FINISHED FLOOR ELEVATION (FF) | BASE FLOOD ELEVATION (BFE) | DIFFERENCE (FT) |
|---|---|---|---|
| 1 | 48.5 (44.5) | 43.5 | 5.0 (1.0) |
| 2 | 41.4 | 39.7 | 1.7 |
| 3 | 42.4 | 39.9 | 2.5 |
| 4 | 41.4 | 39.6 | 1.8 |
| 5 | 42.6 | 40.4 | 2.2 |
| 6 | 43.1 | 40.8 | 2.3 |
| 7 | 42.6 | 40.5 | 2.1 |
| 8 | 42.1 (41.8) | 40.3 | 1.8 (1.5) |
| 9 | 40.9 | 39.2 | 1.7 |
| 10 | 40.5 | 39.0 | 1.5 |
| 11 | 40.7 | 39.4 | 1.3 |
| 12 | 40.9 | 39.5 | 1.4 |
| 13 | 42.1 (41.8) | 39.7 | 2.4 (2.1) |
| 14 | 42.6 | 41.3 | 1.3 |
| 15 | 44.0 | 42.5 | 1.5 |
| 16 | 43.1 | 41.8 | 1.3 |
| 17 | 42.6 | 40.3 | 2.3 |
| 18 | 41.4 | 39.7 | 1.7 |

NOTES:

1. PROJECT SITE IS WITHIN AO FLOOD AREA (DEPTH 1') PER FLOOD INSURANCE RATE MAP 06085C0067J (FEBRUARY 19, 2014). ALL PROPOSED STRUCTURES TO BE REMOVED FROM SPECIAL FLOOD HAZARD AREA (SFHA).
2. PER CITY OF MILPITAS REQUIREMENTS, FINISH FLOOR ELEVATIONS MUST BE GREATER THAN OR EQUAL TO ONE FOOT ABOVE THE BASE FLOOD ELEVATION.
3. BASE FLOOD ELEVATIONS (BFE'S) LISTED FOR EACH BUILDING ARE PER THE MEMO GENERATED BY SCHAAF & WHEELER ENTITLED 400–450 MONTAGUE 100–YEAR FLOODPLAIN ANALYSIS DATED OCTOBER 21, 2014. BFE'S ARE CALCULATED FOR EACH BUILDING BY ADDING 1' (AO FLOOD DEPTH) TO THE HIGHEST ELEVATION OF THE FOLLOWING:
   - AVERAGE EXISTING ELEVATION (BLDGS 2–15)
   - ADJACENT TOP OF CURB ELEVATION (BLDG 1)
   - CREEK PROFILE (BLDGS 16–18)
4. BUILDINGS 1, 8 AND 13 HAVE DEPRESSED ENTRIES. FINISHED FLOOR ELEVATIONS LISTED IN PARENTHESES INDICATE ELEVATION AT THESE DEPRESSED ENTRIES. ALL DEPRESSED ENTRIES STILL REMAIN ABOVE THE BASE FLOOD ELEVATION.

0 20 40 80

# 450 MONTAGUE

# FLOOD PLAIN MAP

TM.05


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LENNAR
Lennar Homes
6111 Bollinger Canyon Rd, Suite 550
San Ramon, CA 94583


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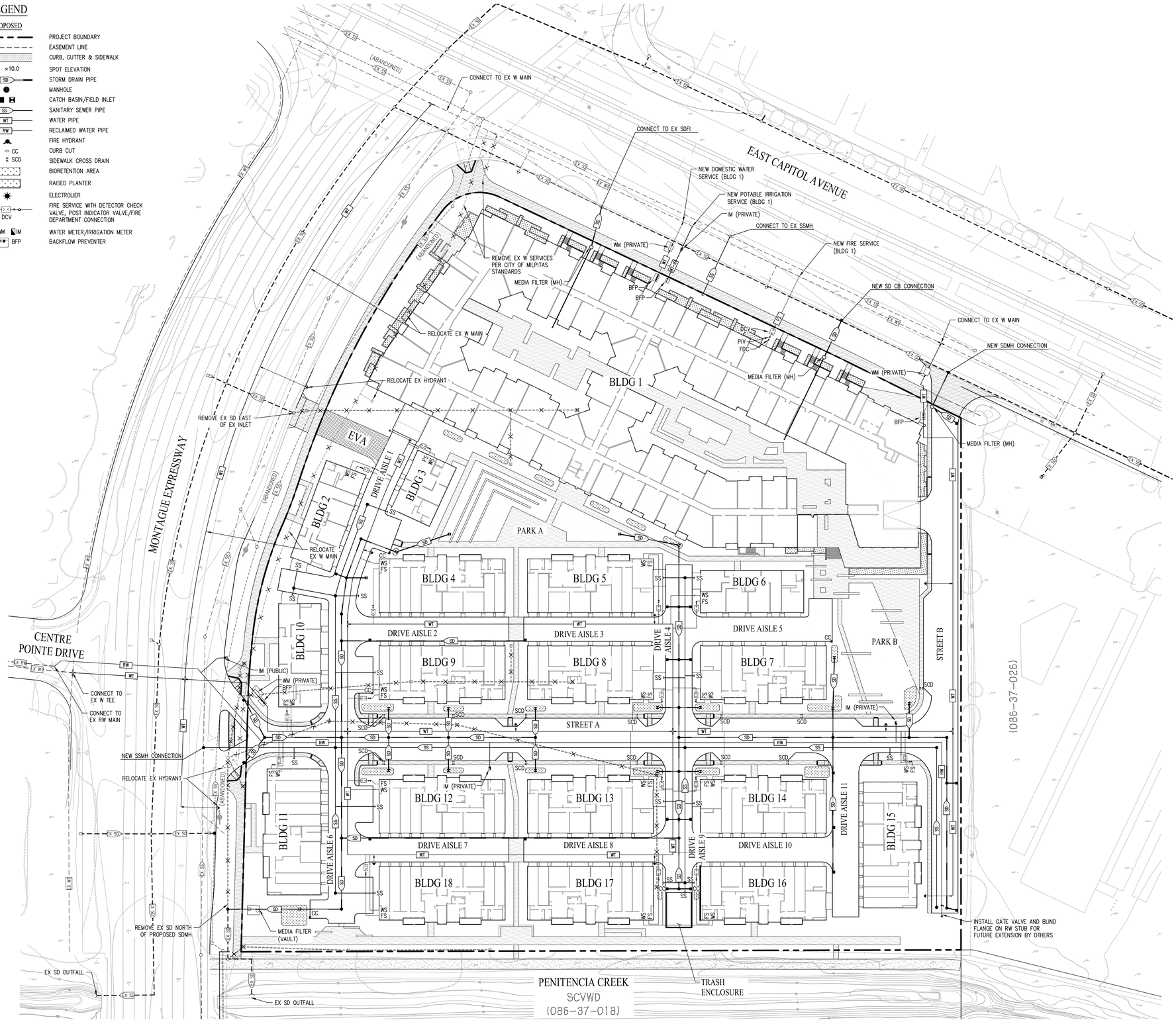
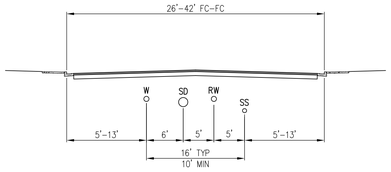
## LEGEND

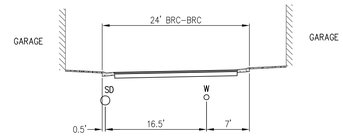
| EXISTING | PROPOSED | |
|---|---|---|
| | | PROJECT BOUNDARY |
| | | EASEMENT LINE |
| | | CURB, GUTTER & SIDEWALK |
| ×10.0 | ×10.0 | SPOT ELEVATION |
| SD | SD | STORM DRAIN PIPE |
| | | MANHOLE |
| | | CATCH BASIN/FIELD INLET |
| SS | SS | SANITARY SEWER PIPE |
| WT | WT | WATER PIPE |
| | RW | RECLAIMED WATER PIPE |
| | | FIRE HYDRANT |
| | CC | CURB CUT |
| | SCD | SIDEWALK CROSS DRAIN |
| | | BIORETENTION AREA |
| | | RAISED PLANTER |
| | | ELECTROLIER |
| | DCV | FIRE SERVICE WITH DETECTOR CHECK VALVE, POST INDICATOR VALVE/FIRE DEPARTMENT CONNECTION |
| WM IM | | WATER METER/IRRIGATION METER |
| BFP | | BACKFLOW PREVENTER |




TYPICAL STREET UTILITY SECTION

NOT TO SCALE




TYPICAL 24' DRIVE AISLE UTILITY SECTION

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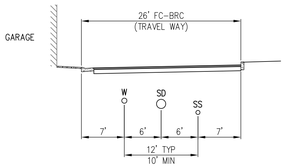


TYPICAL 26' DRIVE AISLE UTILITY SECTION

NOT TO SCALE

## UTILITY NOTES

1. UTILITIES SHOWN ON THIS PLAN ARE PRELIMINARY AND SUBJECT TO CHANGE PENDING FINAL DESIGN. FINAL DESIGN SHALL ADHERE TO CITY OF MILPITAS STANDARDS.
2. PUBLIC RECYCLED WATER MAIN TO BE 8" DIAMETER MINIMUM.

0 20 40 80

# 450 MONTAGUE

# PRELIMINARY UTILITY PLAN

TM.06


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6111 Bollinger Canyon Rd, Suite 550
San Ramon, CA 94583


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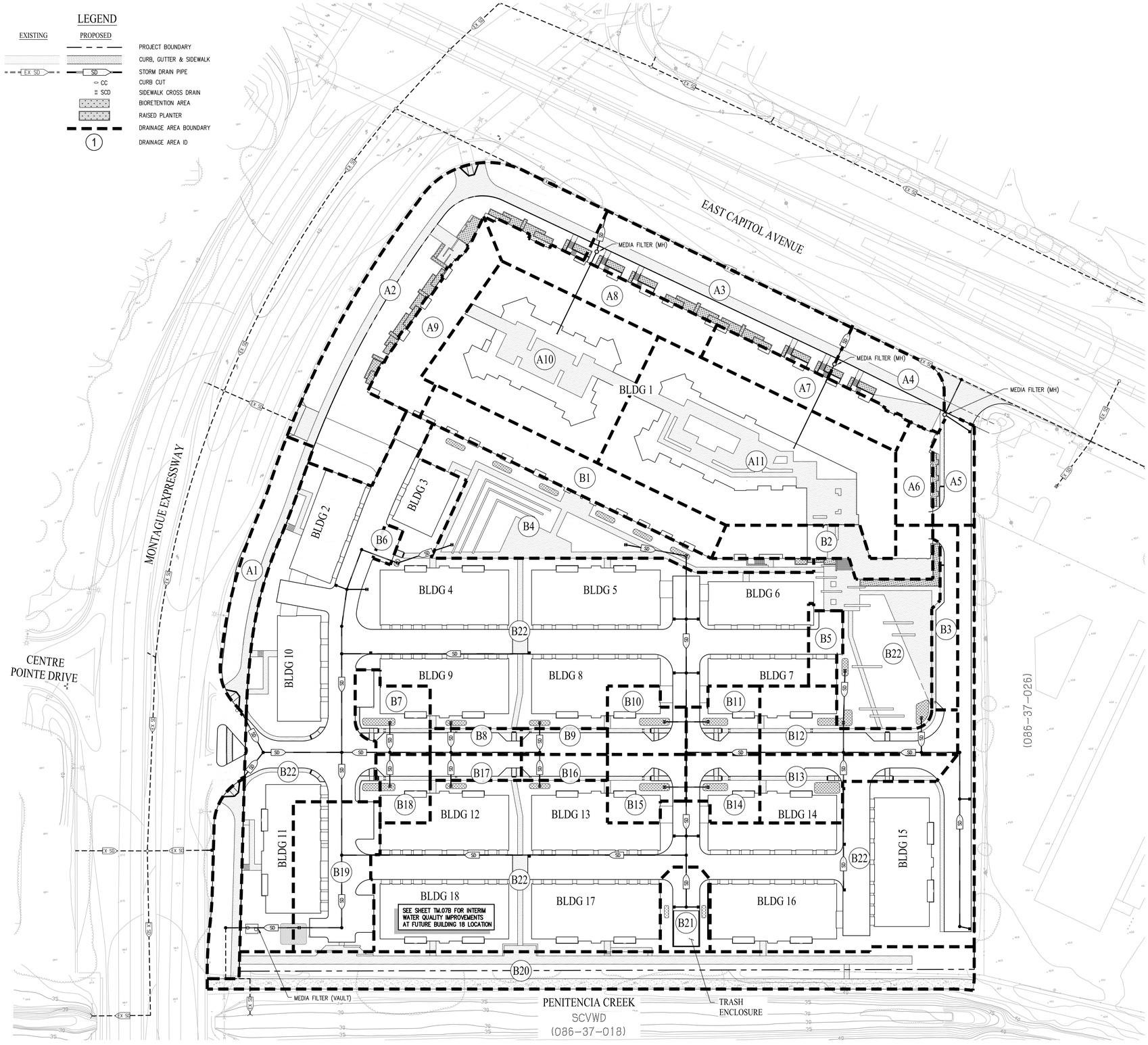


SEE SHEET TM.07B FOR STORMWATER CONTROL PLAN DETAILS AND INTERIM BIORETENTION AREA

## PRELIMINARY STORMWATER TREATMENT SUMMARY

| AREA ID | TREATMENT TYPE | IMPERVIOUS AREA (SF) | TREATMENT AREA REQUIRED (SF) | TREATMENT AREA PROVIDED (SF) |
|---|---|---|---|---|
| A1 | SELF-RETAINING | 2,440 | 1,220 | 4,730 |
| A2 | SELF-RETAINING | 5,680 | 2,840 | 22,010 |
| A3 | SELF-RETAINING | 3,390 | 1,6985 | 10,600 |
| A4 | SELF-RETAINING | 2,640 | 1,320 | 4,110 |
| A5 | MEDIA FILTER (MH) | 3,170 | N/A | N/A |
| A6 | RAISED PLANTER | 3,160 | 126 | 205 |
| A7 | RAISED PLANTER | 7,130 | 285 | 780 |
| A8 | RAISED PLANTER | 7,920 | 317 | 1,330 |
| A9 | RAISED PLANTER | 7,680 | 307 | 1,265 |
| A10 | MEDIA FILTER (MH) | 18,540 | N/A | N/A |
| A11 | MEDIA FILTER (MH) | 26,070 | N/A | N/A |
| A12 | SELF-RETAINING | 1,770 | 885 | 3,450 |
| B1 | BIORETENTION | 10,920 | 437 | 580 |
| B2 | RAISED PLANTER | 6,630 | 265 | 795 |
| B3 | BIORETENTION | 3,950 | 180 | 220 |
| B4 | SELF-RETAINING | 6,620 | 3,310 | 14,200 |
| B5 | BIORETENTION | 2,130 | 85 | 95 |
| B6 | BIORETENTION | 630 | 25 | 30 |
| B7 | BIORETENTION | 3,500 | 140 | 215 |
| B8 | BIORETENTION | 2,100 | 84 | 95 |
| B9 | BIORETENTION | 2,050 | 82 | 95 |
| B10 | BIORETENTION | 3,590 | 144 | 195 |
| B11 | BIORETENTION | 3,390 | 136 | 160 |
| B12 | BIORETENTION | 7,170 | 287 | 290 |
| B13 | BIORETENTION | 6,270 | 251 | 250 |
| B14 | BIORETENTION | 3,340 | 134 | 160 |
| B15 | BIORETENTION | 3,580 | 143 | 195 |
| B16 | BIORETENTION | 2,050 | 82 | 95 |
| B17 | BIORETENTION | 2,090 | 84 | 95 |
| B18 | BIORETENTION | 2,670 | 107 | 215 |
| B19 | BIORETENTION | 9,110 | 364 | 495 |
| B20 | SELF-RETAINING | 12,120 | 6,060 | 14,200 |
| B21 | BIORETENTION | 2,180 | 87 | 95 |
| B22 (INTERIM) | BIORETENTION | 159,050 | 6,362 | 6,650 |
| B22 (ULTIMATE) | MEDIA FILTER (VAULT) | 159,050 | N/A | N/A |

NOTES:

1. ALL TREATMENT MEASURES AND TECHNICAL REQUIREMENTS FOR THIS PROJECT ARE BASED UPON THE SANTA CLARA VALLEY URBAN RUNOFF POLLUTION PREVENTION PROGRAM (SCVURPPP) C.3 STORMWATER HANDBOOK DATED APRIL 2012.
2. REQUIRED SURFACE AREA OF THE BIORETENTION TREATMENT AREA IS EQUAL TO 4% OF THE CONTRIBUTING IMPERVIOUS SURFACE AREA. THIS CALCULATION IS BASED UPON THE UNIFORM INTENSITY METHOD ASSUMING RAINFALL INTENSITY OF 0.2 INCHES/HR AND A BIORETENTION SOIL MIX WITH A 5 INCHES/HR INFILTRATION RATE.
3. REQUIRED SURFACE AREA OF LANDSCAPE WITHIN SELF-RETAINING AREAS IS EQUAL TO 50% OF THE TRIBUTARY IMPERVIOUS SURFACE.
4. THIS PROJECT IS A CATEGORY C SPECIAL PROJECT AND SUBJECT TO 70% LID TREATMENT REDUCTION CREDIT. MEDIA FILTRATION WILL BE USED TO TREAT A MAXIMUM OF 70% OF THE PROPOSED IMPERVIOUS SURFACE ON THE SITE. PRIOR TO CONSTRUCTION OF PODIUM BUILDING (BLDG 1), AN INTERIM BIORETENTION AREA WILL BE INSTALLED AT FUTURE BLDG 18 LOCATION IN ORDER TO PROVIDE 100% LID TREATMENT FOR STACKED FLAT PRODUCT. (SEE SHEET TM.07B FOR DETAILS.)
5. HYDROMODIFICATION IS NOT REQUIRED BECAUSE THE PROJECT IS IN A CATCHMENT AREA WITH GREATER THAN 65% IMPERVIOUSNESS.
6. ALL STORMWATER TREATMENT MEASURES AND SIZING SHOWN ON THIS EXHIBIT IS PRELIMINARY AND SUBJECT TO CHANGE PENDING FINAL DESIGN.
7. SEE 450 MONTAGUE STORMWATER CONTROL PLAN BY CARLSON, BARBEE & GIBSON FOR DETAILED SIZING CALCULATIONS.

0 20 40 80

# 450 MONTAGUE

# PRELIMINARY STORMWATER CONTROL PLAN

TM.07A

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Oakland, CA 94607

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Lennar Homes
6111 Bollinger Canyon Rd, Suite 550
San Ramon, CA 94583

MILPITAS, CA

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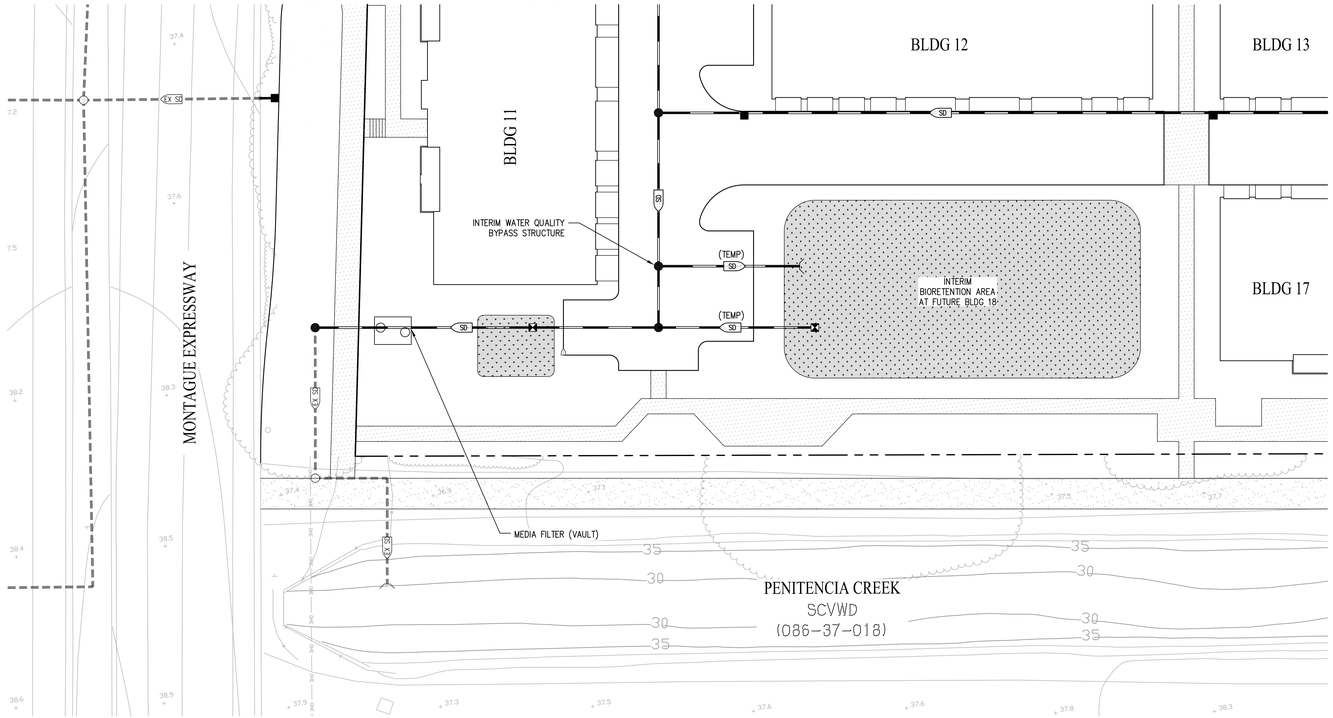
## LEGEND

| EXISTING | PROPOSED | |
|---|---|---|
| | | PROJECT BOUNDARY |
| | | CURB, GUTTER & SIDEWALK |
| EX SD | SD | STORM DRAIN PIPE |
| | CC | CURB CUT |
| | SCD | SIDEWALK CROSS DRAIN |
| | | BIORETENTION AREA |
| | | RAISED PLANTER |
| | | DRAINAGE AREA BOUNDARY |
| | 1 | DRAINAGE AREA ID |

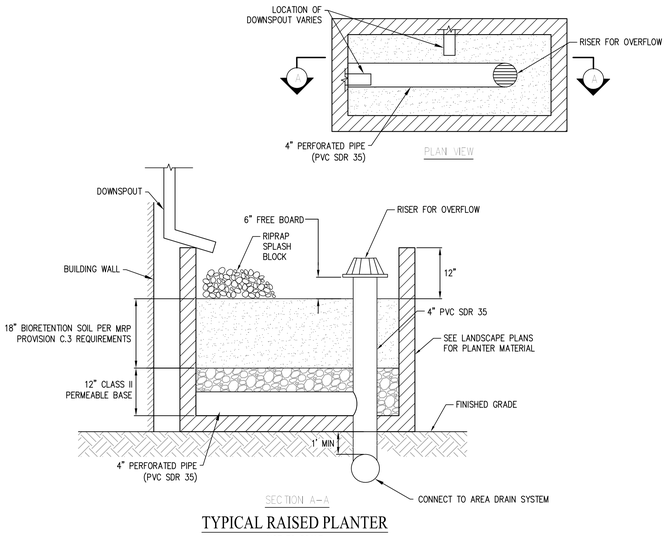
SEE SHEET TM.07A FOR ULTIMATE STORMWATER CONTROL PLAN




### INTERIM BIORETENTION AREA ENLARGEMENT

SCALE: 1" = 20'

NOTES:
INTERIM BIORETENTION AREA TO BE INSTALLED AT FUTURE BUILDING 18 LOCATION IN ORDER TO PROVIDE 100% LID TREATMENT FOR STACKED FLATS UNTIL CONSTRUCTION BEGINS ON PODIUM BUILDING (BUILDING 1). FOLLOWING CONSTRUCTION OF BUILDING 1, THE INTERIM BIORETENTION AREA AND ASSOCIATED STORM DRAIN BYPASS FACILITIES WILL BE REMOVED AND BUILDING 18 WILL BE CONSTRUCTED IN ITS PLACE.




### TYPICAL RAISED PLANTER

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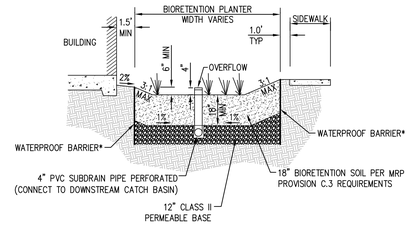


### TYPICAL BIORETENTION AREA

NOT TO SCALE

*NOTE:
INSTALL DEEPENED CURB IN ADDITION TO WATERPROOF BARRIER WHERE NECESSARY PER GEOTECHNICAL RECOMMENDATIONS

0 20 40 80

# 450 MONTAGUE

# PRELIMINARY STORMWATER CONTROL PLAN DETAILS

# TM.07B

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KTGY # 2013-0551

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LEGEND

- FIRE APPARATUS ACCESS ROADS
- ROADS INACCESSIBLE TO FIRE APPARATUS
- FIRE HYDRANT
- EXISTING FIRE HYDRANT

EAST CAPITOL AVENUE

MONTAGUE EXPRESSWAY

CENTRE POINTE DRIVE

REMOVABLE BOLLARDS

TURF BLOCK OR EQUIVALENT

EVA

26'

BLDG 1

BLDG 2

BLDG 3

PARK A

BLDG 4

BLDG 5

BLDG 6

MOUNTABLE CURB

EVA

PARK B

BLDG 10

BLDG 9

BLDG 8

BLDG 7

STREET A

STREET B

BLDG 11

BLDG 12

BLDG 13

BLDG 14

BLDG 15

MOUNTABLE CURB

EVA

BLDG 18

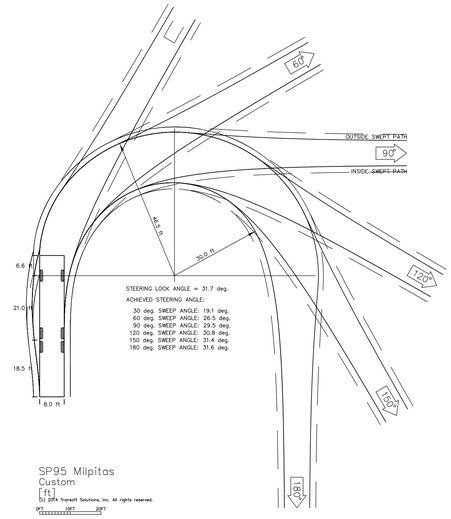
BLDG 17

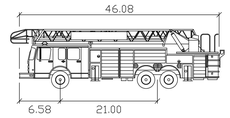
BLDG 16

TRASH ENCLOSURE

PENITENCIA CREEK
SCVWD
(086-37-018)

(086-37-026)




SP95 Milpitas feet

| | |
|---|---|
| Width | : 8.00 |
| Track | : 8.00 |
| Lock to Lock Time | : 5.0 |
| Steering Angle | : 31.7 |

0 20 40 80

# 450 MONTAGUE

# FIRE TRUCK ACCESS PLAN

TM.08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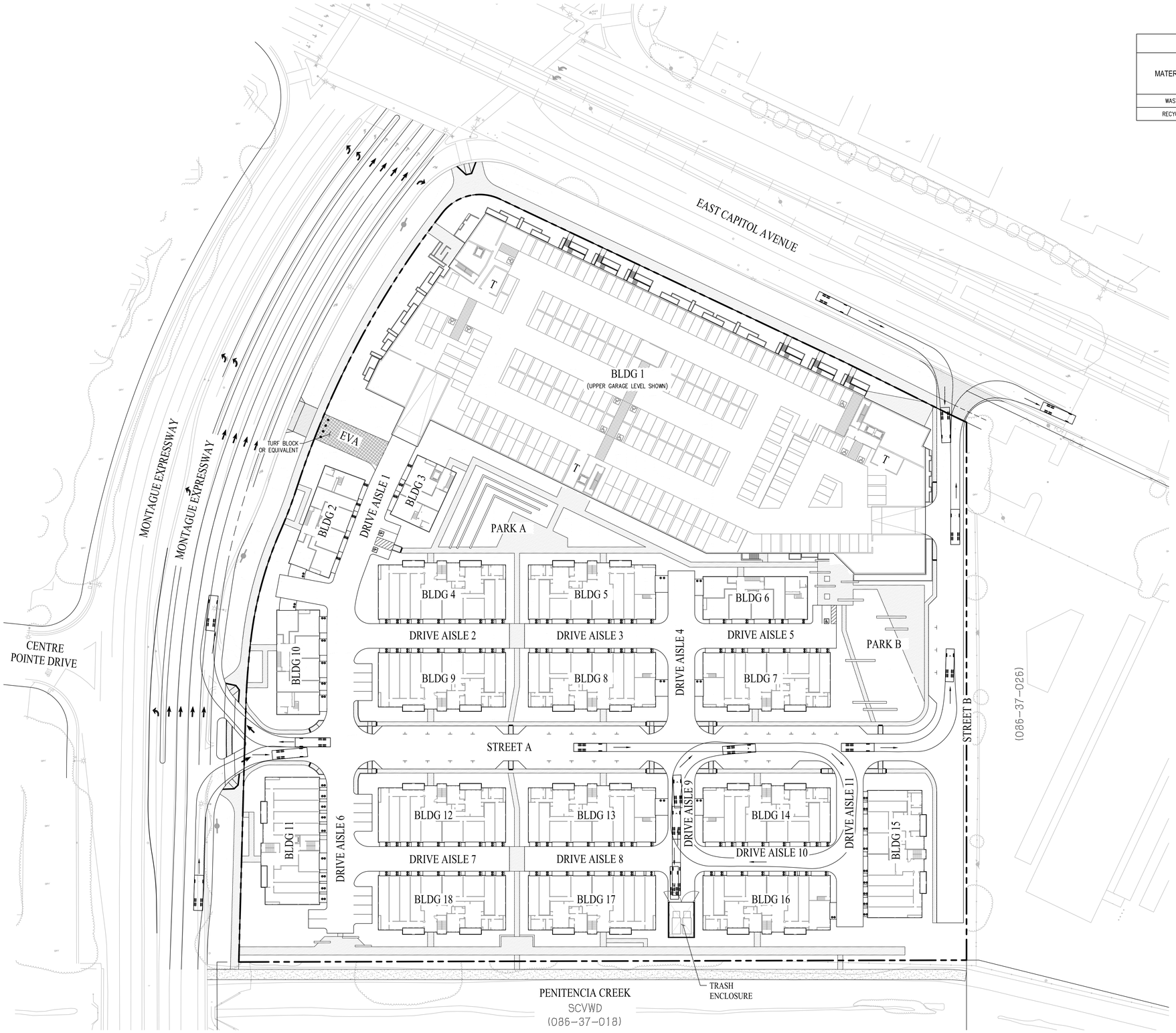



## SOLID WASTE HANDLING SUMMARY

| MATERIALS | WASTE FACTOR PER UNIT PER WEEK (CY) | WEEKLY WASTE GENERATION - APARTMENTS (CY) | WEEKLY WASTE GENERATION - STACKED FLATS (CY) | TOTAL WASTE GENERATION PER WEEK (CY) | COMPACTED CUBIC YARDS (3:1 COMPACTION RATIO) | PROJECTED PICKUPS PER WEEK (30 CY) |
|---|---|---|---|---|---|---|
| WASTE | 0.340 | 124 | 56 | 180 | 60 | 2 |
| RECYCLE | 0.155 | 57 | 26 | 82 | 27 | 1 |

NOTES:
1. WASTE GENERATION CALCULATIONS ARE BASED UPON 365 APARTMENT UNITS AND 165 STACKED FLAT UNITS FOR A CONSERVATIVE ASSUMPTION.
2. SEE TRASH MANAGEMENT PLAN BY AMERICAN TRASH MANAGEMENT DATED DECEMBER 11, 2014 FOR DETAILED WASTE GENERATION CALCULATIONS.

## LEGEND

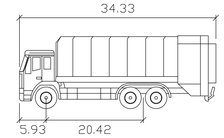
- •• WASTE AND RECYCLING TRASH BAGS
  - WASTE BAG: BLACK/GRAY
  - RECYCLING BAG: WHITE/CLEAR
- T TRASH ROOM

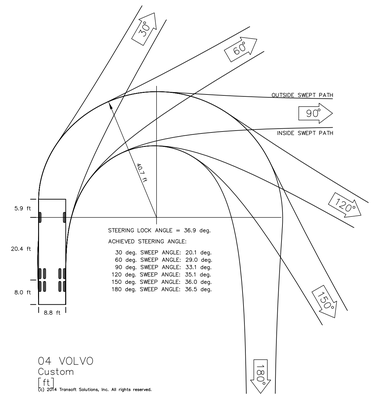
NOTES:
1. ALL TRASH BAGS PLACED ON DRIVEWAY FOR PICK UP TO COMPLY WITH SECTION V-200-3.30 OF MILPITAS MUNICIPAL CODE.
2. TURNING MOVEMENTS SHOWN REPRESENT REPUBLIC SERVICES COLLECTION VEHICLE TO AND FROM TRASH ENCLOSURE.

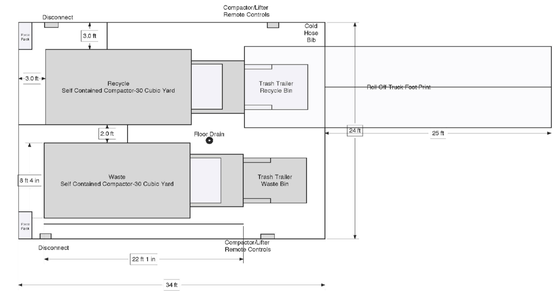
## WASTE COLLECTION PROCESS

1. STACKED FLAT BUILDINGS: RESIDENTS TO PLACE TRASH BAGS OUTSIDE GARAGE DOORS ON INDIVIDUAL DRIVEWAYS ON DESIGNATED TRASH DAY (ONE DAY PER WEEK).

   PODIUM BUILDING: RESIDENTS TO DEPOSIT TRASH FROM INDIVIDUAL UNITS INTO GRAVITY TRASH CHUTES WHICH EMPTY INTO LOOSE BINS OR COMPACTORS WITHIN TRASH ROOMS ON THE GARAGE LEVEL OF THE BUILDING.
2. INDEPENDENT CONTRACTOR TO TRANSPORT TRASH BAGS FROM INDIVIDUAL DRIVEWAYS OF STACKED FLAT BUILDINGS AND LOOSE BINS/COMPACTORS FROM TRASH ROOMS WITHIN PODIUM GARAGE TO THE CENTRAL TRASH ENCLOSURE USING STANDARD UTILITY VEHICLE OR PICK-UP TRUCK TOWING TRAILER OR CARTS. INDEPENDENT CONTRACTOR SERVICES TO BE COORDINATED BY PROJECT HOMEOWNERS ASSOCIATION.
3. REPUBLIC SERVICES TO PICK UP TRASH FROM CENTRAL ENCLOSURE ONCE PER WEEK.




TRASH ENCLOSURE DETAIL
NOT TO SCALE

0 20 40 80

# 450 MONTAGUE

# SOLID WASTE MANAGEMENT PLAN

# TM.09

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## LEGEND

- GARAGE PARKING STALL
- ACCESSIBLE PARKING STALL
- V VAN ACCESSIBLE PARKING STALL
- 57 UNCOVERED PARKING STALL

EAST CAPITOL AVENUE

MONTAGUE EXPRESSWAY

CENTRE POINTE DRIVE

BLDG 1
SEE ARCHITECTURAL PLANS FOR PODIUM BUILDING PARKING LAYOUT

RAMP DOWN TO LOWER GARAGE LEVEL

EVA

DRIVE AISLE 1

BLDG 2

BLDG 3

PARK A

BLDG 4

BLDG 5

BLDG 6

DRIVE AISLE 2

DRIVE AISLE 3

DRIVE AISLE 4

DRIVE AISLE 5

PARK B

BLDG 10

BLDG 9

BLDG 8

BLDG 7

STREET A

STREET B

(086-37-026)

BLDG 11

DRIVE AISLE 6

BLDG 12

BLDG 13

DRIVE AISLE 7

DRIVE AISLE 8

DRIVE AISLE 9

BLDG 14

DRIVE AISLE 10

DRIVE AISLE 11

BLDG 15

BLDG 18

BLDG 17

BLDG 16

TRASH ENCLOSURE

PENITENCIA CREEK
SCVWD
(086-37-018)

## PARKING SUMMARY

### STACKED FLATS

| DESCRIPTION | UNIT COUNT | PARKING REQUIRED | PARKING PROVIDED |
|---|---|---|---|
| GARAGE | 138 | 224 | 270 |
| ON-STREET GUEST | – | 45 (20% REQUIRED) | 52 (23% PROVIDED) |
| TOTAL | – | 269 | 322 |

NOTES:

1. STANDARD GARAGE PARKING INCLUDES 6 VAN ACCESSIBLE SPACES. THE UNITS WITH ACCESSIBLE SPACES WILL ONLY HAVE 1 PARKING SPACE PER UNIT.
2. GUEST PARKING INCLUDES 2 STANDARD ACCESSIBLE AND 1 VAN ACCESSIBLE SPACES.
3. PROVIDED GUEST PARKING IS BASED ON PRELIMINARY DESIGN. ACTUAL PARKING PROVIDED MAY VARY WITH FINAL DESIGN IN ACCORDANCE WITH MINIMUM GUEST PARKING REQUIREMENTS.

### PODIUM APARTMENTS

| DESCRIPTION | UNIT TYPE | UNIT COUNT | PARKING REQUIRED | | PARKING PROVIDED | |
|---|---|---|---|---|---|---|
| | | | REQUIRED PARKING RATIO | PARKING REQUIRED | PROVIDED PARKING RATIO | PARKING PROVIDED |
| GARAGE (RESIDENT) | JR 1 BEDROOM | 45 | 0.8 SPACES/DU | 36 | 0.8 SPACES/DU | 36 |
| | 1 BEDROOM | 202 | 1.2 SPACES/DU | 242 | 1.2 SPACES/DU | 242 |
| | 2 BEDROOM | 104 | 1.6 SPACES/DU | 166 | 1.6 SPACES/DU | 167 |
| | SUBTOTAL | 351 | – | 444 | – | 445 |
| GARAGE (GUEST) | | – | 15% OF REQUIRED | 67 | 15% OF REQUIRED | 67 |
| TOTAL | | – | – | 511 | – | 512 |

NOTES:
1. SEE ARCHITECTURAL PLANS FOR LOCATIONS OF ACCESSIBLE PARKING SPACES.
2. PROVIDED GUEST PARKING IS BASED ON PRELIMINARY DESIGN. ACTUAL PARKING PROVIDED MAY VARY WITH FINAL DESIGN IN ACCORDANCE WITH MINIMUM GUEST PARKING REQUIREMENTS.

### OVERALL PROJECT

| PRODUCT | PARKING PROVIDED | PARKING PROVIDED | % |
|---|---|---|---|
| PODIUM | STANDARD | 344 | 41% |
| | COMPACT | 40 | 5% |
| | TANDEM | 128 | 33% |
| STACKED FLATS | TANDEM | 144 | |
| | STANDARD | 126 | 15% |
| | ON-STREET | 52 | 6% |
| TOTAL | | 834 | 100% |

0 20 40 80

# 450 MONTAGUE

# PARKING PLAN

# TM.10


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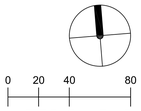
CITY NOTES AND CONDITIONS OF APPROVAL

# 450 MONTAGUE

# CONDITIONS OF APPROVAL




TM.11

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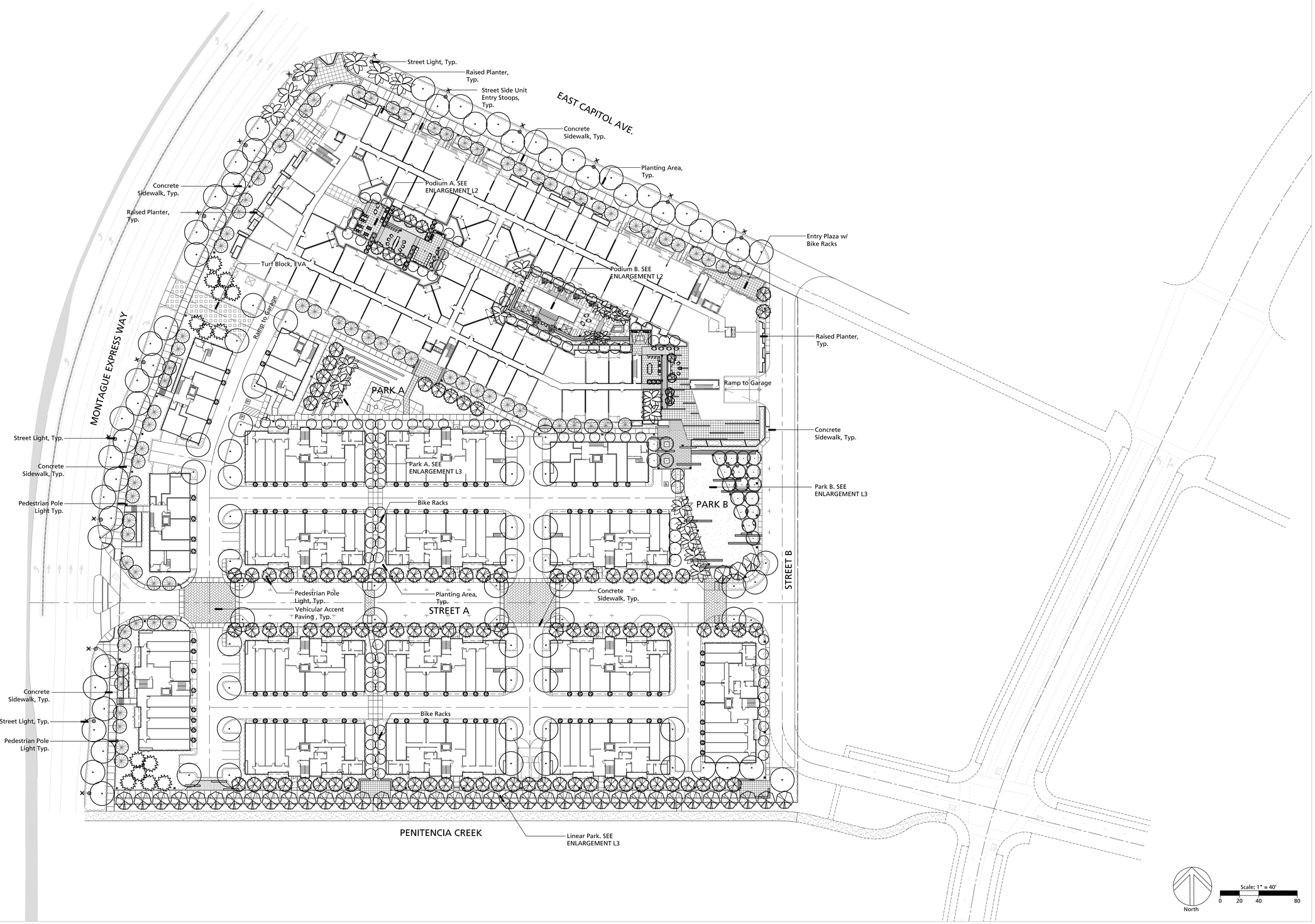


# 450 MONTAGUE

# LANDSCAPE PLAN

L1

MILPITAS, CA

KTGY # 2013-0551

02.26.2015


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San Francisco, CA 94111
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F 415 433 5003

KTGY Group, Inc.
Architecture+Planning
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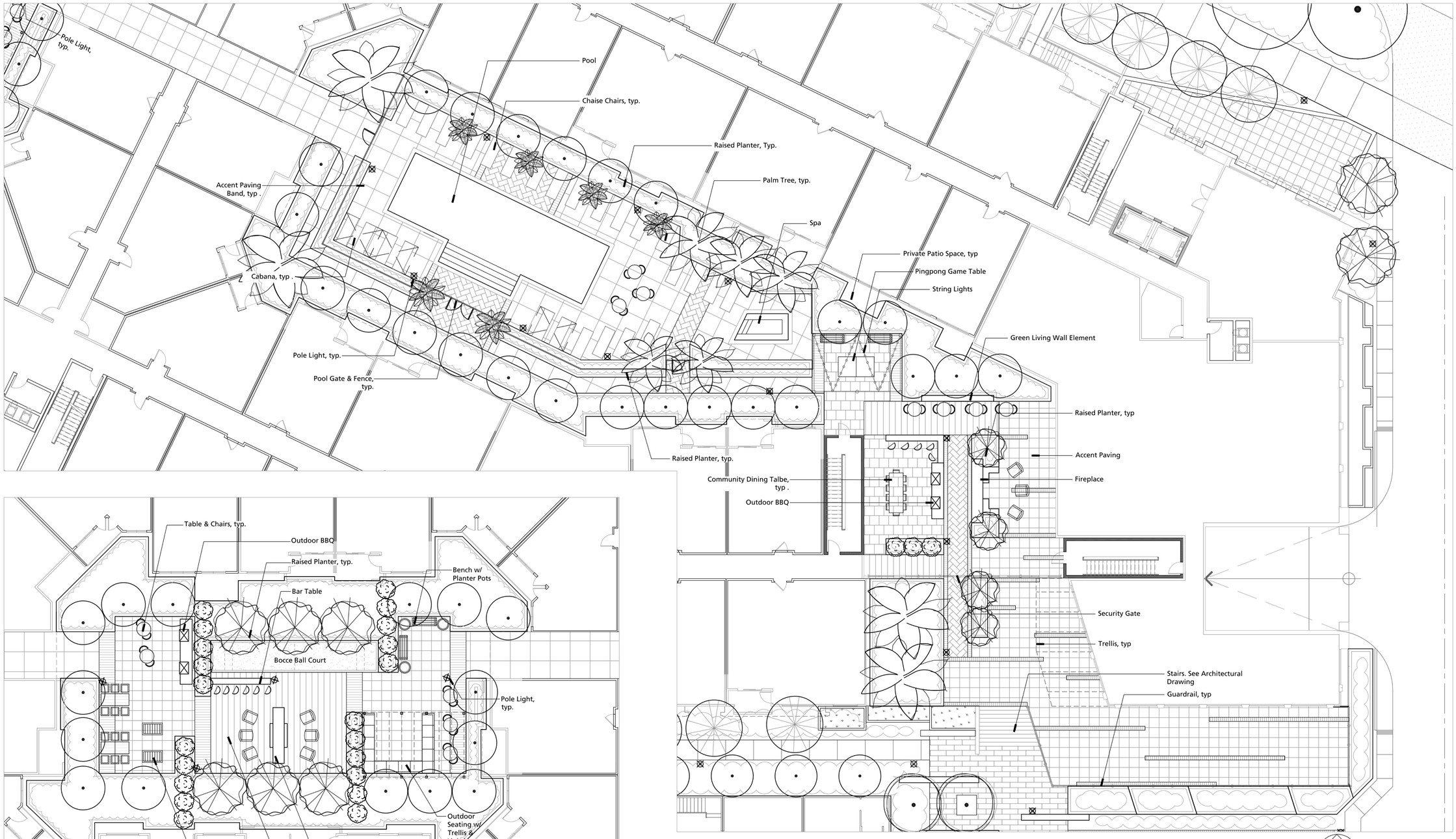
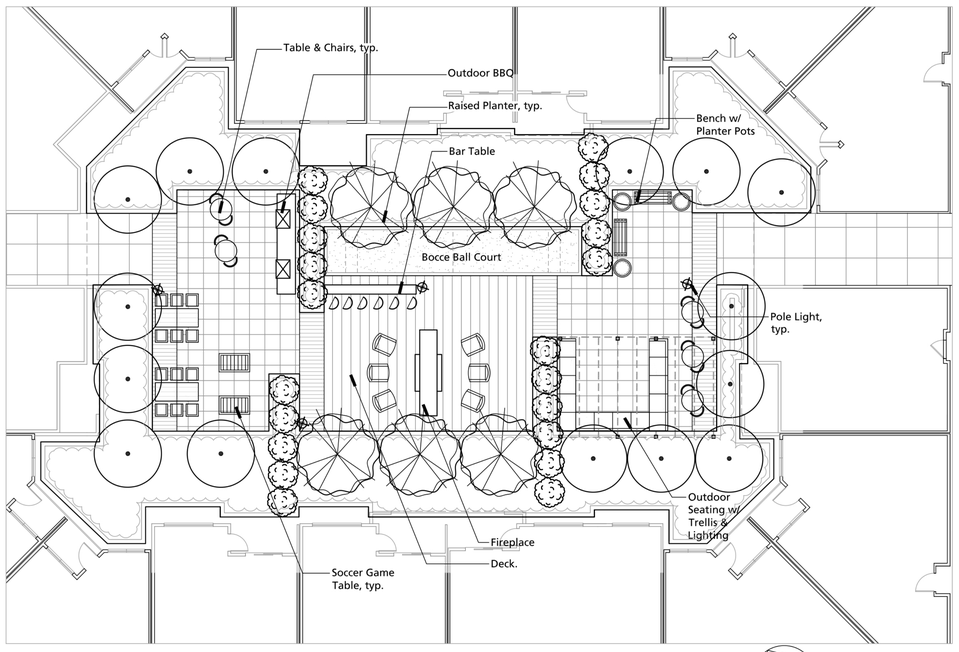
510.272.2910
ktgy.com




Podium B Enlargement

Scale: 1"=10'




Podium A Enlargement

Scale: 1"=10'

North

Scale: 1" = 10'

0 5 10 20

# 450 MONTAGUE

# PODIUM COURTYARD ENLARGEMENTS

L2

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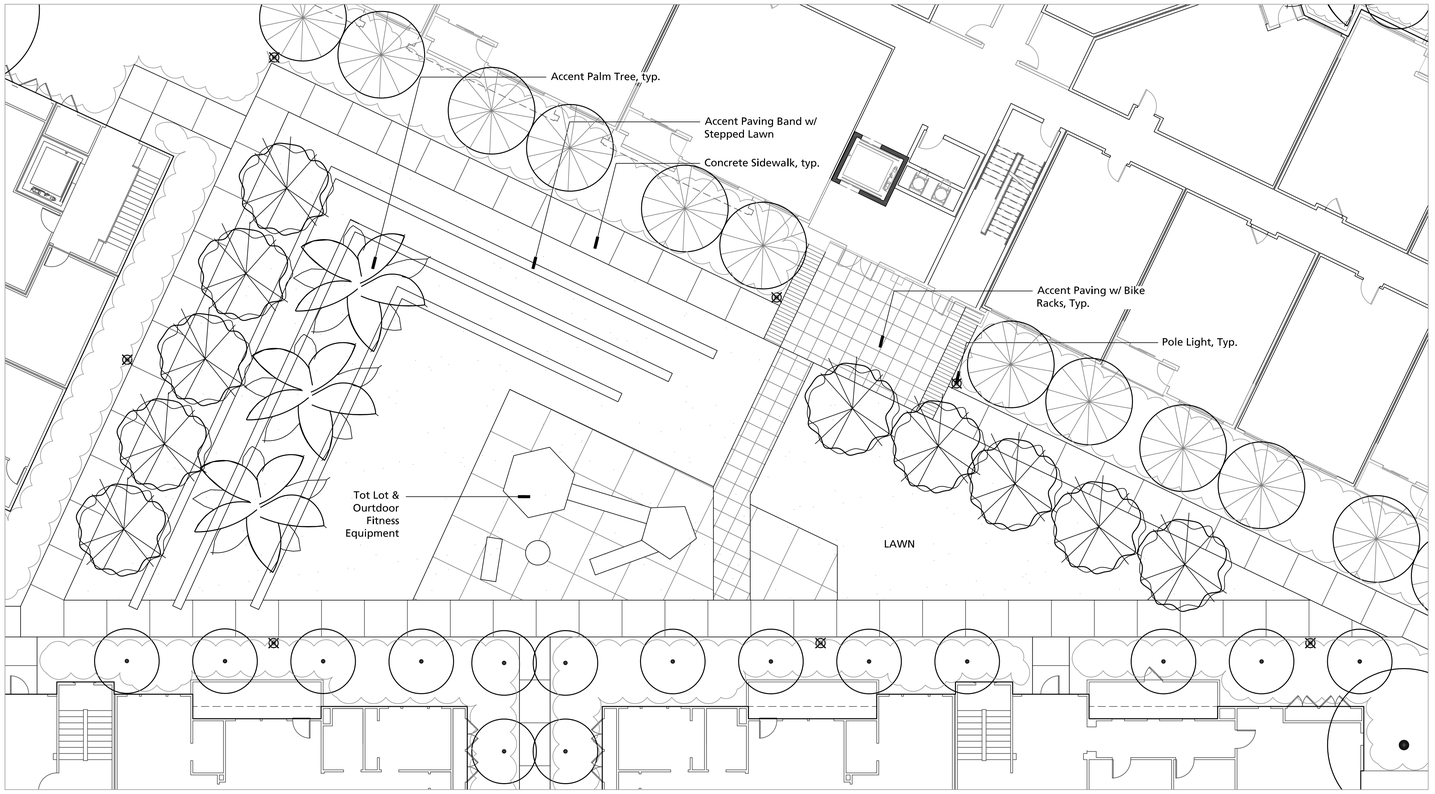
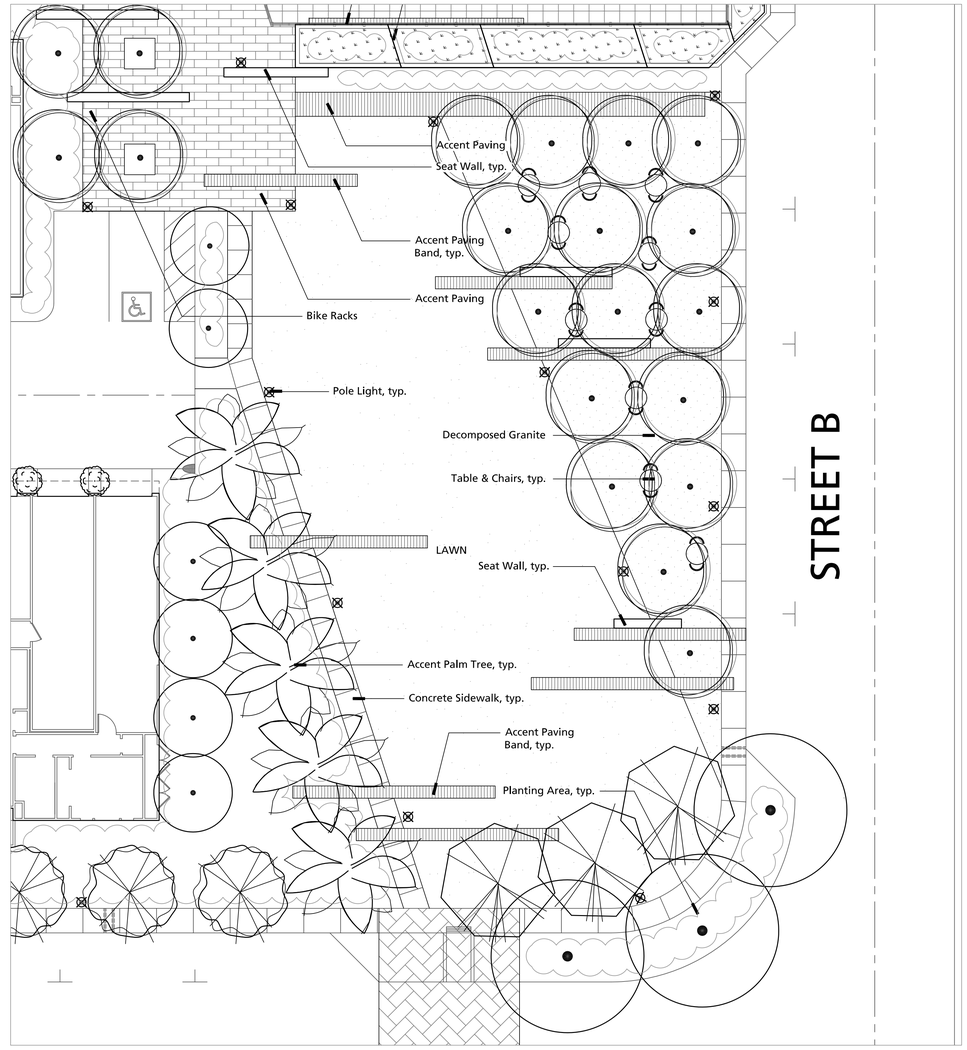



## Park A Enlargement

Scale: 1"=10'

Scale: 1" = 10'
0 5 10 20




## Park B Enlargement

Scale: 1"=10'

Scale: 1" = 10'
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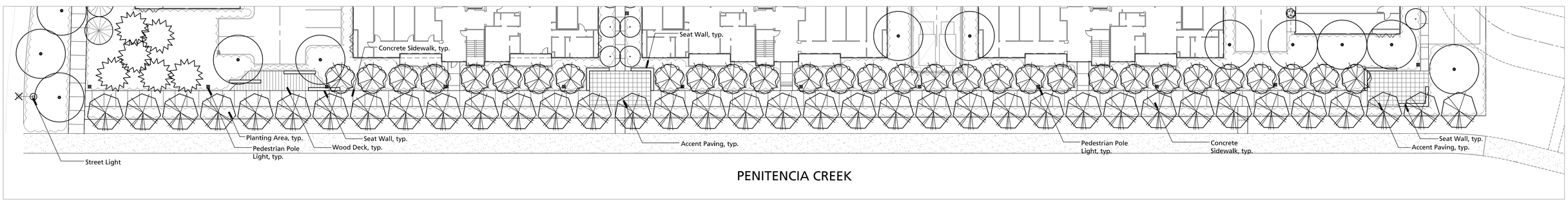


## Linear Park Enlargement

Scale: 1"=20'

Scale: 1" = 20'
0 10 20 40

# 450 MONTAGUE

# PARK ENLARGEMENTS

North

L3

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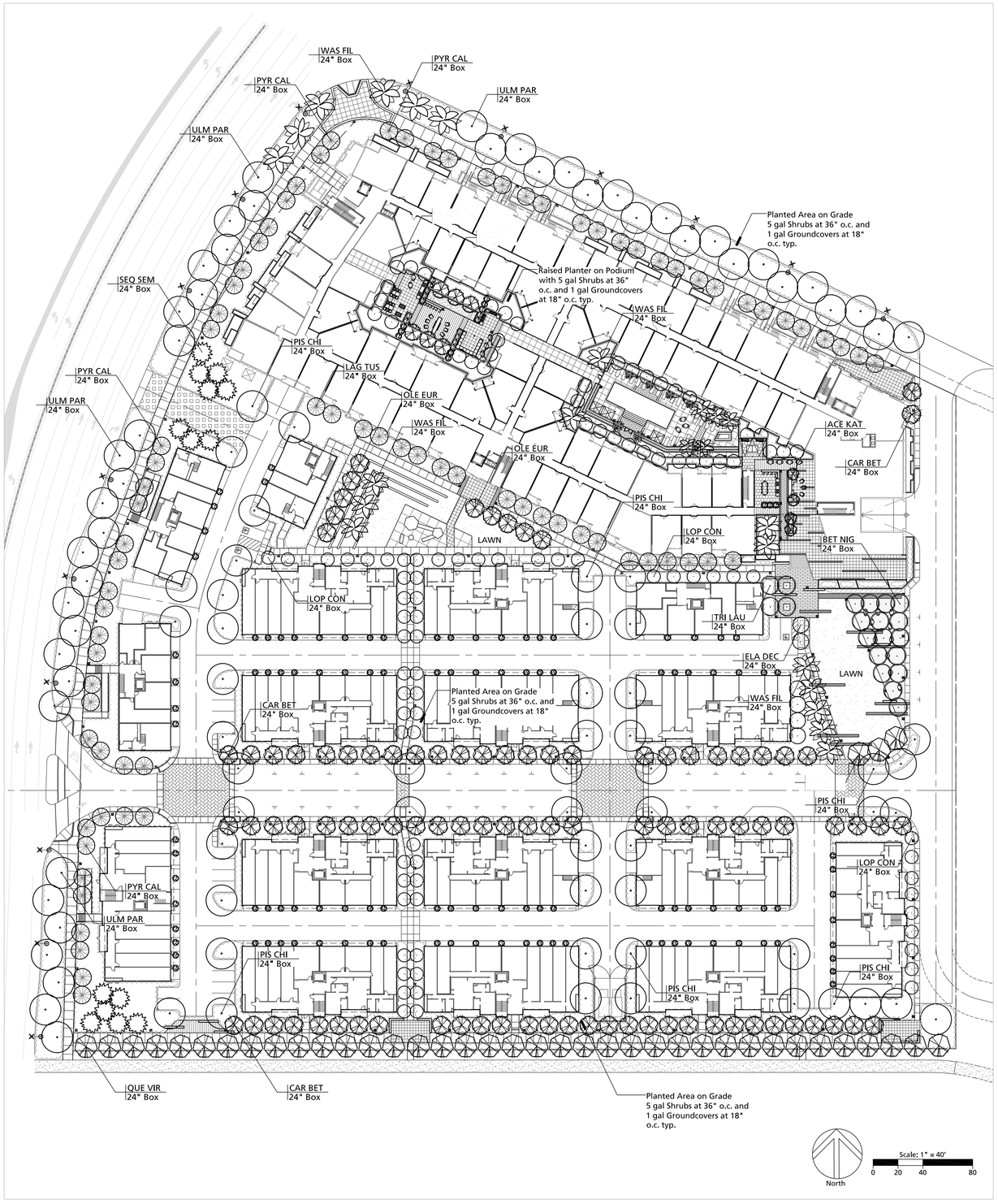


# PLANT PALETTE (Quantities are Approximate) **

| TREES | | | | | |
|---|---|---|---|---|---|
| KEY | SIZE | BOTANICAL NAME | COMMON NAME | COMMENTS | QUANTITY |
| ACE KAT | 24"box | Acer palmatum 'Katsura' | Coral Bark Japanese Maple | | |
| ARB MAR | 24"box | Arbutus marina | Strawberry Tree | | 42 |
| BET NIG | 24"box | Betula nigra | Jacquemontii Birch | | |
| CAR BET | 24"box | Carpinus betulus 'fastigiata' | Hornbeam | | 26 |
| CER OCC | 24"box | Cercis occidentialis | Western Redbud | Standard | 4 |
| CIT MEY | 15gal | Citrus x meyerii | Lemon Tree 'Improved Meyer' | | |
| ELA DEC | 24"box | Elaeocarpus decipiens | Japanese Blueberry Tree | | |
| ERI DEF | 24"box | Eriobotrya deflexa | Bronze Loquat | | 31 |
| GAR ELL | 24"box | Garrya elliptica 'James Roof' | James Roof Silk Tassel | | |
| LAG TUS | 24"box | Lagerstroemia tuscarora | Crape Myrtle | | 18 |
| LOP CON | 24"box | Lophostemon confertus | Brisbane Box | | 48 |
| MAG GRA | 24"box | Magnolia g. 'St. Mary' | Southern Magnolia | | 16 |
| OLE EUR | 24"box | Olea europa | Olive | | |
| PIS CHI | 24"box | Pistachia chinensis | Chinese Pistache | | |
| PLA ACE | 24"box | Platanus acerifolia | London Plane Tree | | 3 |
| POD NAG | 24"box | Podocarpus nagi | Nagi Tree | Columnar | |
| POD MAC | 24"box | Podocarpus macrophyllus | Yew Pine | | 17 |
| PRU CAR | 15gal | Prunus caroliniana | Carolina Cherry Laurel | | |
| PYR CAL | 24"box | Pyrus calleryana 'Aristocrat' | Flowering Pear | | 35 |
| QUE VIR | 24"box | Quercus virginiana | Southern Live Oak | | 31 |
| RHU LAN | 24"box | Rhus lancea | African Sumac | | |
| SEQ SEM | 24"box | Sequoia sempervirens | Coast Redwood | | |
| TRI LAU | 24"box | Tristaniopsis laurina 'Elegant' | Water Gum | | 19 |
| ULM PAR | 24"box | Ulmus parvifolia 'True Green' | True Green Evergreen Elm | | 12 |
| | | | | | |
| PALMS | | | | | |
| BUT CAP | 24"box | Butia capitata | Pindo Palm | | |
| CHA HUM | 24"box | Chamaerops humilis | Mediterranean Fan Palm | | |
| WAS FIL | 18'bth | Washingtonia filifera | California Fan Palm | | 12 |

| SHRUBS | | | | | |
|---|---|---|---|---|---|
| KEY | SIZE | BOTANICAL NAME | COMMON NAME | COMMENTS | QUANTITY |
| AV | 5 gal | Agave geminiflora | Twin-Flowered Agave | | 150 |
| AT | 15gal | Agave attenuata | Foxtail Agave | | 150 |
| AA | 15gal | Agave americana sp. | Century Plant | | 300 |
| AM | 5 gal | Aloe marlothii | Marlothii Aloe | | 400 |
| AZ | 5 gal | Aeonium Zwartkop | Aeonium | | 120 |
| AM | 5 gal | Acanthus mollis | Bear's Breech | | 110 |
| BT | 15gal | Bambusa textilis | Weaver's Bamboo | | 250 |
| BA | 15gal | Bambusa multiplex 'Alphonse Karr' | Alphonse Karr Bamboo | | 200 |
| DB | 5 gal | Dietes bicolor | Fortnight Lily | 30" O.C. | 175 |
| DV | 15gal | Dodonaea viscosa Purpurea | Hopseed Bush | | 130 |
| GT | 15gal | Gunnera tinctoria | Gunnera | | 280 |
| HH | 15gal | Himalaycalamus hookerianus | Blue Bamboo | | 350 |
| IL | 5gal | Ilex vomitoria 'Nana' | Dwarf Yaupon | | 350 |
| PN | 15gal | Phyllostacys nigra | Black Bamboo | | 200 |
| PM | 15gal | Podocarpus 'Maki' | Maki Fern Pine | Columnar | 50 |
| LC | 5 gal | Loropetalum chinense | Loropetalum | 36" O.C. | 320 |
| GJ | 5 gal | Gardenia jasminoides | Gardenia | | 340 |
| LD | 5 gal | Leucadendron discolor 'Pom Pom' | Leucadendron Pom Pom | | 275 |
| MR | 5 gal | Muhlenbergia rigens | Deer Grass | 36" O.C. | 350 |
| PZ | 5 gal | Phormium 'Maori Maiden' | Maori Maiden New Zealand Flax | | 160 |
| PG | 5 gal | Phormium 'Guardsman' | Guardsman New Zealand Flax | | 230 |
| SN | 15gal | Strelitzia nicolai | Giant Bird of Paradise | | 10 |
| SR | 5 gal | Strelitzia reginae | Bird of Paradise | 24" O.C. | 225 |
| YF | 15gal | Yucca filamentosa 'Variegata' | Variegated Adam's Needle | | 275 |

| SUB SHRUBS, GRASSES, FERNS | | | | | |
|---|---|---|---|---|---|
| KEY | SIZE | BOTANICAL NAME | COMMON NAME | COMMENTS | QUANTITY |
| AH | 5 gal | Anigozanthos hybrids 'Big Red' | Kangaroo Paw | 30" O.C. | 350 |
| AS | 5 gal | Asparagus densiflorus 'Sprengeri' | Sprenger's Asparagus Fern | 24" O.C. | 650 |
| CM | 5 gal | Clivia miniata | Kaffir Lily | 30" O.C. | 300 |
| EM | 1 gal | Euphorbia x martini | Martini Euphorbia | 24" O.C. | 770 |
| FE | 1 gal | Festuca G. 'Elijah Blue' | Elijah Blue Fescue | 18" O.C. | 710 |
| OS | 1 gal | Osteospermum 'Cream Symphony' | Cream Symphony Freeway Daisey | 12" O.C. | 800 |
| LP | 5 gal | Libertia peregrinans | Orange Libertia | 18" O.C. | 550 |
| IC | 1 gal | Imperata cylindrica 'Rubra' | Japanese Blood Grass | 12" O.C. | 230 |
| NC | 5 gal | Nephrolepis cordifolia | Southern Sword Fern | 30" O.C. | 400 |
| PP | 5 gal | Pleioblastus pygmaea | Dwarf Bamboo | 30" O.C. | 200 |

| GROUNDCOVERS | | | | | |
|---|---|---|---|---|---|
| COT | 1 gal | Cotyledon orbiculata | Cotyledon | 18" O.C. | 1310 |
| PLE | 1 gal | Plecostachys serpyllifolia | Plecostachys | 18" O.C. | 710 |
| ROS | 1 gal | Rosemary 'Prostrata' | Creeping Rosemary | 24" O.C. | 1150 |
| MYP | 1 gal | Myoporum 'Putah Creek' | Putah Creek Myoporum | 72" O.C. | 250 |
| TRA | 1 gal | Trachelospermum jasminoides | Star Jasmine | 24" O.C. | 1550 |
| SAL | 1 gal | Salvia officinalis | Common Sage | 12" O.C. | 1010 |
| SAN | 1 gal | Santolina chamaecyparissus | Lavender Cotton | 24" O.C. | 510 |
| SED | Flats | Sedum spurium | Stonecrop | 12" O.C. | 430 |
| VIN | 1 gal | Vinca minor | Periwinkle | 24" O.C. | 1760 |
| SEN | 1 gal | Senecio mandraliscae | Mandraliscae Senecio | 24" O.C. | 380 |
| SOD | SOD | Festuca 'No Mow' | No Mow Fescue | | |

| VINES | | | | | |
|---|---|---|---|---|---|
| BO | 5 gal | Bougainvillea 'Oo-La-La' | Oo La La Bougainvillea | | 160 |
| CA | 5 gal | Clematis armandii | Evergreen Clematis | | 122 |

**NOTE: Plant quantities listed are approximate. The above plants have been selected as being representative of the overall planting design intent. This plant palette is suggested for use, but does not preclude use of other appropriate plant material. Water-conserving plants and other climate appropriate varieties of trees, shrubs and ground covers have been selected to complement the character of the project.

The final construction documents will provide the contractor with an understanding of the design intent for the maintenance of the planting areas regarding care and pruning of the site. The maintenance contractor shall furnish all labor, equipment, materials and supervision required to properly maintain the landscaped areas in an attractive condition and as described in the project maintenance specifications.

Total Landscape Area 152,300 Sqft.

All planted areas are to be watered with an approved automatic underground irrigation system. The system shall be designed to make efficient use of water through conservation techniques, and be in compliance with the City's Water Efficient Landscape Ordinance 238.

## Water Budget Calculation Worksheet

**Maximum Applied Water Allowance (MAWA)**
**The maximum allowed water to be used on a site is calculated based on the formula below.**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 45.3 | 0.62 | 0.70 | 152,300 | 0 | | | |
| ETO | Conversion from inches to gallons. | ETAF | Landscaped Area | Special Landscape Area | = | 2,994,248 | Gallons |

**Estimated Total Water Use Savings**
1,079,774

**Irrigation System Design Factors**

| Hydrozone Category (WUCOLS) | Plant Material (from landscape plan) | Species Factor (Ks) | Density Factor (Kd) | Microclimate Factor (Kmc) | Average Landscape Coefficient (Kl) | Area (Sqft) | Plant Water Requirement (Gallons) | System Type | Estimated Design Efficiency | Hydrozone water Requirement (Gallons) |
|---|---|---|---|---|---|---|---|---|---|---|
| High Water Use | MIXED | 0.8 | 1 | 1 | 0.8 | 15,230 | 342,200 | Sub Surface Drip | 0.90 | 380,222 |
| High Water Use | WATER FEATURES | 0.8 | 1 | 1 | 0.8 | 200 | 4,494 | Line | 0.90 | 4,993 |
| Medium | MIXED | 0.5 | 1 | 1 | 0.5 | 30,260 | 424,941 | Drip | 0.80 | 531,176 |
| Low Water Use | MIXED | 0.3 | 1 | 1 | 0.3 | 106,610 | 898,275 | Sub Surface Drip | 0.90 | 998,083 |
| TOTALS | | | | | | | 152,300 | 1,669,909 | | 1,914,474 |

**Total Estimated Irrigation Requirement** 1,914,474

**The information included on this sheet and associated landscape and irrigation plans represent the landscape water allowance and estimated water requirements of this project.**

| Base Schedule | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ETo | | | | | | | | | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
| Spray Turf | PRBCW | Ks | Kd | Kmc | ASC | RUN TIME | CYC | CYC TIME | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Rotor Turf | 0.80 | 0.80 | 0.8 | 1.00 | 0.64 | 78 | 4 | 19 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Spray SCHRUB | 0.80 | 0.80 | 0.8 | 1.00 | 0.64 | 78 | 4 | 19 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Rotor SCHRUB | 1.00 | 0.80 | 0.8 | 1.00 | 0.80 | 125 | 11 | 61 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Bubblers CONTAIN | 0.50 | 0.80 | 0.8 | 1.00 | 0.40 | 125 | 11 | 86 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Bub/Trees in planting | 1.00 | 0.80 | 0.8 | 1.00 | 0.80 | 67 | 4 | 17 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Bub/Trees in lawns | 0.80 | 0.80 | 0.8 | 1.00 | 0.64 | 360 | 4 | 90 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 1.00 | 0.80 | 0.8 | 1.00 | 0.80 | 360 | 4 | 90 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

## NOTES OF DESIGN INTENT

1. IRRIGATION SYSTEM SHALL BE DESIGNED IN ACCORDANCE WITH LOCAL WATER EFFICIENT LANDSCAPE ORDINANCE.
2. IRRIGATION CONTROLLER SHALL BE "SMART" SELF ADJUSTING BASED ON DAILY ET REQUIREMENTS OF THIS PLANT MATERIAL.
3. DEDICATED IRRIGATION SYSTEM WATER METER SHALL CONNECT TO A LOOPED IRRIGATION SYSTEM SUPPLYLINE.
4. LOW PRECIPITATION RATE IRRIGATION SPRAY HEADS SHALL BE USED WHEREVER PLANTING MATERIAL AND WATER EFFICIENT LANDSCAPE ORDINANCE WILL ALLOW.
5. HIGH EFFICIENCY DRIP IRRIGATION SHALL BE USED WHEREVER PRACTICLE WITHIN GROUNDCOVER AND SHRUB AREAS.
6. DEDICATED IRRIGATION ZONES FOR TREES SHALL BE DESIGNED WITH BUBBLER IRRIGATION.
7. VALVE BOX LOCATIONS SHALL BE IN GROUNDCOVER AREAS WHEREVER POSSIBLE.

## PROPOSED EQUIPMENT LIST

| | |
|---|---|
| DOMESTIC WATER METER-2" | -BY OTHER SECTION OF CONTRACT |
| IRRIGATION BACKFLOW PREVENTION DEVICE | -WILKINS-975-XU-2" |
| MASTER CONTROL VALVE | -TORO-220-27-DS -2" |
| FLOW SENSOR | -DATA INDUSTRIAL-P220-1" |
| FERTIGATION SYSTEM (20 GALLON) | -EZ-FLO-EZ20 |
| ELECTRIC CONTROLLER ASSEMBLIES | -BASELINE 3200 X-CABINET |
| REMOTE CONTROL VALVES | -TORO-P220 SERIES |
| DRIP REMOTE CONTROL VALVES | -TORO-P220 SERIES WITH DRIP CONTROL ASSEMBLY |
| QUICK COUPLING VALVES | -RAINBIRD-33DRC |
| GATE VALVES -LINE SIZE | -SEE DETAIL |
| DIGITAL SOIL MOISTURE SENSOR | -BASELINE-BL SENSOR |
| RAIN SENSOR | -TORO-TRS |
| FLUSH VALVE | -SEE DETAIL |
| PLANTER POT IRRIGATION | -SEE DETAIL |
| TREE BUBBLERS | -TORO-FB-100-PC |
| IRRIGATION SUPPLYLINE -DOMESTIC SYSTEM | -1120/SCHEDULE 40 PVC PIPE -24" COVER |
| IRRIGATION SPRINKLERLINE | -1120/SCHEDULE 40 PVC PIPE -12" COVER |
| ELECTRICAL CONDUIT-SIZE AS INDICATED | -1120/SCHEDULE 40 PVC PIPE -24" COVER |
| SLEEVING-SIZE AS INDICATED | -1120/SCHEDULE 40 PVC PIPE -24" COVER |
| IRRIGATION SUBSURFACE EMITTERLINE | -NETAFIM-TLCV4-12 -4" COVER |




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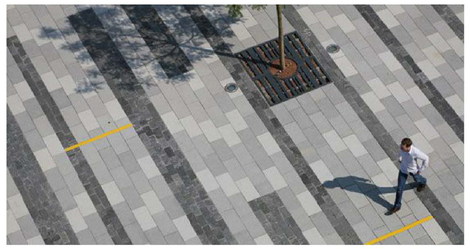
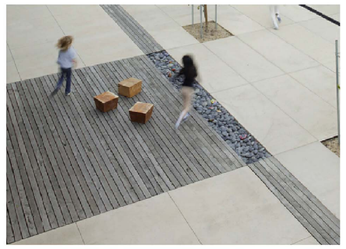
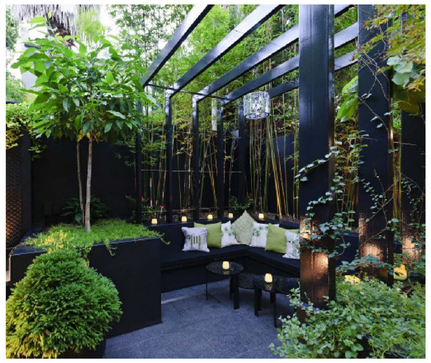
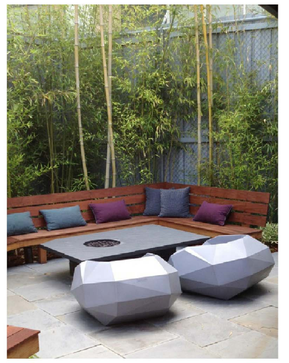

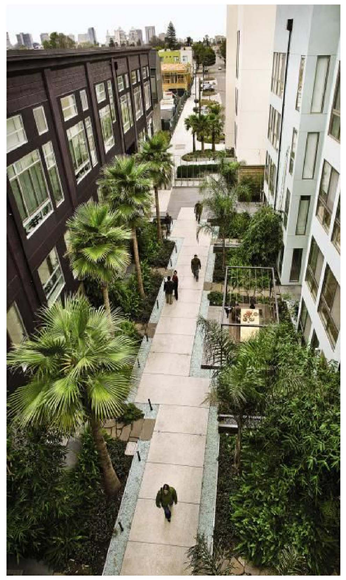
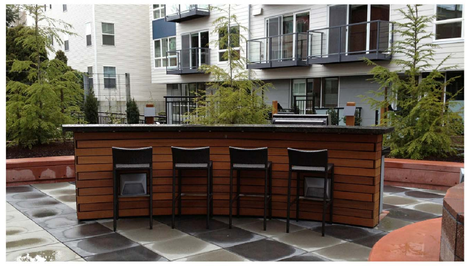

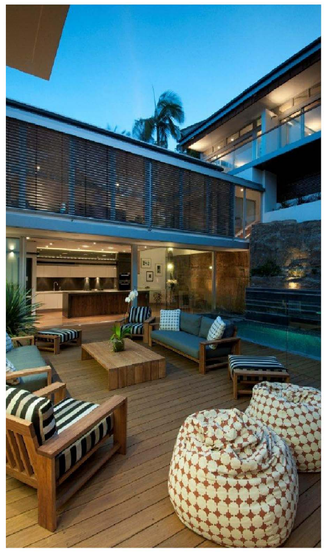
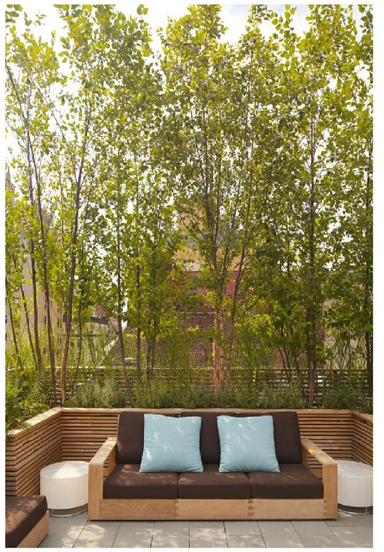

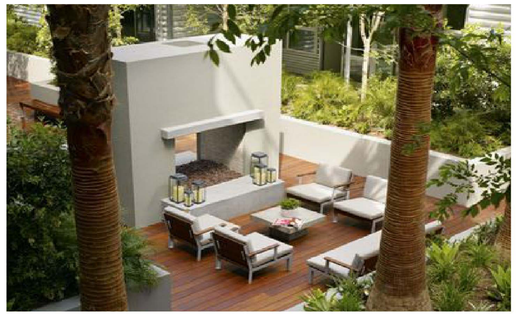

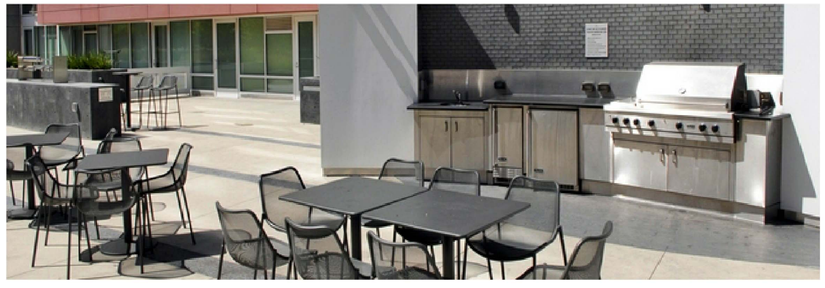

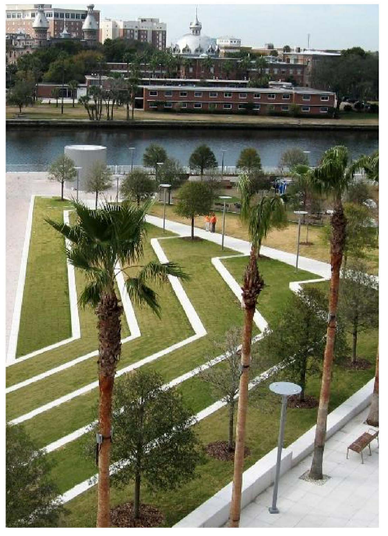

# 450 MONTAGUE

# LANDSCAPE IMAGERY

L5

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2F

# *M E M O R A N D U M*

***Department of Planning and Neighborhood Services***

**To:** Parks, Recreation, and Cultural Resources Commission

**From:** Shaunn Mendrin, Senior Planner

**Subject:** **450 Montague Park**

**Date:** February 2, 2015

---

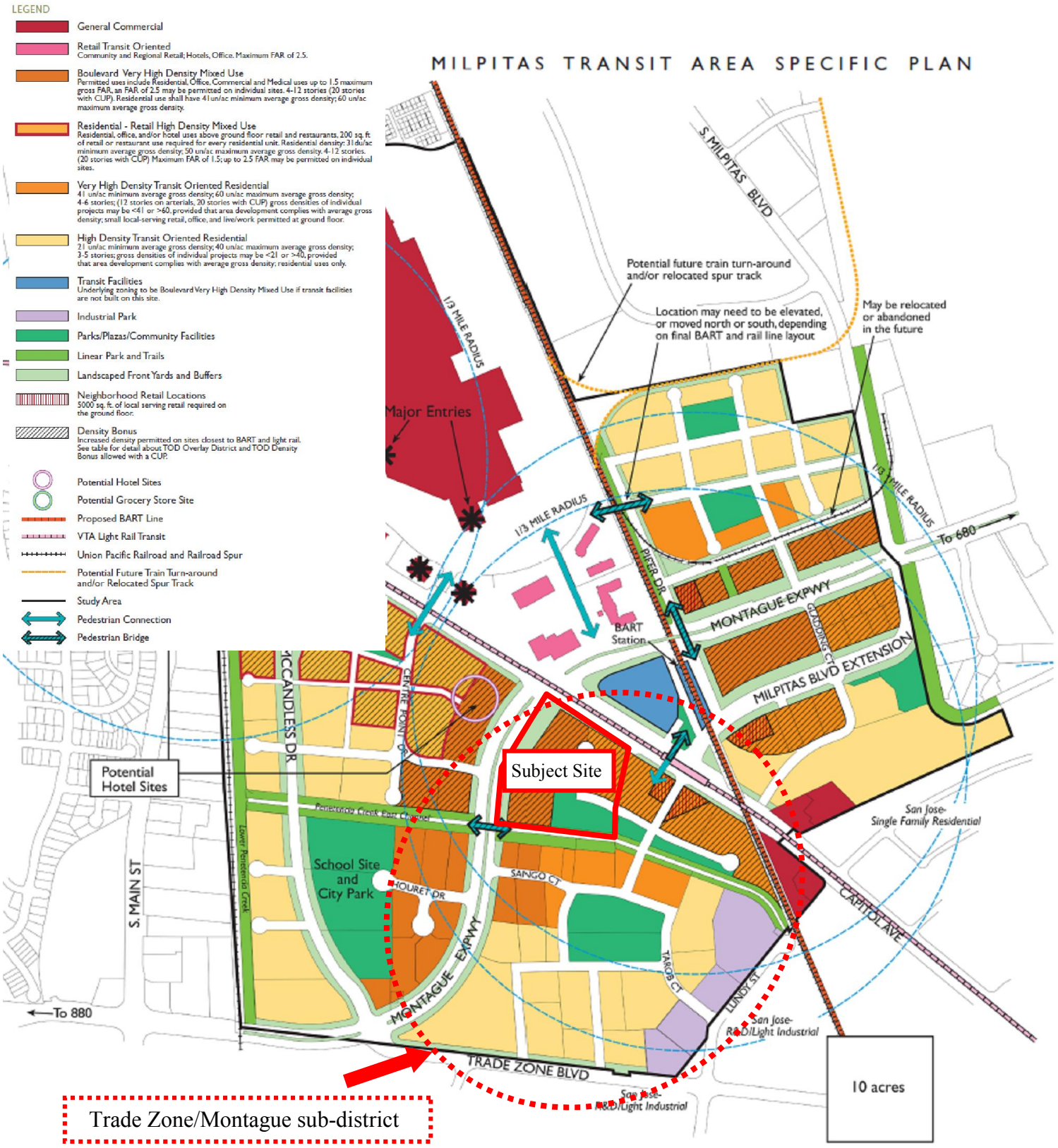
**Background:**
In June 2008, the City Council adopted the Transit Area Specific Plan (TASP), which includes the vision for approximately 7,000 dwelling units, 900,000 square feet of office and 280,000 square feet of retail space over a 437 acre area. The plan also anticipates 36 acres of public park land. The transit area is intended to be a cohesive neighborhood with consistent focus towards walking and transit usage. However, the planning area is divided by creeks, roadways, railways and various developed parcels. As a planning strategy, the specific plan created sub-districts with specific planning and vision criteria to take advantage of local characteristics. This report is on the Trade Zone/Montague sub-district.

For this subdistrict, the TASP envisioned a larger park located off Sango and a smaller linear park paralleling Penetencia Creek between Montague and Lundy. 450 Montague is currently in process for consideration of a new residential development and park space. The proposed project is located over three parcels and includes linear park and larger park areas. The proposed park is comprises of three areas

**Recommendation:**
Receive proposed parks, identify park name and forward to City Council for final approval.

Attachments:
A- Transit Area Specific Plan- Land Uses & Subdistrict

# Attachment A – TASP Land Use Plan



# Attachment B

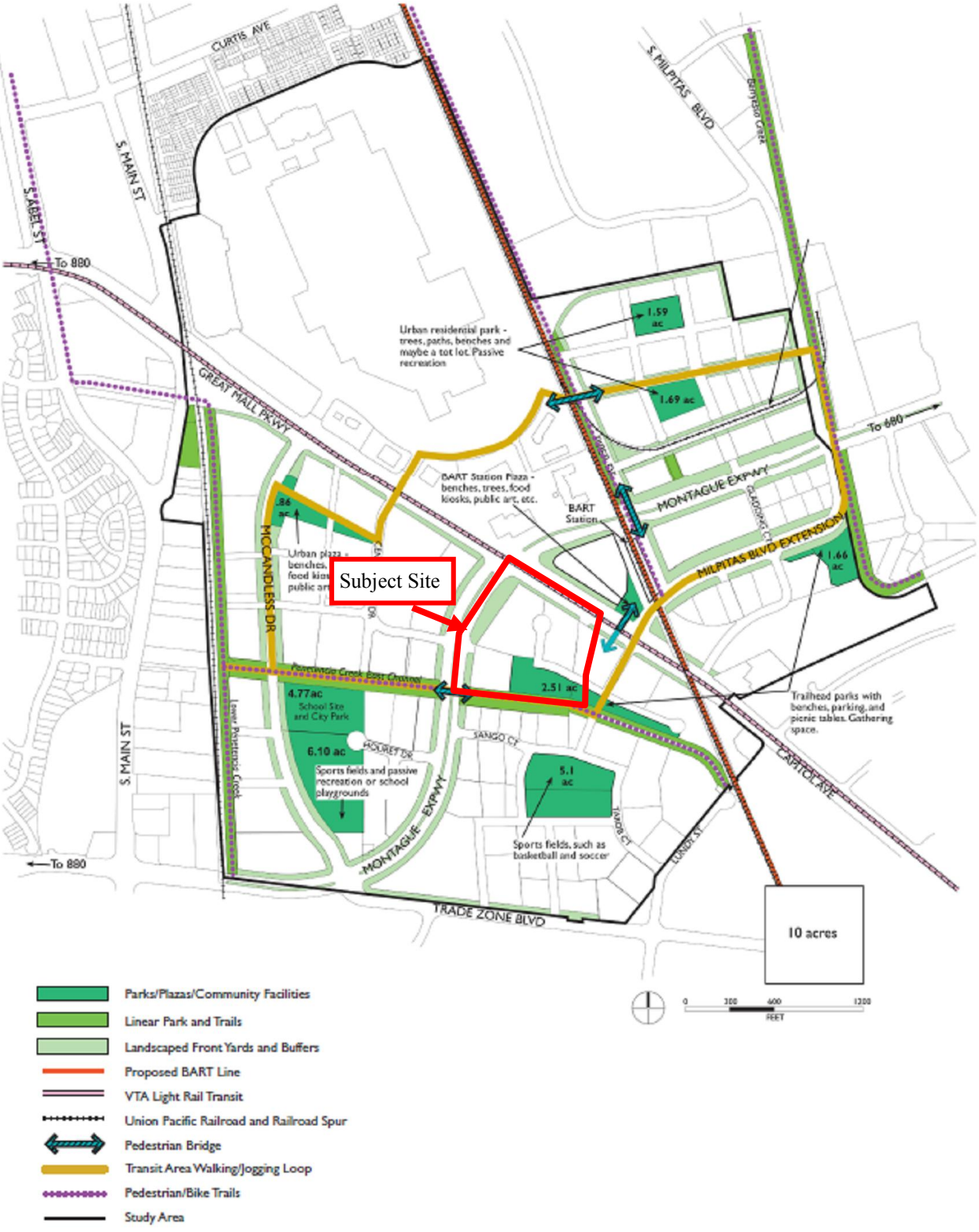


Exhibit Index:


| | |
|---|---|
| 1 | Landscape Plan |
| 2 | Site Plan - Park Area Summary |
| 3 | Park Enlargements |
| 4 | Conceptual Park Imagery |
| 5 | Section Through Linear Park & Park B Extension |
| 6 | Park B Extension Plan and Conceptual Imagery |
| 7 | Park Paseo - Link Between Park A & B |
| 8 | Park Paseo Conceptual Perspective |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# PARKS EXHIBIT

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# 450 MONTAGUE

# LANDSCAPE PLAN

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## Park Area Summary

| | Acres |
|---|---|
| Park 'A' | 0.33 |
| Park 'B' | 0.31 |
| Linear Park | 0.50 |
| Park Link 'A' | 0.13 |
| Park Link 'B' | 0.14 |
| Park Paseo | 0.07 |
| **Total Provided** | **1.48** |

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# SITE PLAN - PARK AREA SUMMARY

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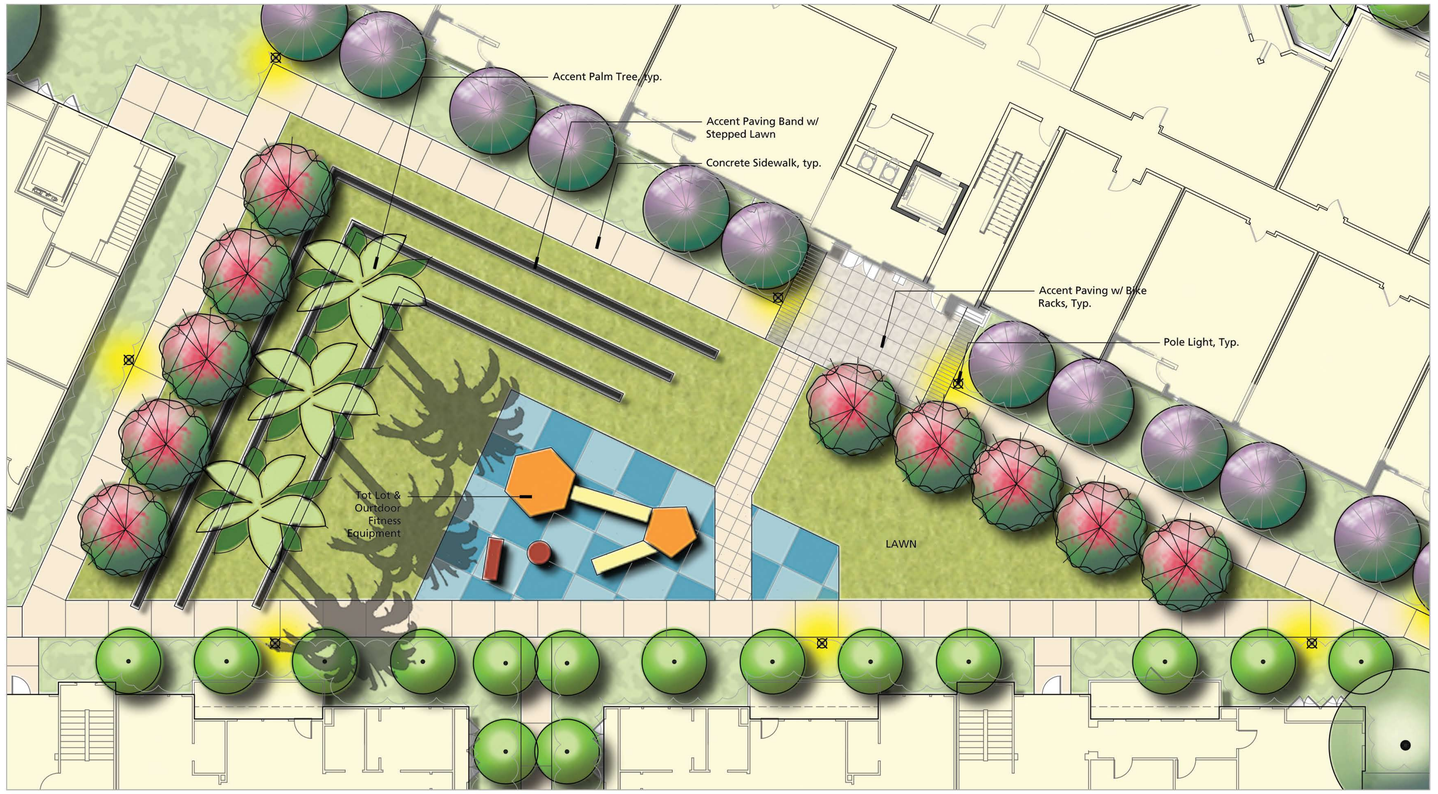
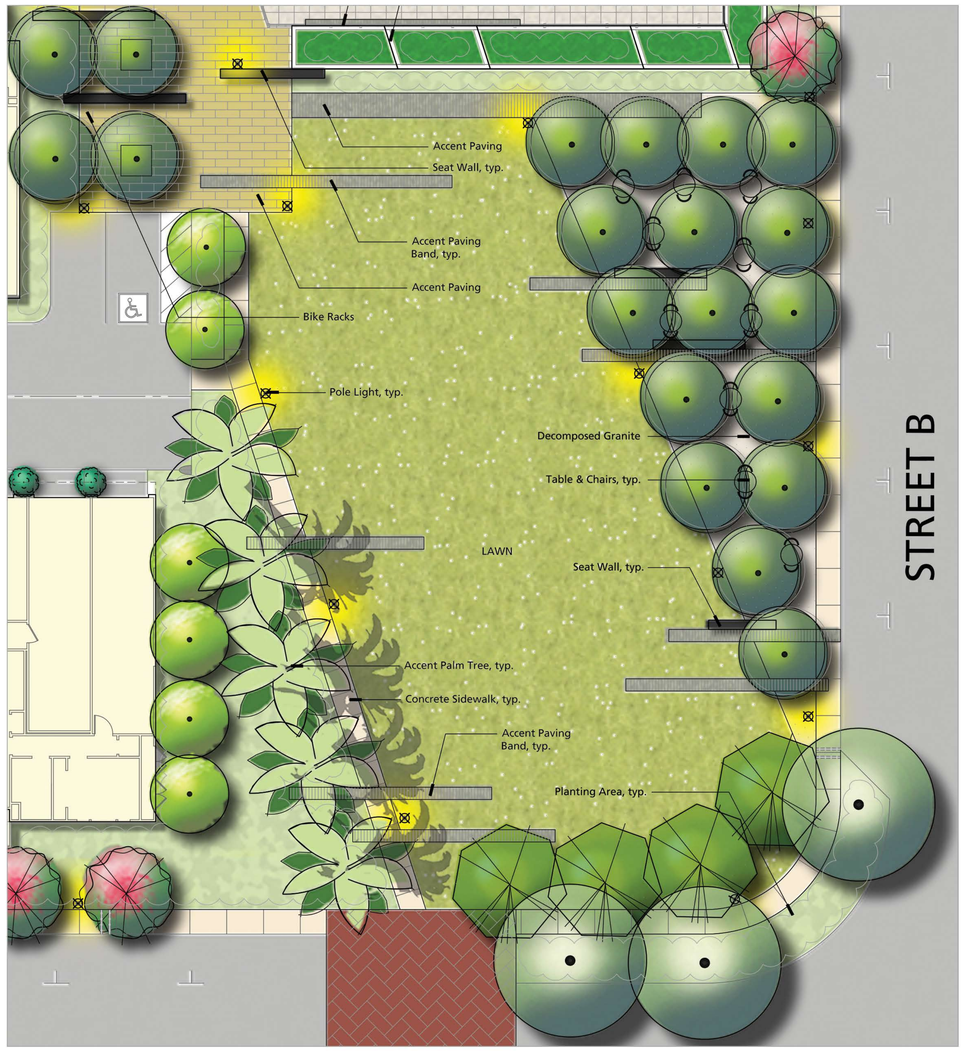



## Park A Enlargement

Scale: 1"=10'

Scale: 1" = 10'
0 5 10 20




## Park B Enlargement

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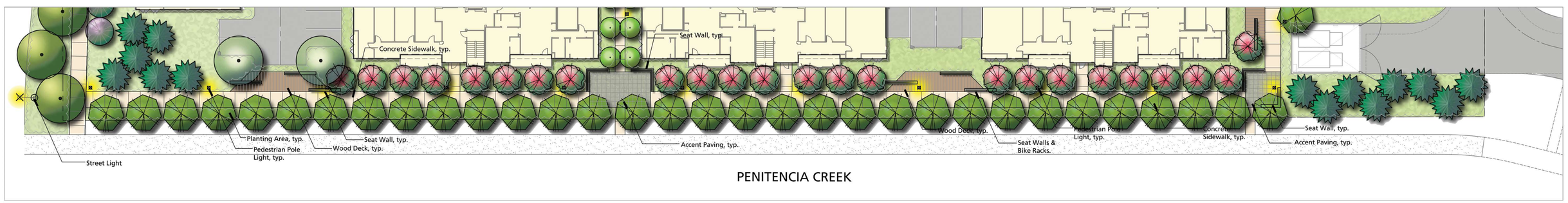
Scale: 1" = 10'
0 5 10 20




## Linear Park Enlargement

Scale: 1"=20'

Scale: 1" = 20'
0 10 20 40

# 450 MONTAGUE

# PARK ENLARGEMENTS

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North

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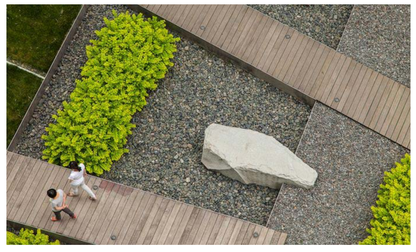

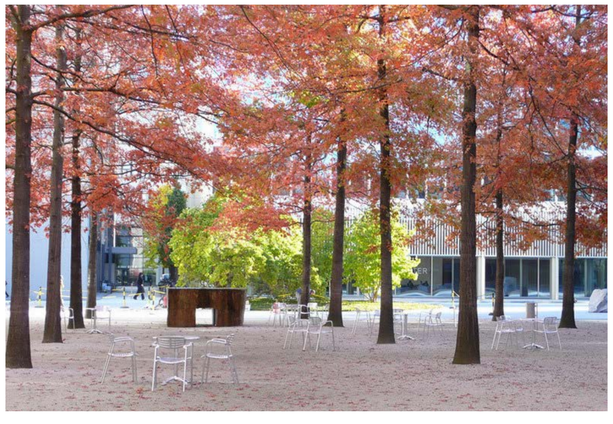

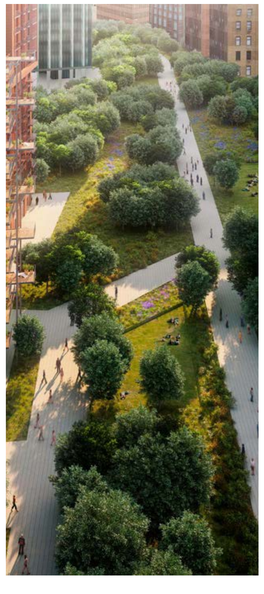

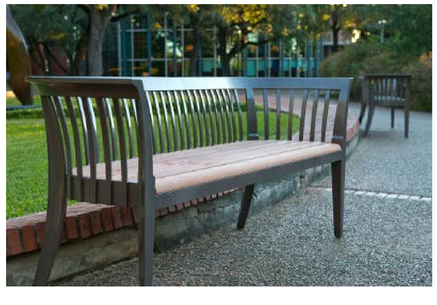

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# CONCEPTUAL PARK IMAGERY

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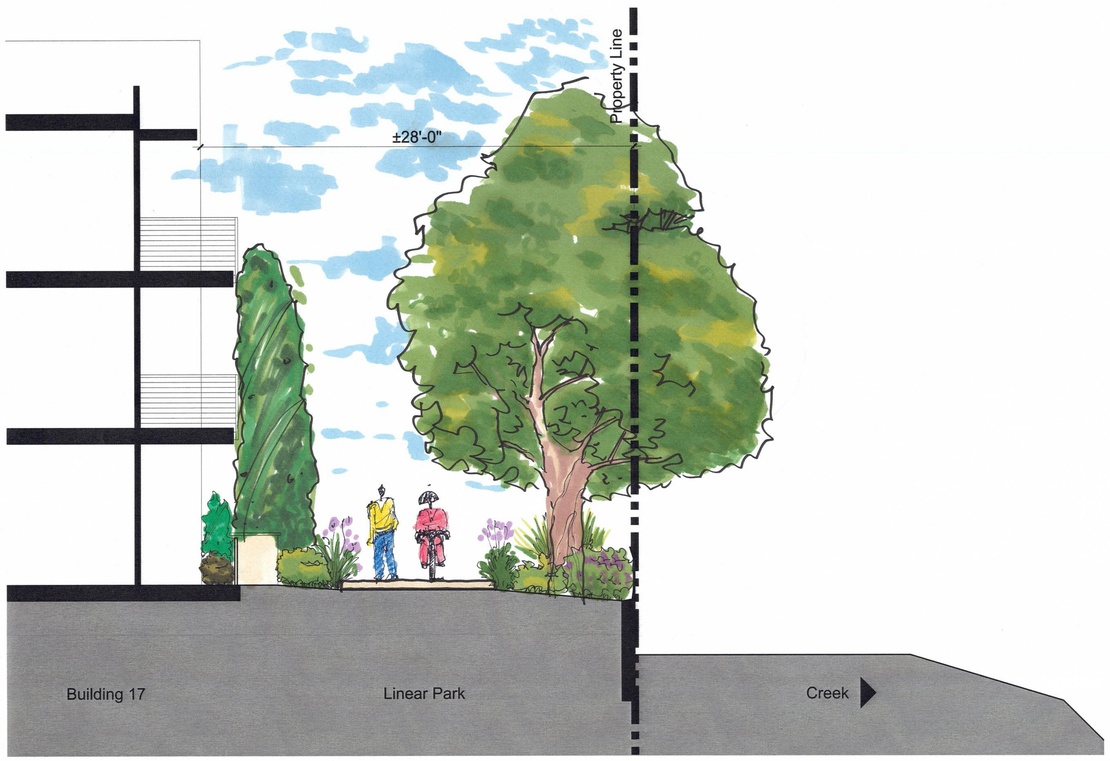
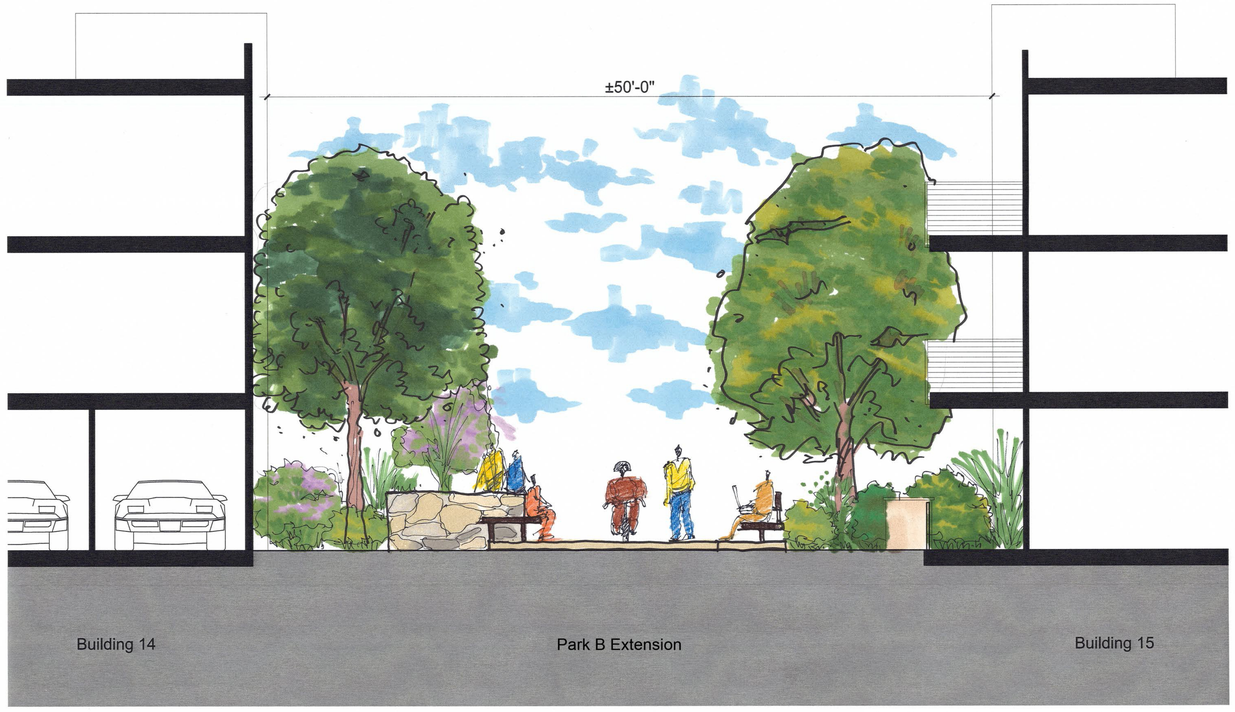



1. Section A Through Linear Park




2. Section Through Park B Extension

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# 450 MONTAGUE

# SECTION THROUGH LINEAR PARK & PARK B EXTENSION

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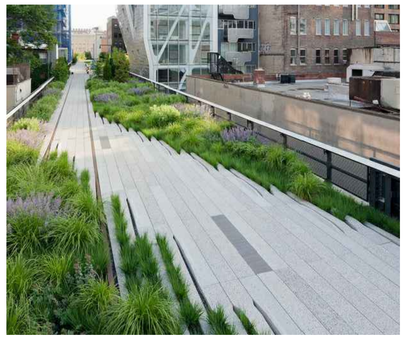

High Line Park, NY

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San Ramon, CA 94583


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KTGY # 2013-0551 01.23.2015


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**Architecture+Planning**
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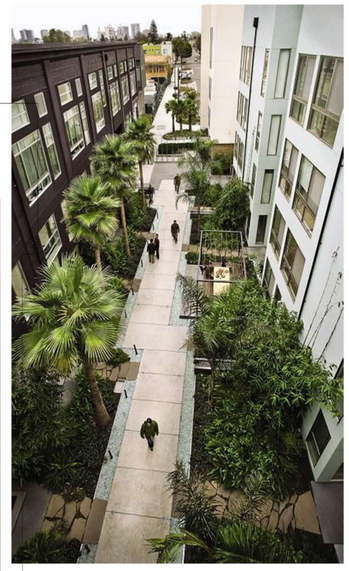
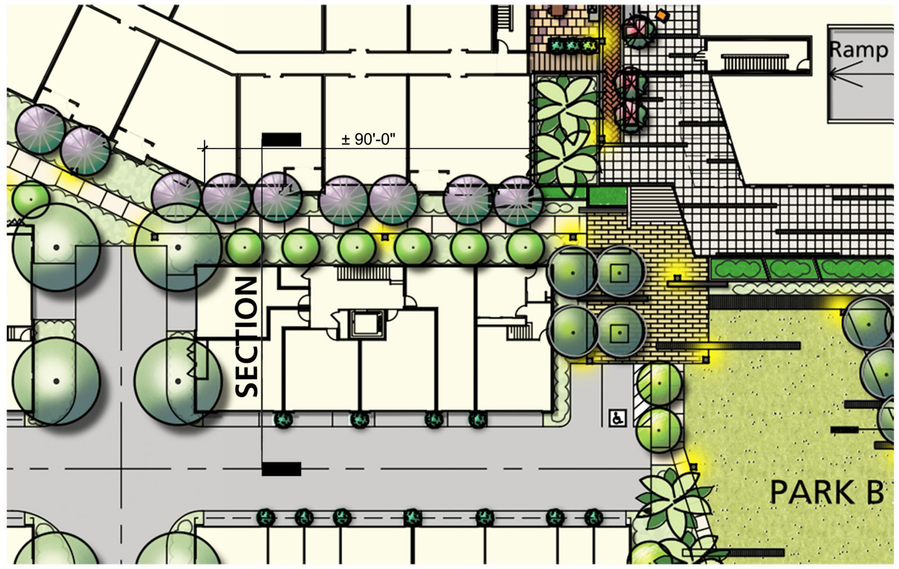
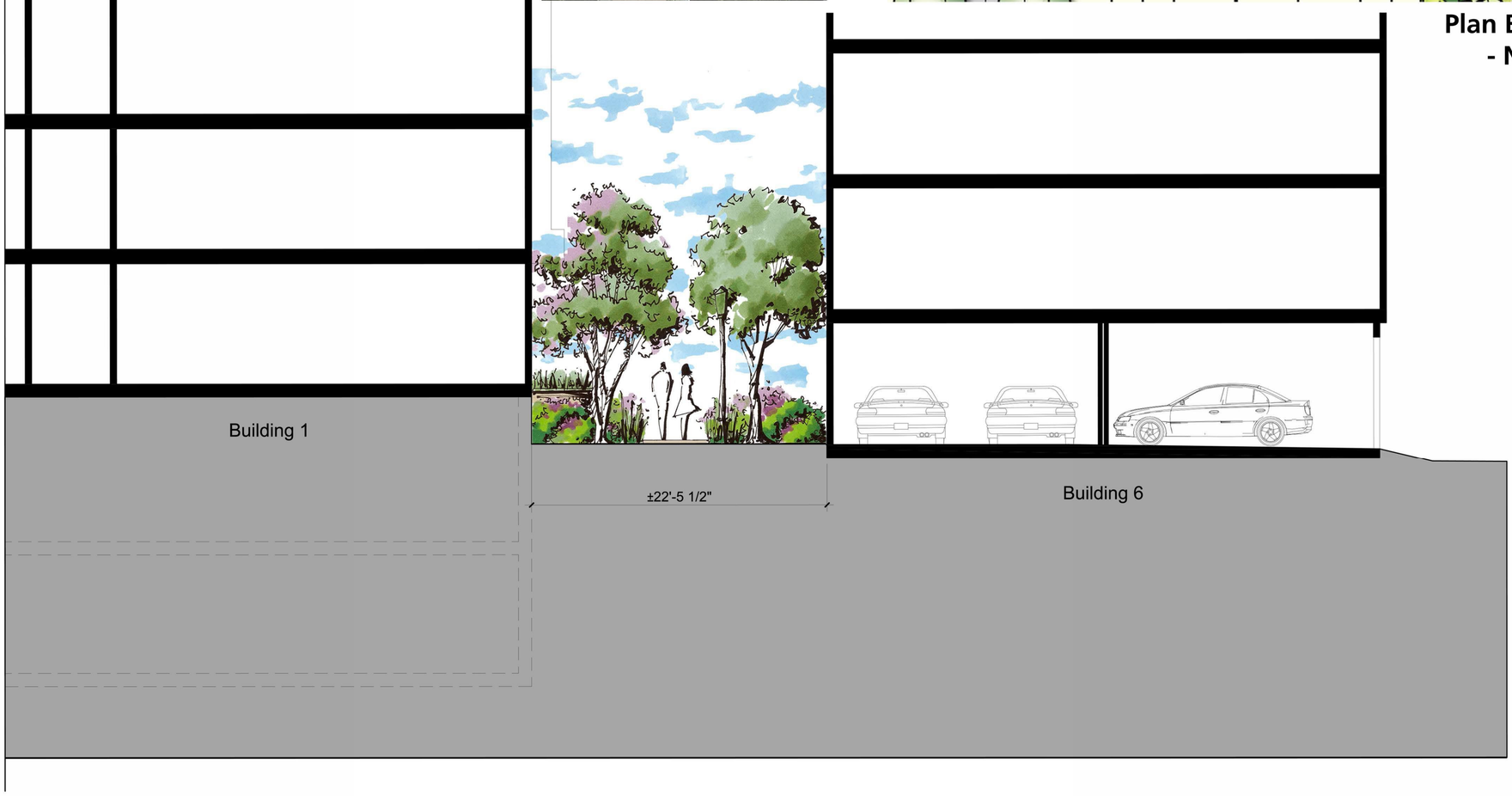





**Plan Enlagement**
**- Not to Scale**

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# 450 MONTAGUE

# PARK PASEO - LINK BETWEEN PARK A & B

7

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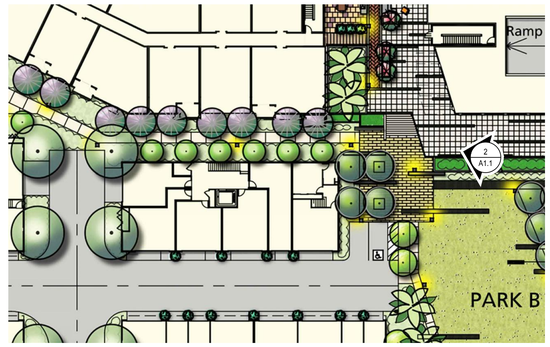

Key Map n.t.s.

2. Aerial View of Park Paseo

*Refer to Landscape sheets for plant species and placement

# 450 MONTAGUE

# PARK PASEO CONCEPTUAL PERSPECTIVE



MILPITAS, CA

KTGY # 2013-0551 01.23.2015

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**CITY OF MILPITAS**
M I N U T E S

**PARKS, RECREATION AND CULTURAL RESOURCES COMMISSION**

**Minutes:** Regular Meeting of the Parks, Recreation and Cultural Resources Commission

**Date of Meeting:** February 2, 2015

**Place of Meeting:** Milpitas Community Center: Auditorium, 457 E. Calaveras Blvd.

**I. Call to Order:** Chair Sharma called the meeting to order at 7:05pm.

**II. Roll Call:** Commissioners Present: Bansal, Matau, Munzel, Ramirez, Sharma and Singh
Commissioners Excused: Fong and Mathur
Commissioner Unexused: None
City Staff Present: Jaime Chew – Recreation Services Supervisor
Lisa Ciardella – Public Services Clerk
City Council Liaison Present: Council Member Barbadillo

**III. Seating of Alternates:** Bansal

**IV. Approval of Agenda:** MOTION to approve the agenda for February 2, 2015 as submitted.
M/S: Munzel/Matau Ayes: All

**V. Approval of Minutes:** MOTION to approve the minutes from January 5, 2015 and January 21, 2015 as submitted.
M/S: Matau/Sharma Ayes: All

**VI. Public Forum:** None

**VII. Announcements and Correspondence**

Jaime Chew announced that this will be her last meeting with the Commission. Recreation Services Supervisor Stephanie Douglas will be the Commission Liaison while she is on Maternity Leave When she returns from leave, she and Lisa Ciardella will be moving to the Arts Commission and Recreation Services Manager Renee Lorentzen will be the Staff Liaison to the PRCRC Commission and Public Services Assistant Justin Yount will be the Recording Secretary.

**VIII. New Business**

**1. Public Parks and Naming at 450 Montague**

City Planner, Shaunn Mendrin presented the Commission with the proposed project at 450 Montague. There will be three public parks within the project that will be the responsibility of the Home Owner's Association. The project will be presented to the Planning Commission on February 11, 2015 and to the City Council on March 3, 2015.

Representatives from Lennar Corporation and the Builder for the project presented the information to the Commission. They presented the details of the three parks. Park A will be between the buildings. There will be a lawn area for active and passive recreation. There will be a tot lot with a shade structure as well as seating and adult fitness elements. Park B will also have a lawn area for active and passive

recreation. It will be lined with palm trees with seating available underneath. Street parallel parking will also be available. Sidewalks will line both parks A and B. The third area will be a Linear Park along the creek with a par course. There are no restrooms planned as it is within the complex and although they are considered public parks, they will more than likely be utilized by the residents of the complex. Commissioner Munzel questioned if the grass in the parks, especially park A, would receive enough sun light as it is between the buildings. Lennar staff said they felt it would as the buildings are approximately 20-25 feet away. Commissioner Munzel stated that he would like to see water permeable landscape and to make sure there are no toxic plants.

The Commission questioned Mr. Mendrin if the project met the per capita ratio of residents to park space. Mr. Mendrin stated that it does.

The Commission also discussed the possible names for Park A and Park B. The choices that they would like to pass on for consideration by City Council are J.W. Johnson, Captain Calvin Valpey, O.H.P. Vennum and Charles Beverson.

MOTION to forward to City Council proposed parks and locations and the list of 4 proposed names of J.W. Johnson, Captain Calvin Valpey, O.H.P. Vennum and Charles Beverson for Park A and Park B for final approval of 450 Montague
M/S: Sharma/Ramirez Ayes: All

**IX. Staff Report**

None.

**X. Liaison Reports**

1. City Council:

2. Community Advisory Commission:

3. Senior Advisory Commission: None.

4. Planning Commission: None.

5. Youth Advisory Commission: None.

6. Milpitas Historical Society

7. Arts Commission: None

8. Recycling and Source Reduction Advisory Commission: None.

Santa Clara County Parks & Recreation:

**XI. Future Agenda Items**

**XII. Adjournment:**

With there being no further business, the meeting was adjourned at 9:15 p.m. to the next scheduled meeting on Monday March 2, 2015 at 7:00pm.

2G

# *Agenda*
# *City of Milpitas*
# *Parks, Recreation and Cultural Resources Commission*

Monday, March 2, 2015
**City Hall Committee Room**
455 E. Calaveras Blvd.
7:00 PM

**I. Call to Order**

**II. Flag Salute**

**III. Roll Call**

**IV. Seating of Alternates**

**V. Approval of Agenda: March 2, 2015**

**VI. Approval of Minutes: February 2, 2015**

**VII. Public Forum**

Members of the audience are invited to address the Commission on any subject not on the agenda. Speakers must state their name and address for the record, and limit their remarks to under three minutes. As an unagendized item, no response is required of City staff or the Commission; however, the Commission may agendize the item for a future meeting.

**VIII. Announcements and Correspondence**

- New Commission Alternate – Samu Tiumalu

**IX. Old Business**

1. **Youth Sport User Fee (Stephanie Douglas, Recreation Supervisor)**

**Background:** At the October 2014 PRCRC meeting, the Commission requested an update on the Youth Sports User Fee at the February 2015 meeting. At the February 2015 meeting the Commission requested to continue this item to the March meeting. Staff has prepared a presentation to update the Commission.

**Recommendation:** Receive presentation.

**X. New Business**

1. **Little League Farm Field Dedication (Renee Lorentzen, Recreation Manager)**

**Background:** Milpitas Resident and Little League player, Christian Dalugdug passed away at the age of 8 years old on December 27, 2014. A third grader at Weller Elementary, Christian loved playing baseball. He

played on the Milpitas Sports Center's Farm fields for two years before his passing. Christian's family and friends and the President of Milpitas Little League are asking for the Commission's support in dedicating the Milpitas Sports Center Little League Farm Field to Christian Dalugdug with a plaque. The last field dedication was for Michael De Jesus, at Gill Park in 2008.

**Recommendation:** Discuss and make recommendation to City Council on dedicating the Milpitas Sports Center's Little League Farm Field to Christian Dalugdug.

**2. Review and Recommend the Parks Projects in the Proposed Capital Improvement Program 2015-2020 to the City Council (Steven Machida, City Engineer)**

**Background:** City Staff will provide an overview of the current Parks Capital Improvement Program, including a progress report on work underway. Staff will also present the Parks section of the proposed 5 year Capital Improvement Program (2015-2020) for review and recommendation to the City Council.

**Recommendation:** Receive Staff Report and recommend the Parks projects in the Proposed 2015-2020 Capital Improvement Program to the City Council for final approval.

**3. Review International Park Concept at Tom Evatt Park (Steven McHarris, Planning Director)**

**Background:** The City has received requests from international organizations, representing Philippines, India, Korea, and Vietnam to have a public place to represent the culture of each respective country. Additional country representation is anticipated. Preliminary discussions have resulted in a concept of an "International Park" in Milpitas, and Tom Evatt Park was identified as a possible location due to its central and accessible midtown location.

The International Park concept is to provide a public space with an educational non-political theme of culture, arts, history, architecture, geography, native plants for each participating international group. The park could be divided into small delineated areas with the first to be located on the east side of Main Street. The concept could be expanded to the west side of main Street dependent on other organizations participation interest. If the concept moves forward, staff would develop policies, procedures and specifications for size of each area.

**Recommendation:** Although there are no preliminary design plans to review, Staff will discuss with the Commission and request the Commission review the concept and provide feedback

**4. Minor Public Parks Changes to 450 Montague (Shaunn Mendrin, Senior Planner)**

**Background:**
In June 2008, the City Council adopted the Transit Area Specific Plan (TASP), which includes the vision for approximately 7,000 dwelling units, 900,000 square feet of office and 280,000 square feet of retail space over a 437 acre area. The plan also anticipates 36 acres of public park land. The transit area is intended to be a cohesive neighborhood with consistent focus towards walking and transit usage. However, the planning area is divided by creeks, roadways, railways and various developed parcels. As a planning strategy, the specific plan created sub-districts with specific planning and vision criteria to take advantage of local characteristics. This report is on the Trade Zone/Montague sub-district.

For this subdistrict, the TASP envisioned a larger park located off Sango and a smaller linear park paralleling Penitencia Creek between Montague and Lundy. 450 Montague is currently in process for consideration of a new residential development and park space. The proposed project is located over three parcels and includes linear park and two larger park areas. The linear park area will parallel Penitencia

Creek with a larger park (Park A) located within the development and it will include passive areas and a Tot Lot. The second larger park (Park B) will be located on the edge of the development adjacent to a North South local roadway. Pedestrians may access the parks from Montague or Capitol or from the linear park through a large Paseo connecting to Park B and a smaller Paseo connecting from Park B to Park A. The proposed project will be conditioned to include way finding signs from the public right of way and linear trail. See Attachment A for park plans and materials and Attachment B for suggested names.

The PRCRC reviewed the item on February 2, 2015 and concurred with the proposed park layout and included some suggested four names for the City Council including J.W. Johnson, Captain Calvin Valpey, O.H.P. Vennum and Charles Beverson for Park A and Park B. Since February 2, 2015, the applicant has made revisions to the north south vehicular access from E Capitol, moving the entire access road onto the subject site (originally it was shared with the adjacent property). This has resulted in a reconfiguration of the orientation of Building 15 located at the southeast corner of the site. The resulting change has eliminated the connecting paseo originally located between Building 15 and Buildings 14 & 16. The frontage of Building 15 will be conditioned to include a wider sidewalk with double row of trees to enhance the connection. In addition, staff will also include a condition requiring a future minor realignment of the road transition onto the property to the east near Penitencia Creek to allow for a wider connection to the linear park along the creek. This change would not happen until the adjacent site redevelops.

**Recommendation:**
Review the modification and forward recommendation to City Council for final approval.

## XI. Staff Report

## XIII. Liaison Reports

1. City Council – Council Member Garry Barbadillo
2. Community Advisory Commission – Chair Sharma
3. Senior Advisory Commission – Commissioner Ramirez
4. Planning Commission – Commissioner Mathur
5. Youth Advisory Commission – Commissioner Fong
6. Milpitas Historical Society – Vice Chair Munzel
7. Arts Commission/Public Art Committee - Commissioner Matau
8. Recycling and Source Reduction Advisory Commission- Commissioner Singh
9. Santa Clara County Parks & Recreation – Vice Chair Munzel

## XIV. Future Agenda Items

KNOW YOUR RIGHTS UNDER THE **OPEN GOVERNMENT ORDINANCE**

Government's duty is to serve the public, reaching its decisions in full view of the public. Commissions, boards, councils and other agencies of the City exist to conduct the people's business. This ordinance assures that deliberations are conducted before the people and the City operations are open to the people's review.

Materials related to an item on this agenda submitted to the Parks, Recreation and Cultural Resources Commission after initial distribution of the agenda packet are available for public inspection at the Community Center office, 457 E. Calaveras Blvd., Milpitas during normal business hours.

For more information on your rights under the Open Government Ordinance or to report a violation of the ordinance, contact the City Attorney's office at Milpitas City Hall, 455 E. Calaveras Blvd, Milpitas, CA 95035

E-mail: mogaz@ci.milpitas.ca.gov / Fax 408/586-3056 / Phone 408/586-3040

## XV. Adjournment

Approved by PRCRC 2-2-15

# 450 MONTAGUE

# LANDSCAPE PLAN

1

MILPITAS, CA

KTGY # 2013-0551 01.23.2015


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THE GUZZARDO PARTNERSHIP INC.
Landscape Architects • Land Planners
181 Greenwich Street
San Francisco, CA 94111
T 415 433 4672
F 415 433 5003

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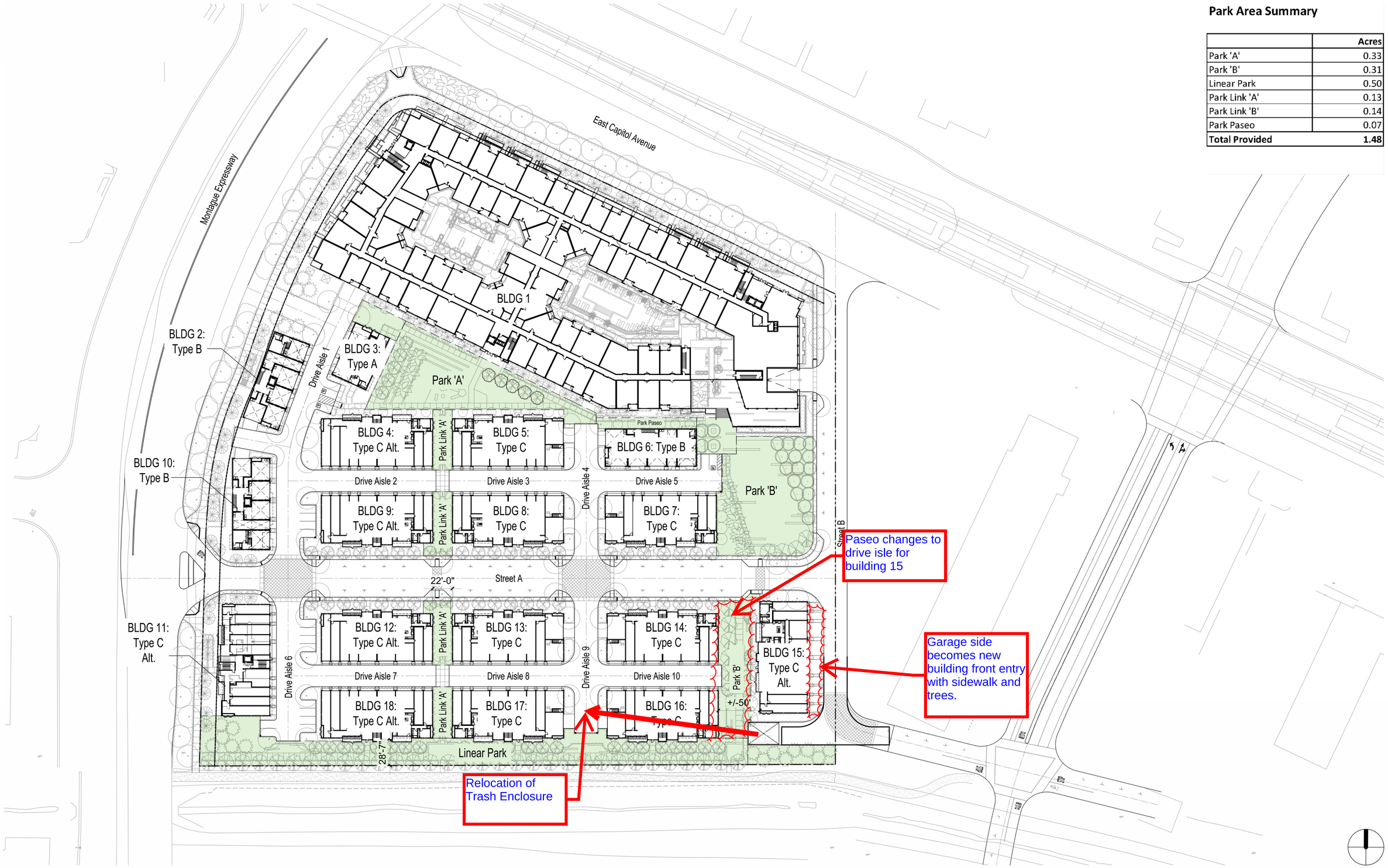
510.272.2910
ktgy.com

## Park Area Summary

| | Acres |
|---|---|
| Park 'A' | 0.33 |
| Park 'B' | 0.31 |
| Linear Park | 0.50 |
| Park Link 'A' | 0.13 |
| Park Link 'B' | 0.14 |
| Park Paseo | 0.07 |
| **Total Provided** | **1.48** |




# 450 MONTAGUE

# SITE PLAN - PARK AREA SUMMARY

2

MILPITAS, CA

KTGY # 2013-0551 01.23.2015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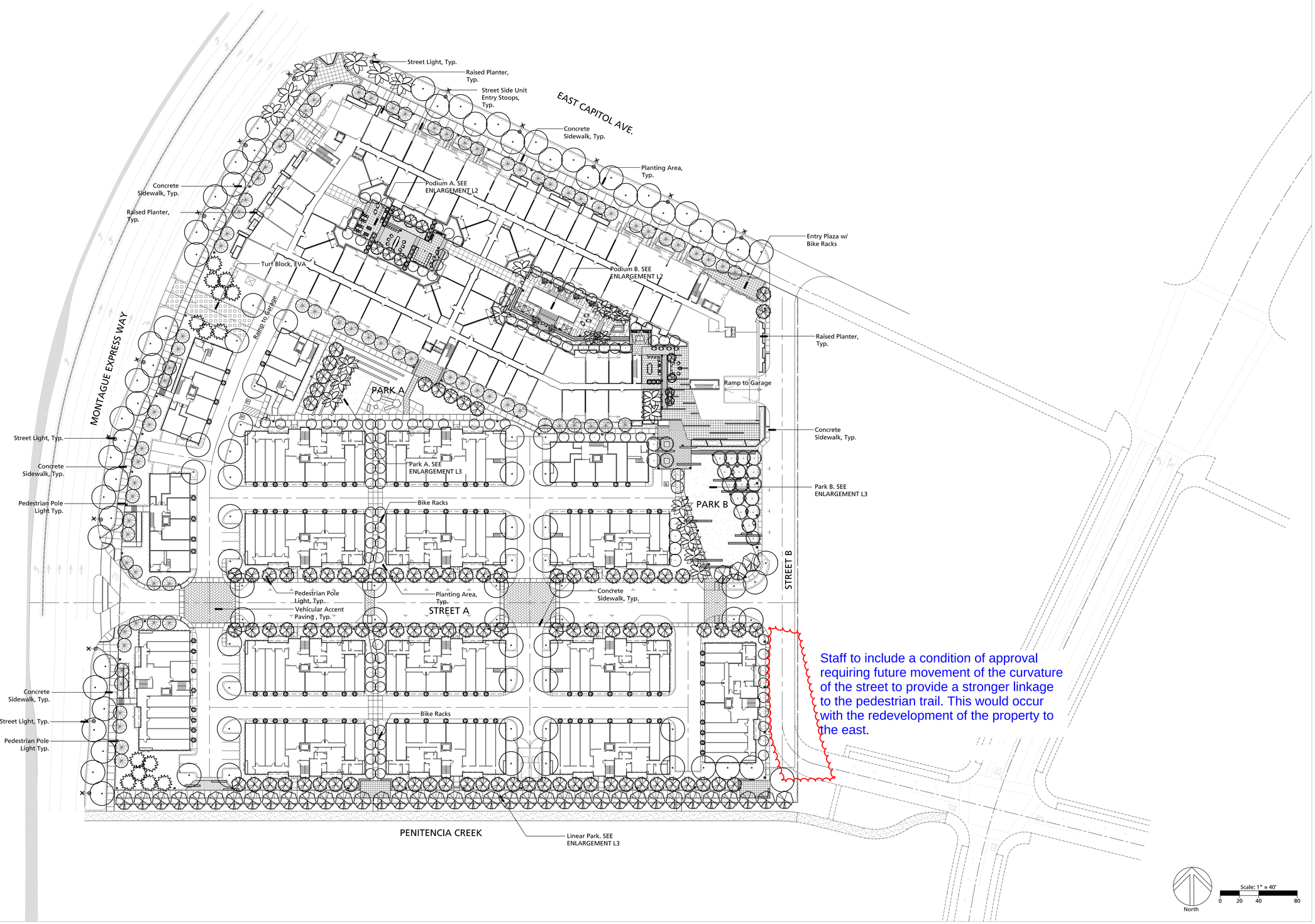


Proposed Changes Around Building 15

# 450 MONTAGUE

# LANDSCAPE PLAN

L1

MILPITAS, CA

KTGY # 2013-0551 02.24.15


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**CITY OF MILPITAS**
M I N U T E S

**PARKS, RECREATION AND CULTURAL RESOURCES COMMISSION**

**Minutes:** Regular Meeting of the Parks, Recreation and Cultural Resources Commission

**Date of Meeting:** March 2, 2015

**Place of Meeting:** Milpitas City Hall: Committee Conference Room, 455 E. Calaveras Blvd.

**I. Call to Order:** Vice Chair Munzel called the meeting to order at 7:00pm.

**II. Roll Call:** Commissioners Present: Bansal, Fong, Munzel, Singh and Tiumalu
Commissioners Excused: Matau, Mathur, Ramirez and Sharma
Commissioner Unexcused: None
City Staff Present: Renee Lorentzen – Recreation Services Manager
Stephanie Douglas – Recreation Services Supervisor
Lisa Ciardella – Public Services Assistant
City Council Liaison Excused: Council Member Barbadillo

**III. Seating of Alternates:** Bansal and Tiumalu

**IV. Approval of Agenda:** MOTION to approve the agenda for March 2, 2015 as submitted.
M/S: Bansal/Fong Ayes: All

**V. Approval of Minutes:** MOTION to approve the minutes from February 2, 2015 as submitted.
M/S: Matau/Sharma Ayes: All

**VI. Public Forum:** None

**VII. Announcements and Correspondence**

Stephanie Douglas announced that Jaime Chew gave birth to a baby girl. She also welcomed Samu Tiumalu as the new alternate commissioner.

**VIII. Old Business**

1. **Youth Sport User Fee**

**IX. New Business**

1. **Little League Farm Field Dedication**

2. **Review and Recommend the Parks Projects in the Proposed Capital Improvement Program 2015-2020 to the City Council**

3. **Review International Park Concept at Tom Evatt Park**

The City of Milpitas has received requests from international organizations representing the Philippines, India, Korea and Vietnam to have a public place to represent the culture of each respective country. Preliminary discussions have led to a concept of an "International Park" in Milpitas with the anticipation of other country representation in the future. Tom Evatt was identified as a possible

location due to its central and accessible midtown location. The thought is to start on the east side of the park and expand to the west side of Main St. dependent on other organizations interest. The location was questioned by the Commission as they did not feel that there is ample parking at the Tom Evatt park location. The suggested that parking be planned as part of the Main Street Improvements to allow for parallel street parking near the park, for the park. It was also mentioned to have the International Park idea represented at different parks throughout the city.

A group of San Jose State Students were in attendance to fulfill a class requirement. Vice Chair asked for their opinion of the park idea. They also felt that it would bring unity throughout the City, if the idea was spread out to several parks, rather than just isolating it to one park. They also gave the idea, if feasible to offer diagonal parking on the street rather than parallel parking to provide more spaces.

**4. Minor Public Parks Changes to 450 Montague**

At the February 2, 2015 PRCRC meeting a presentation was made about the proposed parks at 450 Montague. The Commission concurred with the proposed park layouts and suggested four names for the parks to be presented to City Council. Since that meeting the applicant has made revisions to the north/south vehicular access from E Capitol, moving the entire access road onto the subject site. That resulted in a reconfiguration of the orientation of Building 15 located at the southeast corner of the site. The change has eliminated the connecting paseo originally located between Building 15 and Buildings 14 and 16. The frontage of Building 15 will be conditioned to include wider sidewalks with double rows of trees to enhance the connection. Staff will also include a condition requiring a future minor realignment of the road transition onto the property to the east near Penitencia Creek to allow for a wider connection to the linear park along the creek. That change would not happen until the adjacent site redevelops.

MOTION to approve the modification of the orientation of Building 15 and the changed pathways and forward to City Council for final approval.
M/S: Bansal/Singh Ayes: All

## IX. Staff Report

None.

## X. Liaison Reports

1. City Council: None.
2. Community Advisory Commission: None.
3. Senior Advisory Commission: None.
4. Planning Commission: None.
5. Youth Advisory Commission: None.
6. Milpitas Historical Society:
7. Arts Commission: None

8. Recycling and Source Reduction Advisory Commission: None.

9. Santa Clara County Parks & Recreation:

**XI. Future Agenda Items**

**XII. Adjournment:**

With there being no further business, the meeting was adjourned at 8:25 p.m. to the next scheduled meeting on Monday April 6, 2015 at 7:00pm.

**FIGURE 1**
**450 Montague Access and Circulation**

ATTACHMENT H
MT14-0004/UP14-0024
450 Montague Expressway

**FIGURE 2**
**TASP Area and Future Improvements**

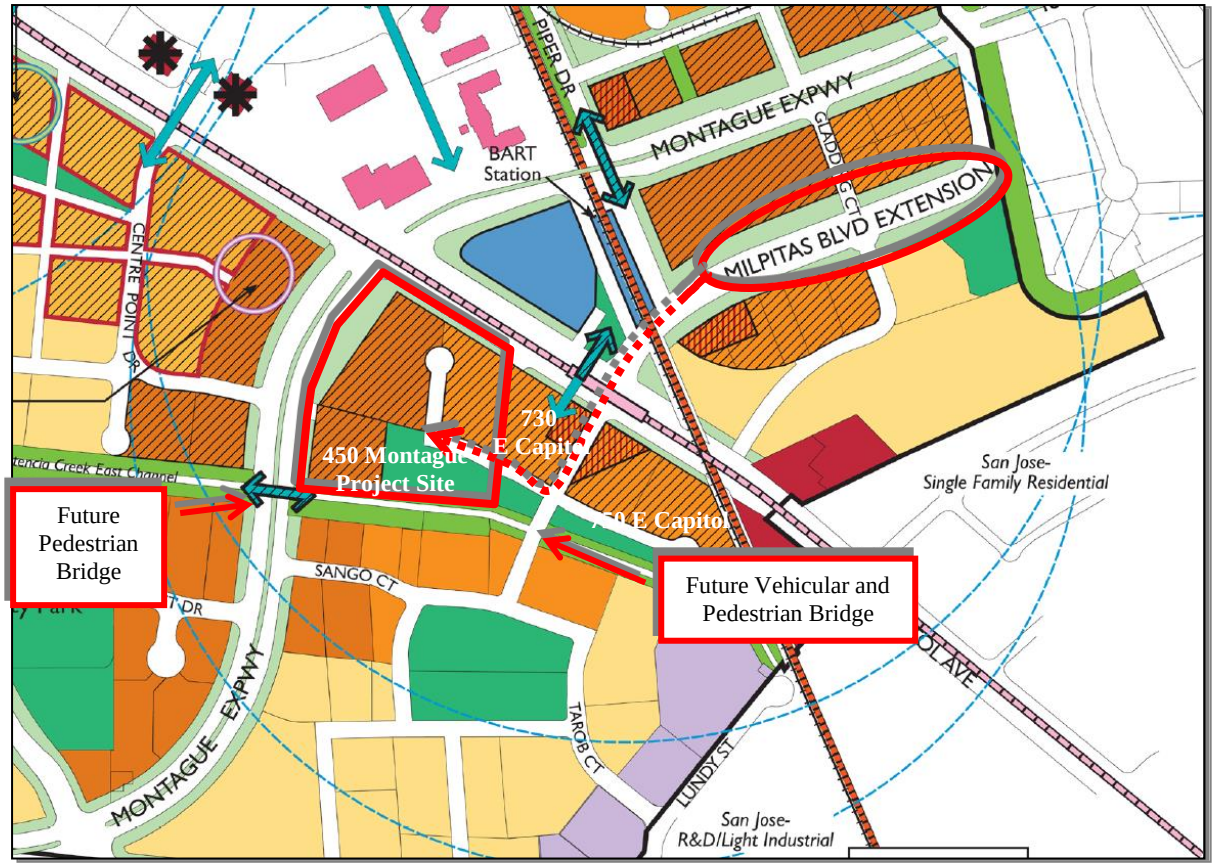
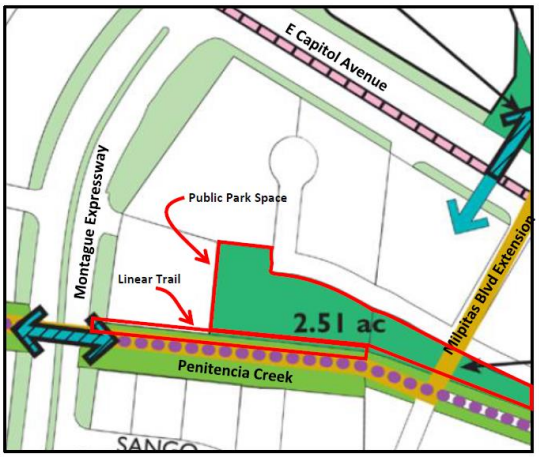
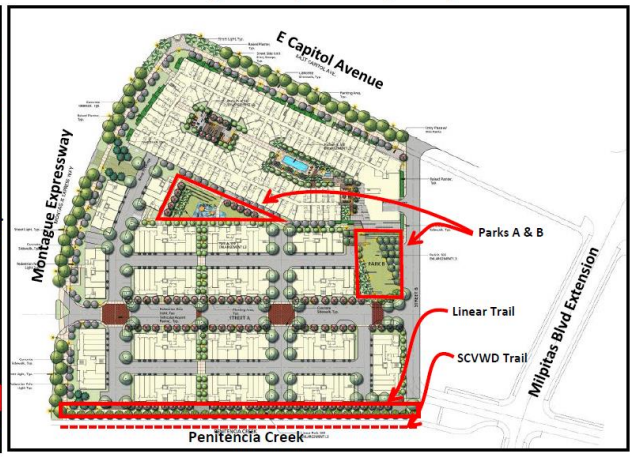


**FIGURE 3**
**Open Space Comparison**

**TASP - Open Space Plan**




**450 Montague Proposed Open Space**



**RESOLUTION NO. ____**

**A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF MILPITAS APPROVING SITE DEVELOPMENT PERMIT NO. SD14-0017, CONDITIONAL USE PERMIT NO. UP14-0024, AND TENTATIVE MAP NO. MT14-0004 FOR THE LENNAR RESIDENTIAL PROJECT LOCATED AT 450 MONTAGUE EXPRESSWAY**

**WHEREAS**, on October 23, 2014, an application was submitted by Lennar Communities for the development of 489 dwelling units on 10.47 acres (46.70 dwellings/acre) in a multi-story building and stacked flat units building with three and four stories located at 450 Montague Expressway (APNs: 86-037-004, -019, and -020) zoned Mixed Use Very High Density/Urban Residential with Transit Oriented Development & Site and Architectural Overlays (MXD3/R5-TOD-S) within the Transit Area Specific Plan; and

**WHEREAS**, the Planning Division completed an environmental assessment for the project in accordance with the California Environmental Quality Act (CEQA), and the Planning Commission recommended that the City Council determine this project exempt and that it is consistent with the Transit Area Specific Plan EIR approved on June 3, 2008; and

**WHEREAS**, on March 25, 2015, the Planning Commission held a duly noticed public hearing on the subject application, and considered evidence presented by City staff, the applicant, and other interested parties and unanimously recommended approval to the City Council of the project; and

**WHEREAS**, on April 21, 2015, the City Council held a duly noticed public hearing on the subject application, and considered evidence presented by City staff, the applicant, and other interested parties; and

**NOW THEREFORE**, the City Council of the City of Milpitas hereby finds, determines and resolves as follows:

1. The City Council has considered the full record before it, which may include but is not limited to such things as the staff report, testimony by staff and the public, and other materials and evidence submitted or provided to it. Furthermore, the recitals set forth above are found to be true and correct and are incorporated herein by reference.

2. The project is exempt pursuant to Section 15168(c) (2) of the CEQA Guidelines because the project is consistent with the certified EIR for the Transit Area Specific Plan adopted on June 3, 2008, by the City Council.

3. The project is consistent with the Milpitas Zoning Ordinance in that the project site meets the density and land use requirements.

4. The project is consistent with the Milpitas General Plan in that the project meets the density and land use requirements.

5. The project conforms to the intent and the specific requirements of the Transit Area Specific Plan, including the Development Standards and Design Guidelines in that the project creates a high-density residential project, and a component of public open space with trail.

6. <u>Site Development Permit (Section XI-10-57-03(F))</u>

   a. The layout of the site and design of the proposed buildings, structures and landscaping are compatible and aesthetically harmonious with adjacent and surrounding development.

      As detailed in the staff report and herein, the proposed project is consistent with this finding because the proposed development is of a higher quality architecture located adjacent to the new BART station and existing VTA station. The proposed project will implement the TASP streetscape along all frontages and install parks and trails as identified in the TASP. Although there will not be any other

residential building immediately adjacent to the site, it will be the first on the block and will act as an important anchor for the intersection.

b. The project is consistent with the Milpitas Zoning Ordinance.

The proposed project is consistent with this finding because the site is located in TASP and consistent with required density and requested a Conditional Use permit for minor deviations from the TASP as allowed in the TASP. The remaining portions of the development are consistent with setbacks, open spaces and other development standards. The table below indicates the project setbacks, height, parking and density.

**Table 1:**
**Summary of Development Standards**

| | **Zoning Ordinance/TASP** | **Proposed** |
|---|---|---|
| Density (Min/Max) | 41/75 units/acre | 46.7 units/acre |
| Setbacks (Minimum)<br>Capitol Avenue | <br>49’ | <br>49’ |
| Montague Expressway<br>East<br>South | 45’<br>20’<br>20’ | 45’<br>41’<br>25’ |
| Building Height (Maximum) | 12 stories | 5 stories |
| Parking (Minimum) | 668 residential + 121 guest = 780 | *834 spaces (272 Tandem)** |
| Maximum encroachment into setbacks by patios, stoops, etc. | ± 6’ | *6’* |
| Open Space | Min 40 sq. ft. for balconies and Min of 50 sq. ft. for patios | *Short 16% for some studios and 1 bedroom units on Capitol Ave.* * |
| * Indicates a Conditional Use Permit is required to allow the proposed deviations. | | |

Parking for the project complies with the Milpitas Municipal Code, which is a minimum of 780 parking spaces for the entire project based on the bedroom count and parking type (individual garage versus parking structure). The following table summarizes the parking required and provided for the project:

**Table 2**
**Parking Summary**

| **5-Story Rental Building** | | | |
|---|---|---|---|
| **Unit Type** | **Number of Units** | **Spaces Provided** | **Parking Ratio** |
| Studios | 45 | 317 | 1.10 |
| 1BR | 202 | | |
| 2BR | 104 | | |
| ***Total*** | ***351*** | | |
| **Tandem Parking Allowed (75% of total required parking)** | | 128 | 25% |
| **Guest Parking (15% of residential parking)** | | 67 | 15% |
| **Total** | | **512** | |

| | | | |
|---|---|---|---|
| ***Total Required by Code*** | | ***511*** | |
| | | | |
| **Stacked Flat Units** | | | |
| **Unit Type** | **Number of Units** | **Spaces Provided** | **Parking Ratio** |
| 2BR | 42 | 126 | 1.09 |
| 3BR | 92 | | |
| 4BR | 4 | | |
| ***Total*** | ***138*** | | |
| **Tandem Parking Allowed (50% of total required parking)** | | 112 | 50% |
| **Guest Parking (20% of residential parking)** | | 52 | 23% |
| **Total** ***Total Required by Code*** | | **322** ***269*** | |

Parking is provided in the parking structure under Building 1 and private garages in the Stacked Flat units and open on-site spaces. The project includes tandem spaces, which has different requirements for structured parking vs. private garage. The amount proposed in Building 1 is below the maximum allowed of 75% of the total required parking at 25%. The Stacked Flats are at the maximum allowed of 50%. The project meets the requirements for the remaining parking for the residential units and guest parking. The total parking provided on site meets the minimum required. A Conditional Use Permit is required to allow the use of tandem parking spaces, which has been discussed in the Conditional Use Permit Section.

c. The project is consistent with the Milpitas General Plan and Transit Area Specific Plan.

The proposed Project is consistent with this finding as discussed previously in the staff report and herein because the approved use is allowed in the TASP and it is consistent with the minimum density. The project furthers the goals and policies of the land use element by further implementing the project residential units within the TASP.

d. Specifically, the project supports the following General Plan principles and policies:

| **Guiding Principles and Implementing Policies** | | **Consistency Finding** |
|---|---|---|
| *2.a-G-2:* | *Maintain a relatively compact urban form.* | **Consistent** |
| *2.a-G3:* | *Provide for a variety of housing types and densities that meet the needs of individuals and families.* | **Consistent** |
| *2.a-G-5* | *A park-like setting will be created by a series of local parks, school sites, trails, and a greenway system laced throughout all living areas.* | **Consistent** |
| *2.a-G-7* | *When considering development proposals, seek "community benefit," such as upgrading infrastructure facilities, constructing new infrastructure facilities, and funding contributions to programs.* | **Consistent** |
| *2.a-I-1* | *New developments should not exceed the building intensity limits established in the General Plan.* | **Consistent** |
| *2.a I-2* | *Promote development within the incorporated limits which acts to fill-in the urban fabric rather than providing costly expansion of urban services into outlying areas.* | **Consistent** |

| Guiding Principles and Implementing Policies | | Consistency Finding |
|---|---|---|
| *2.a-I-8* | *Establish redevelopment projects to secure funds that can be used to attract commercial, industrial and residential development in order to eliminate blight and improve an area.* | **Consistent** |
| *2.a 1-31* | *Develop the Transit area, as shown on the Transit Area Plan, as attractive, high density, urban neighborhoods with a mix of land uses around the light rail stations and the future BART station. Create pedestrian connections so that residents, visitors and workers will walk, bike, and take transit. Design streets and public spaces to create a lively and attractive street character, and a distinctive identity for each sub-district.* | **Consistent** |
| *2.a 1-32* | *Require development in the Transit area to conform to the adopted design guidelines/requirements contained in the Transit Area Plan.* | **Consistent** |
| *2.b-I-3* | *Provide housing opportunities in Milpitas by meeting the City's regional fair-share housing obligations.* | **Consistent** |

7. Conditional Use Permit Amendment (Section XI-10-57-04-(F)(1&2))

a. The proposed use, at the proposed location will not be detrimental or injurious to property or improvements in the vicinity nor to the public health, safety and general welfare.

The proposed project is located with the Transit Area Specific Plan and is consistent with the Goals, Policies and Development Standards of the TASP. The project will improve the property frontages by installing new sidewalks, street trees, streetlights and landscaping to enhance the area and to provide safe pedestrian access around the site. The requested deviations from the TASP development standards and Zoning Code standards have been found to be acceptable by staff as noted in the staff report. Overall, the development will improve the site and enhance the intersection of Montague Expressway and East Capitol Avenue.

b. The proposed use is consistent with the Milpitas General Plan.

See discussion above.

c. The proposed use is consistent with the Milpitas Zoning Ordinance.

In addition to the TASP Conditional Use Permit allowances, the Zoning Code also requires approval of a Conditional Use Permit for deviations from Code provisions for the following:

- Tandem parking: The Zoning Code allows the uses of tandem parking spaces with the approval of a Conditional Use Permit. The Zoning Code allows a maximum of 75% for structured garage spaces and 50% for private garages. The proposed development includes 128 tandem spaces in the garage (25%) and 112 spaces in private garages (50%). The proposed tandem spaces are within the maximums allowed. In addition, this type of unit provides housing opportunities for a larger age group range of residents. Each building will have a main lobby and elevator to each floor. Each garage space has a private entrance into the building leading to the main lobby and elevator. The site is in close proximity to the Light Rail and the future BART station; therefore, staff is in support of the proposal. In addition, staff has added a Condition of Approval requiring the applicant to enter into an agreement with VTA for the Residential Eco Pass program. This will allow residents to receive the Eco

Passes (or Clipper Cards) at a discounted rate due to the developments proximity to VTA Light Rail and BART.

- Private Open Space: The Zoning Code requires a minimum of 40 square feet for balconies and 50 square feet for patios for all development. The applicant is proposing that the 55 units do not have balconies in Building 1. They are a mix of studios and junior one bedrooms. The site will be providing ample outdoor spaces for residents and this will also allow for more livable space in each unit, which is needed in smaller units. The project will have podium open space and the two parks and trail on the site.

  Based on the analysis above, the City Council supports the requested deviations through the Conditional Use Permit process.

d. The proposed use is consistent with the Transit Area Specific Plan.

The TASP is a conceptual land use document designed in 2008 and it is being implemented at a faster rate as we near the opening of the future BART station. The TASP plan also acknowledged that there may be some deviations from the plan as they relate to development standards and it established a process for consideration through a Conditional Use Permit. The proposed project includes the following deviations from the adopted TASP plan:

- *Driveway access on Montague Expressway and Capitol Expressway.*
  The proposed project can only be accessed from Montague Expressway and East Capitol Avenue since the Milpitas Boulevard Extension has not been constructed and the future Milpitas Boulevard Extension is located on land not owned or controlled by the applicant. The access for both driveways will be right in and right out with the driveway on Capitol being reduced to right in only once the Milpitas Extension has been constructed.

- *Underground garage extending more than 5 feet above grade.*
  The TASP limits the amount that an underground garage may extend above the grade to 5 feet. The proposed garage does extend more than 5 feet in some places on the site, which is a result of the site topography. The project uses raised planters, planter beds and site landscaping to shield these elements from view, which reduces the visual impacts of these sections.

- *Park Location*
  The TASP also called for a larger park location closer to Penitencia Creek for the 450 Montague site. The applicant proposed the park at an internal location to benefit the site. The parks will still be open to the public and they will be required to provide way-finding signage. Furthermore, staff has presented the proposed park locations to the Park, Recreation and Cultural Resources Commission for their input and possible names for the park.

  The requested TASP deviations can be supported, as they will be mitigated with the development or future roadway improvements. The proposed use, at the proposed location will not be detrimental or injurious to property or improvements in the vicinity or to the public health, safety, and general welfare in that the project will improve the area.

  The deviation from the Transit Area Specific Plan Standard meets the design intent of the Specific Plan and does not detract from the overall architectural, landscaping and site planning integrity of the proposed development in that the streetscape treatment to the access off of Montague Expressway and E Capitol will be consistent with the TASP standards as conditioned.

  The deviation from the Transit Area Specific Plan Standard allows for a public benefit not otherwise obtainable through the strict application of the Zoning Standard in that the project will complete the following:

- A Feasibility Study for the Milpitas Avenue Extension Vehicular and Pedestrian Bridge that will span Penitencia Creek and eventually connect to Sango Court.
- Prepare Construction Drawings for the proposed bridge once the Feasibility Study has been vetted through the City and the Santa Clara Valley Water District and other require agencies.
- Design and construction drawings for the Milpitas Avenue Extension from East Capitol Avenue to the new bridge.
- Provide construction cost estimates for the Milpitas Avenue Extension.
- Contribute 53% of the total construction costs of the Milpitas Avenue Extension.
- A Feasibility Study for the new Pedestrian Bridge over Montague Expressway near Penitencia Creek.
- Prepare Construction drawings and cost estimates for the construction of the new Pedestrian Bridge.

8. Major Tentative Map Findings (Section XI-1-20.01)

   a. The tentative subdivision map is consistent with the Milpitas General Plan

      As discussed in detail in the staff report and herein, the subdivision map complies with the TC Zoning District and to the development standards of the Zoning Code and General Plan. The proposed Project type, density and size are all consistent with the General Plan Land Use Designation for the site.

9. The City Council approves Site Development Permit No. SD14-0017, Conditional Use Permit No. UP14-0024, and Tentative Map No. MT14-0004 for the Lennar Residential Project at 450 Montague Expressway, subject to the above findings, and the Conditions of Approval attached hereto as **Exhibit 1**.

10. The City Council formally adopts the name of _____West for Park A and _____ _____ East for Park B located at 450 Montague Expressway.

PASSED AND ADOPTED this _____ day of _____, 2015, by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

ATTEST:

_____
Mary Lavelle, City Clerk

APPROVED:

_____
Jose S. Esteves, Mayor

APPROVED AS TO FORM:

_____
Michael J. Ogaz, City Attorney

**EXHIBIT 1**

**CONDITIONS OF APPROVAL**
**SITE DEVELOPMENT PERMIT NO. SD14-0017, CONDITIONAL USE PERMIT NO. UP14-0024, TENTATIVE MAP NO. MT14-0004 AND EXCEPTION TO WATER CONSERVATION ORDINANCE NO. 204.2 FOR THE LENNAR RESIDENTIAL PROJECT INCLUDING A 5-STORY PODIUM BUILDING WITH 351 DWELLING UNITS AND 138 CONDOMINIUM STACKED FLAT UNITS LOCATED AT 450 MONTAGUE EXPRESSWAY**

**GENERAL CONDITIONS**

1. General Compliance. The applicant and owner, including all successors in interest (collectively "Permittee") shall comply with each and every condition set forth in this Permit. This SITE DEVELOPMENT PERMIT NO. SD14-0017, CONDITIONAL USE PERMIT NO. UP14-0024, TENTATIVE MAP NO. MT14-0004 (collectively "Permit") shall have no force or effect and no building permit shall be issued unless and until all things required by the below-enumerated precedent conditions have been performed or caused to be performed and this Resolution has been recorded by the Permittee with the Santa Clara County's Recorder Office and a copy shall be provided to the Planning Department. (P)

2. Effective Date. Unless there is a timely appeal filed in accordance with the Milpitas Zoning Code, the date of approval of this Permit is the date on which the decision-making body approved this Permit.

3. Acceptance of Permit. Should Permittee fail to file a timely appeal within twelve (12) calendar days of the date of approval of this Permit, inaction by Permittee shall be deemed to constitute each of the following:
   a. Acceptance of this Permit by Permittee; and
   b. Agreement by the Permittee to be bound by, comply with, and to do all things required of or by Permittee pursuant to all of the terms, obligations, and conditions of this Permit.

4. Modifications to project. Any deviation from the approved site plan, floor plans or other approved submittal shall require that, prior to the issuance of building permits, the Permittee shall submit modified plans and any other applicable materials as required by the City for review and obtain the approval of the Planning Director or Designee. If the Planning Director or designee determines that the deviation is significant, the Permittee shall be required to apply for review and obtain approval of the Planning Commission or City Council, in accordance with the Zoning Ordinance. (P)

5. Previous Planning Application: Previously approved Planning Applications for a Site Development Permit No. SD12-0009, Conditional Use Permit UP12-0024, and Tentative Map No. MT12-0005 to allow the development of 474 dwelling units on 7.98 acres (59 dwellings/acre) in a multi-story building located at 450 Montague Expressway (APN: 86-037-004, -020, and -021) shall be rescinded and replaced completely with the adoption of this Resolution. **(P)**

6. Conditions of Approval. As part of the issuance of building permits, the Permittee shall include within the first four pages of the working drawings for a plan check, a list of all conditions of approval imposed by the final approval of the project. **(P)**

7. Written Response to Conditions. The Permittee shall provide a written response to the Conditions of Approval indicating how each condition has been addressed with the building permit application submittal. **(ALL)**

8. Permit Expiration. Pursuant to Section XI-10-64-06 of the Milpitas Zoning Code, this Permit shall become null and void if the activity permitted by this Permit is not commenced within two (2) years from the date of approval, or for a project submitted with a tentative map, within the time limits of the approved tentative map. Pursuant to Section XI-10-64.06(B) of the Milpitas Zoning Code, an activity permitted by this Permit shall be deemed to have commenced when the project:
   a. Completes a foundation associated with the project; or
   b. Dedicates any land or easement as required from the zoning action; or
   c. Complies with all legal requirements necessary to commence the use, or obtains an occupancy permit, whichever is sooner. **(P)**

9. Time Extension. Pursuant to Section XI-10-64.07 of the Milpitas Zoning Code, unless otherwise provided by State law, Permittee shall have the right to request a one-time extension of the Permit if the request is made in writing to the Planning Division prior to the expiration date of the approval. **(P)**

10. Project Job Account. If Permittee's project job account is at any time delinquent or below the required deposit amount, City will not continue to review or process the application until Permittee's private job account is paid in full and the required deposit has been made. Additionally, prior to the issuance of any building permit or occupancy permit, as applicable, Permittee shall pay in full the project account balance and establish a remaining balance of at least twenty-five percent (25%) of the required initial deposit. **(P)**

11. Notice. Pursuant to California Government Code Section 66020, any protest filed in court relating to the imposition of fees, dedication, reservations, or other exactions to be imposed on the development project shall be filed within ninety (90) days after the date of the adoption of this Resolution. This provision serves as notice from the local agency to the Permittee that the ninety (90) day period in which the Permittee may file a protest has begun under California Government Code Section 66020(d)(1). **(P)**

12. Cost and Approval. Permittee shall fully complete and satisfy each and every condition set forth in this Resolution and any other condition applicable to the project to the sole satisfaction of the City. Additionally, Permittee shall be solely responsible and liable for the cost to satisfy each and every condition. Permittee shall pay all required fees and charges to City at the rate in effect at time of building permit issuance, or, the rate in effect when the fees and charges are due and paid in full to City. There is no vesting of any fees or charges with the adoption of this Resolution. **(P)**

13. Conditions. Each and every condition set forth in this Exhibit shall apply to the project and continue to apply to the project so long as the Permittee is operating the project under the permits and approvals in this Resolution.

14. Compliance with Laws. The construction, use and all related activity authorized under this Permit shall comply with all applicable local, state and federal laws, rules, regulations, guidelines, requirements and policies. (CA/P)

15. Indemnification. To the fullest extent permitted by law, Permittee shall indemnify, defend with counsel of the City's choosing, and hold harmless City, its City Council, its boards and commissions, officials, officers, employees, and agents from and against any and all claims, demands, obligations, damages, actions, causes of action, suits, losses, judgments, fines, penalties, liabilities, costs and expenses (including without limitation, attorney's fees, disbursements and court costs) of every kind and nature whatsoever which may arise from or in any manner relate (directly or indirectly) to (i) City's approval of the project, including but not limited to, the approval of the discretionary permits, maps under the Subdivision Map Act, and/or the City's related determinations or actions under the California Environmental Quality Act, and (ii) Permittee's construction, operation, use, or related activity under this Permit. This indemnification shall include, but not be limited to, damages awarded against the City, if any, costs of suit, attorneys' fees, and other expenses incurred in connection with such claim, action, causes of action, suit or proceeding whether incurred by applicant, City, and/or the parties initiating or bringing such proceeding. Permittee shall indemnify the City for all of City's costs, attorneys' fees, and damages, which City incurs in enforcing the indemnification provisions set forth in this condition. Permittee shall pay to the City upon demand or, as applicable, to counsel of City's choosing, any amount owed pursuant to the indemnification requirements prescribed in this condition.

16. Revocation, Suspension, Modification. This Permit may be suspended, revoked, or modified in accordance with Section XI-10-63.06 of the Milpitas Zoning Code.

17. Severability. If any term, provision, or condition of this Permit is held to be illegal or unenforceable by the Court, such term, provision, or condition shall be severed and shall be inoperative, and the remainder of this Permit shall remain operative, binding, and fully enforceable. **(P)**

18. Permittee shall develop the approved project in conformance with the approved plans approved by the City Council on April 21, 2015, in accordance with these Conditions of Approval. Any deviation from the approved site plan, elevations, materials, colors, landscape plan, or other approved submittal shall require that, prior to the issuance of

building permits, the Permittee shall submit modified plans and any other applicable materials as required by the City for review and obtain the approval of the Planning Director or Designee. If the Planning Director or designee determines that the deviation is significant, the owner or designee shall be required to apply for review and obtain approval of the City Council or City Council, as applicable, in accordance with the Milpitas Zoning Code. **(P)**

19. Compliance with Fire Department and CA Fire Code. The Project shall comply with the requirements of the Milpitas Fire Department and the CA Fire Code. Changes to the site plan and/or building(s) requires review and approval by the Fire Department. **(F)**

20. CEQA REVIEW (2008 TASP FEIR & 2015 INITIAL: STUDY) : The project shall be subject to all applicable mitigation measures identified with the adopted 2008 TASP DEIR and FEIR (SCH# 2006032091) and those carried over into the 2015 Initial Study that was prepared for the project. The Permittee shall include a written response to the Mitigations identified in the 2015 Initial Study Document with the building permit submittal indicating how each mitigation has been addressed. **(P)**

21. Climate Action Plan Compliance. Prior to issuance of any building permit, the Permittee shall provide a final version of the Appendix C of the Climate Action Plan (CAP). The Permittee shall clearly demonstrate compliance with the CAP. **(P)**

22. Project Phasing Plan: The Permittee shall submit a separate project-phasing plan to the Building Department for review. The phasing plan shall be consistent with all construction-timing conditions contained within the approval and address access, public safety, fire safety and solid waste access during construction. The Permittee shall contact the Building Department for complete building permit submittal requirements. **(ALL)**

23. Garage Parking for the Stacked Flats: The garages spaces for the stacked flats shall be maintained and available for parking for two cars at all times. In addition, the upper panel of the garage doors shall be maintained with clear glass to allow for visual inspection by the property management or Home Owners Association (HOA); this shall be noted in the CC&Rs. The property manager or HOA shall be responsible for enforcement of parking in private garages. **(P)**

24. On-Site Security: The Permittee shall provide 24-hour security of the site to ensure that no additional vandalism occurs on the site until the existing buildings have been demolished and the entire site is secured. The Permittee shall keep the site clean and free of debris. (P)

**PROJECT SPECIFIC CONDITIONS**

25. Construction Timing: No more than sixty-nine (69) building permits for the stacked flat units shall be issued before issuance of the podium apartment building permit (Building One (1) on the site plan). No more than one hundred and three (103) stacked flats residential units shall receive a Certificate of Occupancy (temporary or final) before completion of the podium for Building One and a Certificate of Occupancy (temporary or final) has been received for the first phase of the apartment building. The first apartment building phase (approximately 80 units) shall be precisely determined prior to the issuance of the first building permit. The actual numbers of the stacked flats may vary slightly to accommodate the building type and phasing plan subject to review and approval by the Director of Planning and Neighborhood Services. **(ALL)**

26. Architectural Details. Prior to issuance of any building permit, the following shall be demonstrated in the construction plans for the project:
    a. The stucco texture for the walls of the building shall be of sand 20/30 finish.
    b. The stucco for all trim features around windows and doors shall be a trowel smooth finish.
    c. The plans shall clearly demonstrate a 1.5”-2” inch recess for all windows located in stucco wall faces. The Permittee may propose alternatives to achieve the recess subject to review by the Planning Director.
    d. The Cementitious Panels shall be mounted in a manner that is clean and consistent with the architectural style. The Permittee shall provide a mock-up for staff review and approval prior building permit issuance.
    e. The raised planter beds located around the podium building shall be consistent with the masonry veneer (color and texture) located at the leasing lobby and second entrance.
    f. The white bay elements on building 1-foot shall be reduced in height by 1 foot.

g. The exterior material for the white bay elements shall be further refined to enhance the elements by using a smooth three coat hand troweled stucco surface.
h. Final details for the balcony railings for both product types shall be provided to Planning Division for review and approval. The railings shall be a high quality material and provide architectural interest.
i. The entry elements for Stacked Flats Buildings B and E (6-Plex) shall be further enhanced with the use of specimen trees adjacent to the entry and enhance entry awning.

All architectural conditions shall be reviewed and approved by the Director of Planning and Neighborhood Services prior to issuance of building permits for any construction. **(P)**

27. Landscape/Hardscape. Prior to issuance of any building permit, the following shall be demonstrated in the construction plans for the project:
    a. All benches and low walls shall be constructed with a patterned inset to discourage skateboarding.
    b. The plant material palate shall be enhanced to include additional seasonally fragrant plants. The landscape plan legend shall clearly identify fragrant plant species.
    c. Plantings around the trash enclosure shall be enhanced to include climbing vines on the enclosure and taller evergreen screening such as Fern Pine (Podocarpus).
    d. An alternate plant for Sequoia Sempervrens will need to be included in the building permit set. This species will not grow with reclaimed water.
    e. Raised planter beds around the staked flats shall be covered in a material that is complimentary to the development.
    f. Exposed CMU or split faced CMU is not allowed. All CMU will need to be treated appropriately to compliment the buildings and site. **(P)**

28. Public Parks: Both public parks (Park A and Park B) and associated amenities shall be fully constructed and accepted by City prior to the issuance of Certificate of Occupancy (temporary or final) for seventy-five percent (75%) of the total residential units in the development. **(P)**

29. Southern End of Emergency Vehicle Access: When 730 East Capitol Avenue redevelops, the alignment of the southern bend of the EVA shall be reevaluated to allow for a larger paseo connection from the linear trail up to Park B. The Permittee and future HOA shall agree to the proposed changes and enhancements, which will be at the expense of the developer of 730 E Capitol Avenue. The proposed changes shall be subject to review and approval by the Director of Planning and Neighborhood Services and the Public Works Director. **(P)**

30. Creek Trail Connection: The trail shall provide a connection (along the private property) to the adjacent site to the east (730 E Capitol). The pedestrian path will need to extend along the side of the trash enclosure to the EVA and be consistent with TASP Figure 3-6. In addition, the Permittee shall install a new decomposed granite trail along the creek on the maintenance road. Permittee shall solely be responsible for all permitting required from the SCVWD and other agencies. **(P)**

31. Mechanical Venting: All horizontal mechanical venting shall be located on the balconies of each unit or a return wall. If neither option is available, then venting shall be directed through chase to the roof. All vent covers on the exterior shall be the minimum size needed, painted to match the building and be clearly indicated on the architectural elevations. Venting for the on-demand water heaters shall be a high quality material (see Taylor Morrison on McCandless) and may be located above the garage doors for the staked flats and on the balconies in Building 1 if used. The Permittee may propose some alternatives to achieve the goal of screening all mechanical venting, provided the Permittee shall submit a proposal for review by the Planning Director. **(P)**

32. Signs: The Permittee shall submit project identification signs for the review by the Planning Division prior to any Building Permit issuance. **(P)**

33. Density Averaging Agreement: Prior to Final Map approval, the Permittee shall be required to enter into a Density Averaging Agreement approved by City Attorney and Planning Director. The Density Averaging Agreement shall be signed by the Permittee and recorded prior to approval of the Final map. **(P)**

34. County Transportation Approval: The Permittee shall obtain final approval from the County Transportation Department prior to issuance of any building permit for any site improvement adjacent to County right of way. **(P)**

35. Santa Clara Valley Water District (SCVWD): The Permittee shall obtain final approval from the SCVWD for trail improvements on along the creek maintenance road. Final approval and construction shall be completed prior to final Certificate of Occupancy for the last phase in the development (the Phasing Plan shall clearly denote this requirement). **(P)**

36. Public Improvements. Prior to final map approval, the Permittee shall obtain design approval and bond for all necessary public improvements along Capitol Avenue and Montague Expressway including but not limited to the following:
    a. Right of Way. The Permittee shall dedicate all necessary rights-of-way and public easements to the City for the proposed public sidewalk improvements and utilities to the satisfaction of the City Engineer.
    b. Frontage Improvements. Prior to final map approval, Permittee shall submit improvement plans for the frontage improvements along Montague Expressway and Capitol Avenue including curbs, gutters, sidewalks, pavement, striping, hardscape, streetlights, landscaping, trees, irrigation, and utilities in conformance with the Transit Area Specific Plan, City Standard Drawings and guidelines to the satisfaction of the Planning Director and the City Engineer.
    c. Pedestrian Creek Trail. Prior to final approval or building permit issuance, the Permittee shall submit improvement plans for the Pedestrian Creek Trail. The trail shall be designed to drain away from the Penitencia Creek. All run-off from impervious surface shall be treated prior to discharge to the creek or the public storm drain system. Permittee shall submit written approval from the Santa Clara Valley Water District for the trail plans.
    d. Utility Relocation. Underground utilities (such as joint trench conduit, utility boxes, etc.) shall be relocated and adjusted as necessary to accommodate the approved frontage sections to the satisfaction of the Planning Director and the City Engineer.
    e. Occupancy. All public improvements shall be installed and accepted prior to the issuance of the first Certificate of Occupancy. **(E)**

37. Onsite Improvements.

    a. Plan Set Coordination. Permittee shall coordinate all plans showing landscape, utility, and hardscape improvements in order to resolve conflicts. **(ALL)**

    b. Modifications to the Site Plan. Any modifications to the site plan shall require an amendment to the tentative map unless otherwise directed by the Planning Director and the City Engineer.

    c. Storm Water Control Plan (SWCP). Prior to any building permit issuance, the Permittee shall revise the SWCP to increase the amount of Low Impact Development (LID) treatment within the project boundary. Credit for Special Project status will not be applied until all LID treatment opportunities are exhausted on the site to the satisfaction of the City Engineer. All changes shall be reflected on the SWCP report and plan sheet. The treatment summary sheet shall be updated.

    d. Interim Bioretention Treatment. Permittee shall maintain the interim 100% LID treatment facility located on the future Building 18 site until issuance of the building permit for the superstructure of Building 1.

    e. Utility Meter Layout. The Permittee shall include a detail in the Site Improvement plan set showing the size, dimensions and layout of all utility meters and associated appurtenances. The layout design shall comply with all separation and access requirement.

    f. Building Permit Issuance. The Permittee shall follow the floodplain removal protocol outlined in the project's floodplain analysis. Construction permits will not be issued until each milestone in the analysis is achieved.

    g. Floodproofing. The Permittee shall provide a separate flood proofing report describing the floodproofing for all structures that are not removed from the Special Flood Hazard Area. The report shall demonstrate compliance with NFIP Regulations and technical bulletins. The report shall include the floodproofing of mechanical

equipment, elevator shaft and equipment, and utilities. Flood proofing details shall also be included in the site improvement plan set and on the floodplain management sheet.

h. Site Improvement Plan Set. Prior to any building permit issuance, the Permittee shall submit a complete site improvement plan set, including but not limited to a separate plan sheet for floodplain management, storm water control, emergency vehicle access, and solid waste handling.

i. Retaining Wall at Street B. The Permittee shall revise the design of the retaining wall to allow for the capture/conveyance of runoff received at the property line. **(E)**

38. Transportation & Traffic Engineering.

a. Emergency Vehicle Access (EVA). The Permittee shall provide a twenty-six feet (26') Emergency Vehicle Access easement along Street B on the subject site. **(P/E)**

b. Temporary Right-Out Access to Capital Avenue. Right-out vehicular access on to Capital Avenue is authorized on a temporary basis until the West Leg of S. Milpitas Boulevard Extension (WLSMBE) and the private street along Penitencia Creek are constructed and open to the public. Upon the acceptance of WLSMBE, right-out access to Capital Avenue shall be revoked and the Permittee, and all successors in ownership, shall design and construct all on-site and off-site improvements necessary to restrict the vehicular access on to Capital Avenue to the satisfaction of the City Traffic Engineer. Prior to any building permit issuance, the Permittee shall include the design of the ultimate vehicular access to Capital Avenue in the construction documents submitted for onsite and offsite approvals. The Permittee shall provide full disclosure of the temporary right-out access on Capital Avenue to all future residents, tenants, and home owners/property management associations of this development. This condition and all associated exhibits shall be included in the Conditions, Covenants, and Restrictions (CC&R) for both associations. **(E)**

c. Right-Out Access to Montague Expressway. Prior to final map approval, the Permittee shall obtain Santa Clara County Roads and Airports' (County) approval of the final access design for right-in and right-out vehicular access to Montague Expressway. If County approval is not obtained, the Permittee shall revise the site plan and amend the tentative map to the satisfaction of the Planning Director and the City Engineer. **(E)**

d. Montague Expressway Pedestrian Bridge Overcrossing & Land Dedication: The Permittee shall be responsible for the design, construction drawings and land dedication to accommodate the Montague Expressway Pedestrian Bridge Overcrossing as identified in the TASP. The following items shall be required:

i) Conceptual Design Study: The Permittee shall submit conceptual designs for the pedestrian overcrossing over Montague Expressway adjacent to Penitencia Creek prior to Final Map Approval. The Conceptual Design shall include studies, survey information and three bridge design alternatives for architectural design. The Permittee shall also coordinate with the County during the development of the design document.

ii) Construction Drawings: Subject to City review and approval, the Permittee shall complete thirty percent (30%) construction drawings prior to First Certificate of Occupancy (temporary or final) for any residential units and Final Construction drawings prior to the Certificate of Occupancy (temporary or final) for seventy-five percent (75%) of the total residential units in the project. The final construction documents shall include all studies, reports, estimates, easements, and dedications required to complete the design and shall be submitted to the City for review and approval. Final construction drawings shall not commence until the conceptual design is approved by the City and the Santa Clara County Roads and Airports. The City Engineer and Planning Director may grant additional time to satisfy this condition due to coordination with outside agencies. The Permittee shall request changes in the timeline in writing and include a revised project schedule for review and approval. The Permittee shall dedicate all land and easements required to construct, access, and maintain the overcrossing structure and landing.

iii) TASP Credit: The pedestrian overcrossing over Montague Expressway is an identified Transit Area Specific Plan (TASP) public improvement and costs for the design and construction drawings will be credited through the TASP Fee Structure. Fee credit will not be provided until all items above have been completed and all supporting documentation verifying all associated costs. All costs shall be tracked separately from the Penitencia Creek Bridge costs. Final credit will be subject to City review of all materials provided. Prior to Final Map Approval, a separate Fee Credit shall be entered into between the parties subject to City Attorney and City Engineer approval. **(P/E)**

e. West Leg of S. Milpitas Boulevard Extension (WLSMBE). The construction of WLSMBE is a required improvement for the ultimate circulation of the 450 Montague Expressway, 730 East Capitol Avenue, and 750 East Capitol Avenue developments. The design of WLSMBE shall include the design of the East Penitencia Creek Vehicular/Pedestrian Crossing and all related utility relocations. The roadway dedication, design, permitting, and construction of WLSMBE and all associated designs, studies, reports, permits and improvements are a shared cost between the three developments and the costs are distributed in proportion to each development's land area. The Permittee shall comply with the following:

i) East Penitencia Creek Vehicular/Pedestrian Crossing Feasibility Study. Prior to Final Map Approval, the Permittee shall submit a study analyzing:

(1) the feasibility of a vehicular/pedestrian bridge across East Penitencia Creek,
(2) the feasibility of alternative crossings, and
(3) a final recommendation based on cost, design, constructability, schedule, permitting (including CEQA), and maintenance.
(4) the feasibility of incorporating potable water and recycled water pipelines in the bridge deck.

The study shall include outside agency coordination, utility relocation, and engineering estimates for design, construction and permitting of each alternative. The feasibility study shall also identify the required permitting for each alternative.

ii) East Penitencia Creek Vehicular/Pedestrian Crossing. Prior to issuance of first Certificate of Occupancy (temporary or final) for any residential unit, the Permittee shall submit construction documents, including plans, studies, reports, and estimates for the alternative identified in the feasibility study or as directed by the City Engineer for review and approval.

iii) East Penitencia Creek Vehicular/Pedestrian Crossing. The East Penitencia Creek Vehicular/Pedestrian Crossing is an identified Transit Area Specific Plan (TASP) item and costs for the feasibility study and construction drawings will be credited through the TASP Fee Structure in a separate Fee Credit Agreement to be approved by the City Council prior to final map approval. Final credit would occur after all documents have been provided to the City for review and approval and all supporting documentation for all costs associated with the study and design. These documents shall be tracked separately from the WLSMBE and Pedestrian Overcrossing documents. **(E)**

iv) WLSMBE Design. Prior to Final Map Approval, the Permittee shall prepare design documents for the WLSMBE Extension. WLSMBE shall extend from Capitol Avenue to East Penitencia Creek and shall align with the proposed S. Milpitas Boulevard Extension from Montague Expressway to Capital Avenue. The WLSMBE typical cross-section shall conform to the TASP approved sections and shall include, but not be limited to, one 11' southbound lane, one 11' northbound lane, one 11' northbound right turn lane, a Class II bike lane in each direction of travel, a 4' minimum raised median island, an 8' parking lane on one side of the street, a 7' planting strip, and 5' sidewalk on each side of the street or as directed by the Planning Director and the City Engineer. WLSMBE design shall include buried utilities such as potable water pipe, pressure reducing valve and vault, recycled water pipe, storm drainpipe, and sanitary sewer pipe. The pressure reducing valve shall be connected into the Zone 2 piping on the east side of Capitol Avenue and the Zone 1 piping on the west side of Capitol Avenue. The WLSMBE street elevation shall be designed and constructed to accommodate the future crossing over East Penitencia Creek pursuant to the TASP-designated street network and the East Penitencia Creek Crossing feasibility study.

v) WLSMBE Improvements. Prior to issuance of first Certificate of Occupancy (temporary or final) for any residential unit, the Permittee shall submit construction documents, including plans, studies, reports, and estimates for the WLSMBE Improvements to the City for review and approval. The construction documents shall include all related improvements such as the relocation of existing utilities and the installation of traffic signals. Prior to the issuance of any Certificate of Occupancy, the Permittee shall pay for WLSMBE improvements pursuant to the condition below to the satisfaction of the City Engineer.

vi) WLSMBE Cost Share. Prior to issuance of the first Certificate of Occupancy (temporary or final) for any residential unit, the Permittee shall submit an engineer's estimate for all associated costs for the WLSMBE design, construction, management, and land cost assumption of 12% of the total cost of the project and an ENR Construction Cost Index projected out 5 years to the satisfaction of the City Engineer, or land value may be based on fair market value completed by an appraiser subject to City review and approval. The Permittee shall pay to the City a fair share contribution of 53% (based on site area of 10.47 acres) of the estimated costs. The Permittee fair share contribution will be credited for all design costs. The Permittee shall pay the fair share contribution at issuance of Certificate of Occupancy (temporary or final) for any residential unit or final approval of the WLSMBE construction plans, whichever occurs first. **(E)**

f. Future Traffic Signal at Capitol and WLSMBE. Prior to any building permit issuance, the Permittee shall pay a fair share contribution for the construction of a new traffic signal at the E. Capitol Avenue and WLSMBE intersection as approved by City Engineer**. (E)**

39. Utilities. The Permittee shall comply with the following conditions:

a. Water System. Project shall be served by SCVWD Zone 1. A Water Supply Assessment is not required. Contractual water capacity is available. **(E)**
b. Water Service. Separate water meters for domestic and fire services shall serve building one. All landscape located inside the Building 1 footprint shall be served by a separate irrigation meter. Buildings 2-18 may be served by a combined domestic and fire service. Each parcel shall have independent service or shall provide recorded documents allowing reciprocal shared rights. Permittee is alerted that on-site pumping to upper floors may be required. Permittee shall provide backflow protection on all water connections, including fire services, in accordance with City guidelines and USC Manual of Cross Connection Control. **(E)**
c. Hydraulic modeling is required to verify capacity of the adjacent water system piping and determine points of connection to the water and sanitary sewer systems. Permittee shall authorize the City to proceed with hydraulic modeling. All charges shall be applied to Permittee's PJ Account. **(E)**
Waterline Relocation. Permittee is proposing to relocate the public water line in Montague Expressway. The water pipeline shall be located in Montague Expressway, subject to the City and County discretion on the location. Permittee shall connect the southern point of the relocated water line to the water line at Centre Pointe Drive in order to insure reliability looping. **(E)**
d. Montague Expressway Waterline Easement. Prior to final map approval, the Permittee shall secure an easement, for the City of Milpitas benefit, from Santa Clara County for the installation and future maintenance of the relocated water line within the Montague Expressway right-of-way. The water line shall be placed into service prior to issuance of the first Certificate of Occupancy (temporary or final) for any residential unit. If the easement is not needed the Permittee may provide a letter from the County indicating that is not needed and it will be subject to review by the City Engineer. **(E)**

e. Public Landscaping. Street frontage landscaping shall be served by recycled water. The public portion of the proposed recycled water pipelines shall be a minimum of 8 inches in diameter. The Permittee shall install a gate valve and blind flange on the southerly leg of tee to accommodate future extension of the recycled water system. **(E)**

f. Water Supply Emergency. The City Council has declared a water supply emergency and enacted a Water Shortage Contingency Plan. The project is required to use recycled water for construction purposes such as dust control and compaction. Landscape planting shall be deferred for any areas designated to use potable water, such as internal podium areas. **(E)**

g. Existing Utilities. All existing public utilities shall be protected in place and if necessary relocated as approved by the City Engineer. No permanent structure is permitted within City easements and no trees or deep-rooted shrubs are permitted within City utility easements, where the easement is located within landscape areas. **(E)**

h. Multistory Buildings. The apartment building shall require water supply pressures above that which the City can normally supply. Additional evaluations by the Permittee are required to assure proper water supply (potable or

fire services). The Permittee shall submit an engineering report detailing how adequate water supply pressures will be maintained to the satisfaction of the City Engineer and the Fire Marshall. **(E)**

i. Utilities near Buildings. Building foundations adjacent to public utilities shall be designed to be self-supporting such that the building weight is not required to be supported during shoring and excavation of adjacent utilities.

j. Solid Waste Service. This site is recommended to use roll-off style solid waste service. The Permittee shall provide sufficient facilities for on-site storage and collection of solid waste and recyclables. Permittee shall provide a Solid Waste Handling Plan showing how materials will be transferred from Buildings 1-18 to the trash enclosure/external collection point. The Solid Waste Handling Plan shall also address other requirements, such as compaction, chute shut-off, sufficient number of bins, and property management responsibility for bin management and positioning. The Permittee shall demonstrate that sufficient space is provided at Building 1 basement trash areas to house extra containers and the vehicle that will transport the containers to the compactor. Permittee to demonstrate that the site plan provides sufficient space for the solid waste vehicle to perform collection and turn around on-site or provide proof of easement from adjacent property. Permittee shall procure sufficient service frequency and shall provide a minimum of 15 feet vertical (overhead) clearance at the trellis. Permittee shall provide a plan showing solid waste setout locations for Buildings 2-18 that do not block parking spaces. All solid waste collection facilities shall comply with City guidelines. The compactors shall be installed and functional prior to issuance of Certificate of Occupancy of the eightieth ($80^{th}$) residential unit. **(E)**

k. Solid Waste. Prior to issuance of any certificate of occupancy, Permittee shall construct a new trash enclosure to serve the project. The enclosure shall accommodate the required two self-contained compactors at minimum to serve this development. The proposed enclosure shall be designed per the Development Guidelines for Solid Waste Services and enclosure drains must discharge to sanitary sewer line. The enclosure will be subject to the City's review/approval prior to construction of the enclosure. **(E)**

l. Off-Site Recycled Water. Prior to final map approval, the Permittee shall submit construction documents, including plans, studies, reports, and estimates to extend the City's recycled water pipeline. The work consists of installing approximately 1,800 linear feet of new 8 inch diameter recycled water pipeline in Great Mall Parkway starting at Centre Pointe, crossing Montague Expressway, running along Capitol Avenue, and tying into the Valley Transportation Authority's planned recycled water pipeline extension at South Milpitas Boulevard. Permittee shall secure an easement for the City of Milpitas benefit, from Santa Clara County for the installation and future maintenance of the relocated water line within Montague Expressway. Prior to the issuance of the first certificate of occupancy (temporary or final) for any residential unit, the Permittee shall construct the off-site recycled water pipeline. The Permittee may receive credit through the TASP Fee program for the portions of the recycled waterline not in front of their property. The Permittee shall keep accurate records of all construction costs for the installation and shall confer with Utility Staff regarding the segments that need to be tracked separately. Any credit shall be a part of the Fee Credit Agreement approved by the City Council prior to final map approval.

**FEES**

40. Development Fees: Permittee shall submit the following items with the building permit application and pay the related estimated fees prior to building permit issuance:
    a. Sewer Needs Questionnaire and/or Industrial Waste Questionnaire
    b. Water Service Agreement(s) for water meter(s), detector check(s), and double check detector assembly.
    c. Storm water connection fee of $21,562 per acre.
    d. Water, sewer and treatment plant fees will be calculated at the time of building plan check submittal.
    e. Calaveras Blvd Widening Traffic Impact Fee of $235 per residential unit and (in 2009 dollars) prior to building permit issuance. Fee shall be adjusted per ENR index rate at the time of building permit issuance.

    Contact the Land Development Section of the Engineering Division at (408) 586-3328 to obtain the form(s). *The above fees are preliminary estimates and subject to change.* There is no vesting of the fees with the adoption of this Resolution. **(E)**

40. Transit Area Specific Plan (TASP) Fees - Prior to any building permit issuance, Permittee shall pay a Transit Area Development Impact fee. The amount of fee to be paid shall be the amount in effect pursuant to the implementing City Council ordinance or resolution at the time full payment is made to the City at the time of building permit issuance or at the time the full amount is paid to City. There is no vesting of the fees with the adoption of this Resolution.

41. Fee Adjustments: All applicable fees for the Project may be adjusted prior to building permit issuance. The amount of fee to be paid shall be the amount in effect pursuant to the implementing City Council ordinance or resolution at the time full payment is made to the City at the time of building permit issuance, or when full payment is made to City. **(E)**

42. Building Permit Automation Fee: Prior to any building permit issuance, Permittee shall pay all applicable development fees, as determined by the City Engineer in accordance with the most current approved fee schedule adopted by the City Council, including but not limited to, connection fees (water, sewer and storm), Transit Area impact fee, plan check and inspection deposit, and 2.5% building permit automation fee as approved by City Council Resolution No. 7590. **(E)**

**FINAL MAP (STANDARD)**

43. Community Facilities District (CFD) Annexation: Prior to final map approval, Permittee shall submit an executed consent to annex the subject property into CFD 2008-1 and shall agree to pay the special taxes levied by CFD 2008-1 for the purpose of maintaining the public services. The petition to annex into the CFD shall be finalized concurrently with the final map recordation or prior to any building permit issuance, whichever occurs first. Permittee shall comply with all rules, regulations, policies, and practices established by State Law and by the City with respect to the CFD including, without limitation, the requirements for notice and disclosure to future owners and residents. **(E)**

44. Final Map: Prior to issuance of any building permit, the final map shall be recorded. The final map submittal shall meet the following requirements:

    a. Provide a current title report with your final map submittal, not more than 90 days old.
    b. All final maps shall designate all common lots and easements as lettered lots or lettered easements.
    c. The final map shall clearly delineate the project property line and the County right of way line. County right of way and Project boundary should be contiguous.
    d. All final maps shall be tied to the North America Datum of 1983 (NAD 83), California Coordinate of 1983, zone 3.
    e. Permittee shall dedicate all necessary easements for public utilities, emergency vehicle access, solid waste collection, pedestrian corridors, sidewalks, trails, paths, parks and public access on the final map for acceptance by the City in compliance with the City's Engineering Guidelines and the approved Tentative Map.
    f. Prior to recordation of any final map, Permittee shall submit to the City a digital copy of the approved final map in AutoCAD and GIS format. **(E)**

45. Homeowners/Property Management Association: Prior to final map approval, Permittee shall establish a Homeowners/Property Management Association ("Association"). The Association shall be responsible for the maintenance of the landscaping, walls, buildings, private streetlights, common area and private streets and shall have assessment power. The Association shall manage the onsite water, recycled water, storm and sewer system and implement the Solid Waste handling plan. This information shall be clearly included in the Conditions, Covenants, and Restrictions (CC&R) and recorded documents. The CC&R document shall be submitted for review and approval by the City Engineer. **(E)**

**CONSTRUCTION (STANDARD)**

46. Improvement Plans: Prior to final map approval, Permittee shall obtain design approval and bond for all necessary public improvements, including but not limited to the following:

a. Removal and installation of new curb, gutter, and sidewalk, median modification or installation, signage and striping, street lights, street trees, fire hydrants, bus stop, and storm, water, and sewer service installation.
b. All improvements plans shall be prepared using Vertical Datum of 1988 (NAVD 88). The specific city benchmark used for the project shall be indicated on the cover sheet of each improvement plan set.
c. Plans for all public improvements shall be prepared on Mylar (24"x36" sheets) with City Standard Title Block and developer shall submit a digital copy of the Record Drawings AutoCAD and GIS format upon completion of improvements to the satisfaction of the City Engineer.
d. Permittee shall also execute a secured public improvement agreement. The agreement shall be secured for an amount of 100% of the engineer's estimate of the construction cost for faithful performance and 100% of the engineer's estimate of the construction cost for labor & materials. The public facilities such as water meters, RP backflow preventers, sewer clean outs, etc., shall be placed so access is maintained and kept clear of traffic. **(E)**

47. Initial Acceptance: All improvements must be installed in accordance with the City of Milpitas standard drawing and specification, and shall be constructed to the City Engineer's satisfaction and accepted by the City prior to issuance of any final certificate of occupancy of any residential unit. **(E)**

48. Utility Undergrounding: Prior to issuance of the first Certificate of Occupancy (temporary or final) for any residential unit, Permittee shall underground all existing wires and overhang utilities (except the distribution lines located at the upper end of the metal towers, lower lines shall be undergrounded) and remove all related poles within the proposed development and along all street frontages. All proposed utilities within the subdivision shall also be undergrounded. The improvement plans shall show all existing utilities within and bordering the proposed development, and clearly identify the existing PG&E wire towers and state wire voltage. All utility vaults, boxes, cabinets and pedestals shall be identified and labeled on the improvement plans. Above ground utility facilities shall be underground, relocated, or screened to the satisfaction of the City Engineer and the Planning Director. **(E)**

49. Joint Trench Relocation: The joint trench shall be relocated in the field, if necessary, to accommodate the approved street layout (sidewalks, trees, streetlights, etc.) to the satisfaction of the City Engineer and the Planning Director. All joint trench structures (vaults, boxes, cabinets, etc.) shall be adjusted to the final grade. **(E)**

50. Encroachment Permit: Prior to any work within the public right of way or City easement, Permittee shall obtain an encroachment permit from City of Milpitas Engineering Division. Prior to installing offsite improvements, Permittee shall obtain an encroachment permit from the City of Milpitas and all necessary encroachment permits from other affected agencies and private parties, including but not limited to, Pacific Gas and Electric, SBC, Comcast, Santa Clara Valley Water District, Santa Clara County road and Airport Department, and Santa Clara Valley Transportation Agency (VTA). Copies of any approvals or permits shall be submitted to the City of Milpitas Engineering Division as a part of the encroachment permit review. **(E)**

51. Agency Approval: It is the responsibility of the Permittee to obtain any necessary encroachment permits from affected agencies and private parties, including but not limited to, Pacific Gas and Electric, SBC, Comcast, Santa Clara Valley Water District and Caltrans. Copies of any approvals or permits must be submitted to the City of Milpitas Engineering Division. **(E)**

52. Construction Schedule: Prior to start of any construction, Permittee shall submit a construction schedule and monitoring plan for City Engineer review and approval. The construction schedule and monitoring plan shall include, but not be limited to, construction staging area, parking area for the construction workers, personnel parking, temporary construction fencing and construction information signage and establish a neighborhood hotline to record and respond to neighborhood construction related concerns. Permittee shall coordinate their construction activities with other construction activities in the vicinity of this project. Permittee's contractor is also required to submit updated monthly construction schedules to the City Engineer for the purpose of monitoring construction activities and work progress. **(E)**

53. Demolition: All utilities shall be properly disconnected before the building can be demolished. Show (state) how the water service(s), sewer service(s) and storm service(s) will be disconnected. The water service shall be locked off in the meter box and disconnected or capped at main line in the street if the water meter is not to be used. The sanitary sewer shall be capped at the clean out near the property line or approved location if it is not to be used. The storm drain shall be capped off at a manhole or inlet structure or approved location if it is not to be used. **(E)**

54. Maximum Slopes: All slopes adjacent to public sidewalks and streets shall be designed to a maximum grade of 4:1 slope. The grading design shall also provide a 1' flat bench at the top and bottom of the slope adjacent to the public sidewalks, streets, or pathways. **(E)**

55. Tree Removal Permit: In accordance with COMC Chapter 2, Title X (Ord. 201), Permittee may be required to obtain a permit for removal of any existing tree(s). Contact the Public Works Department at (408) 586-2600 to obtain the requirements and forms. **(E)**

56. Underground Service Alert (USA): Permittee shall call Underground Service Alert (U.S.A.) at (800) 642-2444, 48 hours prior to construction for location of utilities. **(E)**

57. Mailboxes: Prior to installation of mailboxes, Permittee shall obtain approval from the US Postal Services and submit documentation to the City for review. Structures to protect mailboxes may be required as a result of the Building, Engineering and Planning Divisions review. **(E)**

**FLOODPLAIN MANAGEMENT (STANDARD)**

58. Special Flood Hazard Area: The proposed development is located within the Special Flood Hazard Area (SFHA), and, therefore, shall comply with the National Flood Insurance Program (NFIP) Title 44 of the Code of Federal Regulations and the City of Milpitas (City) Flood Plain Management Regulations, City of Milpitas Code (COMC) Title XI Chapter 15. Prior to final map approval or any building permit issuance, Permittee shall obtain a Conditional Letter of Map Revision (CLOMR) or a Conditional Letter of Map Revision based on Fill (CLOMR-F) from the Federal Emergency Management Agency (FEMA), conditionally approving the revised floodplain or the removal of the development from the SFHA. Permittee shall also obtain a Letter of Map Revision (LOMR) or a Letter of Map Revision based on Fill (LOMR-F) and shall provide all elevation certificates prior to final building inspection or issuance of certificate of occupancy for any portion of the development. The proposed grading plan shall comply with the established BFE as determined in the final flood study report, the approved CLOMR or CLOMR-F, or the official FEMA Federal Insurance Rate Map (FIRM). **(E)**

59. Floodplain Management Ordinance: Per Chapter 15, Title XI of Milpitas Municipal Code (Ord. No. 209.4) the lowest floor elevation (finished floor) of each structure shall be at least one foot above the Base Flood Elevation (BFE). The structure pad(s) shall be properly designed by a registered civil engineer and compacted to meet FEMA's criterion. In addition, the pad(s) shall extend beyond the building walls before dropping below the base flood elevation, and shall have appropriate protection from erosion and scour. All electrical equipment, mechanical equipment, and utility type equipment servicing the structure shall be located above the BFE, or shall be flood proofed, and shall be constructed to prevent damage from flooding events. Any trailers, modular buildings, or pre-manufactured dwelling units located on this site for periods of time greater than one year, shall be adequately anchored to resist flotation, collapse and lateral movements per Floodplain Management Ordinance. The Permittee's civil engineer shall complete and submit several FEMA Elevation Certificates to the City at different stages of the construction. Flood insurance is required for any construction that is financed with government backed loans. **(E)**

60. Flood Study: Prior to final map approval or any building permit issuance, Permittee shall submit a Flood Study for the project demonstrating, to the satisfaction of the City Engineer that the proposed development has NO adverse impact to the surrounding flood plain within the SFHA and to flood carrying capacity of the area. The study should include cumulative effects of existing and proposed developments demonstrating the combined effects will not increase the water surface elevation of the Base Flood (BFE) more than one foot at any point. For the AO Flood Zone, the flood study is required to establish the BFE, and set the building elevation accordingly. The flood study shall be consistent with the requirements in accordance with Title 44 of the Code of Federal Regulations by establishing a hydraulic model and HEC-RAS. **(E)**

61. Drainage Study: Prior to final map approval or any building permit issuance, Permittee shall submit a final grading plan and hydrologic/hydraulic study prepared by a registered Civil Engineer, consistent with the approved CLOMR. The drainage study shall analyze the existing and ultimate conditions and facilities. The study shall be reviewed and approved by the City Engineer and Permittee shall satisfy the conclusions and recommendations of the approved drainage study. **(E)**

62. Elevation Certificates: Permittee shall submit an elevation certificate for each lot or structure that is to be removed from the SFHA:

    a. Prior to any grading permit issuance, based on an approved grading plan. This elevation certificate shall contain all proposed grades applicable and shall be required in order to receive community acknowledgement for the CLOMR or CLOMR-F application.
    b. Prior to building foundation pour, based on finished formwork while the building is under construction. If Permittee intends to apply for a LOMR or LOMR-F prior to finished construction, this elevation certificate shall be submitted after the foundation pour and shall be based on existing finished floor and adjacent grades. It shall be required in order to receive community acknowledgement for the LOMR or LOMR-F application.
    c. Prior to occupancy of each building or structure, based on finished construction. This elevation certificate shall contain all required finished grades and shall be based on existing information.
    d. Prior to final occupancy, Permittee shall submit a binder containing all the elevation certificates produced for the each phase of the project. **(E)**

**CLEAN WATER (STANDARD)**

63. Construction Storm Water Quality: Permittee shall comply with the requirements of the National Pollution Elimination Discharge System (NPDES) permit as administered by the California State Water Resources Control Board (State Board) and the San Francisco Bay Regional Water Quality Control Board (Regional Board). Prior to the issuance of any building, demolition, or grading permit, Permittee shall submit an Erosion and Sediment Control Plan (Erosion Control Plan) as a part of the improvement plan submittal. The erosion control plan shall show all construction best management practices (BMPs) and shall comply with the requirements of the NPDES, the Municipal Regional Permit Order R2-2009-0074 (MRP), and the City's stormwater and urban runoff pollution control standards and guidelines (City's Clean Water Program). Permittee shall ensure that all contractors and sub-contractors install and regularly maintain all construction BMPs as required by the approved erosion control plan, the COMC, and the City's Clean Water Program. **(E)**

64. Construction General Permit Compliance: Permittee shall comply with the requirements of the Construction General Permit as administered by the State and Regional Boards. Permittee shall obtain a Construction Activities Storm Water General Permit (State Permit) from the State Board. Prior to any construction activities and prior to the issuance of any building, demolition, or grading permit, Permittee shall submit:

    a. a complete Storm Water Pollution Prevention Plan (SWPPP) with the project Waste Discharge Identification Number (WDID) displayed on the cover,
    b. a copy of the approved Notice of Intent (NOI) from the State Board, and
    c. an erosion control plan and a site monitoring plan meeting the satisfaction of the City Engineer.

    Permittee shall ensure that all contractors and sub-contractors install and regularly maintain all storm water quality control measures as required by the approved SWPPP, the approved erosion control plan, the COMC, and the City's Clean Water Program.

    Prior to issuance of final Certificate of Occupancy for any residential unit, Permittee shall submit an approved Notice of Termination (NOT). For phased occupancy, Permittee shall submit a Change of Information (COI) or an NOT approved by the State Board that removes each phase of occupancy from the boundaries of the State Permit prior to the issuance of occupancy for that phase. Contact the State and Regional Boards for questions regarding your specific project. For general information, contact the City of Milpitas Engineering Division at (408) 586-3329. **(E)**

65. Post-Construction Storm Water Quality: Permittee shall comply with the requirements of the MRP for post-construction storm water treatment (provision C.3 regarding new development and redevelopment requirements for regulated projects) and the City's Clean Water Program. Permittee shall submit a final, certified storm water quality control plan (SWCP), a SWCP sheet, and a post-construction BMP operations and maintenance plan (O&M) in accordance with the City's Clean Water Program and meeting the satisfaction of the City Engineer. **(E)**

66. Storm Water Quality Control Plan (SWCP): Prior to final map approval or any building permit issuance, Permittee shall submit a separate final or amended existing SWCP that incorporates post-construction BMPs for the treatment of

storm water runoff from all areas of the parcels. The SWCP shall incorporate source control, site design, and storm water treatment consistent with the MRP requirements and the City's Clean Water Program.

a. The SWCP shall comply with all "Model Conditions of Approval for Stormwater Quality" as shown in the Stormwater Section of the Engineering Plans and Map Procedures and Guidelines, dated July 15, 2010 and are hereby incorporated as conditions of project approval.

b. The final SWCP shall be certified by a third party reviewer from the MRP approved list of certifiers. The third party reviewer shall certify that the SWCP complies with the MRP requirements. A list of qualified reviewers can be found at the Santa Clara Valley Urban Runoff Pollution Prevention Plan (SCVRPPP) website (http://www.scvurppp-w2k.com/)

c. O&M Plan: The final SWCP shall include an Operation and Maintenance (O&M) Plan, acceptable to the City Engineer, describing the operation and maintenance procedures needed to insure that storm water treatment measures continue to work as intended and do not create a nuisance (including vector control). The plan shall include all BMP details, a location map, a maintenance schedule, and inspection and reporting templates. The treatment measures shall be maintained for the life of the project. The storm water control operation and maintenance plan shall include the Permittee's signed statement accepting responsibility for maintenance until the responsibility is legally transferred.

d. O&M Agreement: Prior to issuance of final Certificate of Occupancy for any residential unit, Permittee shall execute and record an O&M Agreement with the City for the operation, maintenance, and annual inspection of the C.3 treatment facilities. Permittee shall submit documentation of inspection and maintenance to the City's Utility Section annually for reporting to the Regional Board.

e. Permittee shall include language in the approved CC&R providing the City with an annual inspection report in conformance with the approved O&M plan and agreement. If the City does not receive the report, the City will conduct the field inspection and report for the site and the applicant and its successor shall be responsible to pay all associated costs.

f. Format: The SWCP shall comply with the City's Standard SWCP formatting policy.

g. All permit applications shall be consistent with the applicant's final Storm Water Control Plan and approved special conditions, and shall include drawings and specifications necessary to implement all measures described in the approved Plan. Onsite improvement plans shall show the details and methods of construction for site design features, pervious pavements, self-retaining areas, treatment BMPs, permanent source control BMPs, and other features that control storm water flow and potential storm water pollutants. Site design shall limit directly connected impervious areas. Any changes to the final Storm Water Control Plan shall require Site & Architectural ("S" Zone) Amendment application review.

h. Storm Water Control Plan Sheet: A plan sheet shall be included in the offsite and onsite improvement plans for Storm Water Control. The sheet will show and label all drainage areas, treatment measures, drainage flow lines, high points, and low points. Each treatment measure shall have an independent drainage area, which shall be designated. The sheet will provide sections and details for grading, drainage, and treatment measures. The sheet will include a table correlating the drainage areas to the treatment measures and summarizing the treatment provided.

i. Storm Water Control Inspection: Prior to initial acceptance of public improvements or initial occupancy for private improvements, the Third Party Certifier of the SWCP shall submit post-construction certification verifying that the post-construction BMPs have been installed correctly and are functioning properly. **(E)**

**UTILITIES (STANDARD)**

67. Utility Protection. All existing public utilities shall be protected in place and if necessary relocated as approved by the City Engineer. No permanent structure is permitted within City easements and no trees or deep-rooted shrubs are permitted within City utility easements, where the easement is located within landscape areas. **(E)**

68. Utility Capacity. The issuance of building permits to implement this land use development will be suspended if necessary to stay within (1) available water supplies, or (2) the safe or allocated capacity at the San Jose/Santa Clara Water Pollution Control Plant, and will remain suspended until water and sewage capacity are available. No vested right to the issuance of a Building Permit is acquired by the approval of this land development. The foregoing provisions are a material (demand/supply) condition to this approval. **(E)**

69. Utility Studies. Prior to final map recordation, Permittee shall submit and obtain approval from the City Engineer of the water, sewer, and storm drainage studies for this development. These studies shall identify the development's effect on the City's present Master Plans and the impact of this development on the trunk lines. If the results of the study indicate that this development contributes to the over-capacity of the trunk line, it is anticipated that the developer will be required to mitigate the overflow or shortage by construction of a parallel line or pay a mitigation charge, if acceptable, to the satisfaction of the City Engineer. **(E)**

70. Utility Modeling. Hydraulic modeling is required to verify the capacity of the adjacent water and sewer system piping and determine points of connection. Permittee shall authorize the City to proceed with hydraulic modeling and the costs of the modeling shall be charged to Applicant's PJ Account**. (E)**

71. Sanitary Sewer Discharge. Prior to any discharge into the sanitary sewer system, Permittee shall obtain all required industrial wastewater discharge approvals from San Jose/Santa Clara Water Pollution Control Plant (WPCP) by calling WPCP at (408) 277-2755. **(E)**

72. Per Chapter 6, Title VIII of Milpitas Municipal Code (Ord. No. 240); the landscape irrigation systems for street landscape, Park A, Park B, and the project site must be designed to meet the City's recycled water guidelines and connect to recycled water system. To meet the recycle water guideline the developer shall:

    a. Design the landscape irrigation for recycled water use. Use of recycled water applies to all existing rehabilitated and/or new landscape.
    b. Design the irrigation system in conformance to the South Bay Water Recycling Guidelines and City of Milpitas Supplemental Guidelines. Prior to building permit issuance the City will submit the plans to the California Department of Public Health (CDPH) for approval; this approval requires additional processing time. The Permittee is responsible for all costs for designing and installing site improvements, connecting to the recycled water main, and processing of City and CDPH approvals. Contact the Land Development Section of the Engineering Division at (408) 586-3329 to obtain copies of design guidelines and standards.
    c. Protect outdoor eating areas from overspray or wind drift of irrigation water to minimize public contact with recycled water. Recycled water shall not be used for washing eating areas, walkways, pavements, and any other uncontrolled access areas. **(E)**
    d. The on-site recycled water irrigation system shall be split into several parallel systems to the satisfaction of the City Engineer. The purpose is to match construction phasing in order to allow recycled water use at the final occupancy for each phase. For example: Parks A and B would be on one meter, the podium building would be on one meter, the street landscape would be on a separate meter, and the landscaping around the condominiums would be served by two separate meters.

73. Landscaping Ordinance 238. In accordance with the provisions of Chapter 5, Title VIII (Ordinance 238) of the COMC for new or rehabilitated landscaping areas equaling 2500 square feet or greater, the Permittee shall:

    a. Provide separate water meters for domestic water service & irrigation service.
    b. Provide separate domestic meters for each proposed use (Residential, Food Services, Commercial/Office).
    c. Comply with all the requirements of Ordinance 238.
    d. Submit two sets of landscape and irrigation improvement plans to the Building Division with the building permit plan check package. Prior to any building permit issuance, Approval from the Land Development Section of the Engineering Division is required prior to any building permit issuance, and submittal of the Certificate of Substantial Completion is required prior to final occupancy inspection. (E)

Contact the Land Development Section of the Engineering Division at (408) 586-3329 for information on the submittal requirements and approval process. **(E)**

**SOLID WASTE MANAGEMENT & RECYCLING (STANDARD)**

74. Solid Waste Handling Plan (Report). Prior to Final Map approval or any building permit issuance, Permittee shall submit a final Solid Waste Handling Plan that incorporates the following solid waste handling requirements and meeting the satisfaction of the City Engineer:

    a. A description of the Solid Waste Services required for the development per the Development Guidelines for Solid Waste Services (Development Guidelines). The description shall include sizing calculations, type of service (front load bins, roll-off compactors, etc.), size of bins, and level of service (e.g. number of pick ups per week).
    b. A description of the Solid Waste Operation at ultimate build out and for each phase of the development.
    c. A detail of the solid waste enclosure designed per the Development Guidelines for Solid Waste Services to house all service described above and all necessary equipment. The enclosure design shall provide adequate access for the solid waste truck, and allocate enough space for the solid waste truck operation without impacting the proposed private street. The access to the location and size of the enclosure shall be designed to the City Engineer's satisfaction and shown on the plans prior to any building permit issuance.
    d. A solid waste handling plan sheet shall be incorporated in the site improvement plan set containing the enclosure detail, a sizing table, a service table, a description of the solid waste operations, and truck turning templates for collection vehicles.
    e. The enclosure drains shall discharge to the sanitary sewer line. Storm drain inlets shall be located at least 25 feet away from enclosures to prevent accidental spills from entering storm drains. Enclosures are not permitted within public utility easements.
    f. The Homeowners Association shall be responsible for solid waste handling. The Solid Waste Handling Plan shall include detailed, step-by-step instructions describing the management of solid waste from generation to disposal. The plan shall demonstrate how recycling and waste will be separately handled and maintained.
    g. Permittee shall complete the construction of the new trash enclosure to serve the Project prior to issuance of the First Certificate of Occupancy. **(E)**

75. Solid Waste Management. Per Chapter 200, Solid Waste Management, V-200-3.10, *General Requirement*, Permittee shall not keep or accumulate, or permit to be kept or accumulated, any solid waste of any kind and is responsible for proper keeping, accumulating and delivery of solid waste. In addition, according to V-200-3.20 *Owner Responsible for Solid Waste, Recyclables, and Yard Waste*, Permittee shall subscribe to and pay for solid waste services rendered. Prior to issuance of any certificate of occupancy, Permittee shall provide evidence to the City that a sufficient level of trash and recycling service has been secured using a Service Agreement with Republic Services (formally BFI). After Permittee has full occupancy, Permittee shall contact the Republic Services commercial representative to review the adequacy of the solid waste level of services. If services are determined to be inadequate, Permittee shall increase the service to the level determined by the evaluation. **(E)**

76. Recycling Report, Part I. Prior to demolition permit issuance, Permittee's contractor shall submit Part I of a Recycling Report on business letterhead to the Building Division, for forwarding to the Engineering Section. This initial report shall be approved by the City's Utility Engineering and Solid Waste Section (Utility Section) prior to demolition permit issuance. The report shall describe the following resource recovery activities:

    a. What materials will be salvaged?
    b. How materials will be processed during demolition?
    c. Intended locations or businesses for reuse or recycling.
    d. Quantity estimates in tons (both recyclable and for landfill disposal). Estimates for recycling and disposal tonnage amounts by material type shall be included as separate items in all reports to the Building Division before demolition begins.

    Permittee's contractor shall make every effort to salvage materials for reuse and recycling. **(E)**

77. Recycling Report, Part II. Prior to final approval of the demolition permit or any building permit issuance, Permittee shall submit Part II of the Recycling Report to the Building Division for forwarding to the Utility Section in order to confirm the information described on Part I of the Recycling Report, especially materials generated and actual quantities of recycled materials. Part II of the Recycling Report shall be supported by copies of weight tags and receipts of "end dumps." Actual reuse, recycling, and disposal tonnage amounts (and estimates for "end dumps") shall be submitted to the Building Division for approval by the Utility Section prior to inspection by the Building Division. **(E)**

78. Demolished Material Removal. All demolished materials including, but not limited to, broken concrete, asphalt paving, pipe, vegetation, excess earth, building debris, and other unsuitable materials, etc., shall be removed from the job site for recycling or disposal by Permittee's contractor, to the satisfaction of the City Engineer. Permittee's contractor shall, to the maximum extent possible, reuse any useful construction materials generated during the demolition and construction of the site. Permittee's contractor shall recycle all building and paving materials including, but not limited to roofing materials, wood, drywall, metals, and miscellaneous and composite materials, aggregate base material, asphalt, and concrete. Permittee's contractor shall perform all recycling and/or disposal by removal from the job site. **(E)**

**Planning Commission Added Conditions:**

79. Landscaping and Public Art: Permittee to work with staff and City arborist regarding species of trees for site landscaping, the addition of art for the project and energy efficiency improvements for the project. **(P)**

**Key:**
(P) = Planning
(B) = Building
(E) = Engineering
(F) = Fire Prevention
(CA) = City Attorney

CENTER FOR CREATIVE LAND RECYCLING

*Redesigning Land for Sustainable Communities*

March 23, 2015

**2J**

Honorable Mayor Jose Esteves and Members of City Council
City of Milpitas
455 East Calaveras Boulevard
Milpitas, California 95035

RE: Lennar's Project Located at 400 and 450 Montague Expressway

Dear Mayor Esteves and Members of City Council:

On behalf of the Center for Creative Land Recycling ("CCLR"), a nonprofit organization founded on the belief that intelligent, innovative land use is the key to ensuring a healthy future for both communities and our environment, I am writing to strongly urge the City Council to approve Lennar's development project located at 400 and 450 Montague Expressway. The transformation of this underutilized light industrial and brownfield site into a transit-oriented residential development is exactly the type of development that Bay Area cities should be encouraging.

CCLR, as the official Technical Assistance to Brownfields ("TAB") provider to the federal EPA Regions 2, 4, 9, and 10, provides workshops, technical assistance, research and advocacy for changing brownfields and similarly derelict redevelopment sites into rational economic choices for private sector investment (http://cclr.org/). Lennar's 400 and 450 Montague Expressway project represents an exciting opportunity in continuing to bring to life the City's Transit Area Specific Plan (TASP).

CCLR has learned from its experience the difficult challenges that cities face in redeveloping urban infill brownfield sites in today's environment when public resources are increasingly scarce. Incentivizing private investment by establishing clear development guidelines, reliable ground rules, and working in cooperative partnership with the development community are crucial tools for successful development.

Thus, CCLR strongly encourages the City Council of Milpitas to approve Lennar's development project at your April 21st hearing.

Sincerely,

Evan Reeves, Policy Director

cc: Vice Mayor Carmen Montano
Councilmember Debbie Indihar Giordano
Councilmember Gary Barbadillo
Councilmember Marsha Grilli
Tom Williams, City Manager
Steven McHarris, Planning and Neighborhood Services Director
Shaunn Mendrin, Senior Planner
Kevin Ma, Lennar Multifamily Communities
Chad Kiltz, Lennar Homes

# Santa Clara County Housing Action Coalition

*The Santa Clara County Housing Action Coalition is comprised of a broad range of organizations and individuals who have, as a common goal, the vision of affordable, well-constructed and appropriately located housing*

**2J**

April 20, 2015

Mayor and City Council
City of Milpitas
200 E. Santa Clara Street
San Jose, CA 95113

Re: 400/450 Montague Expressway Development by Lennar Multifamily

Dear Mayor Esteves and Members of the City Council:

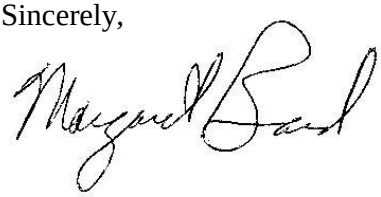
On behalf of the Santa Clara County Housing Action Coalition, I am writing to support the Lennar Multifamily development located at 400/450 Montague Expressway, Milpitas.

By way of reference, the Housing Action Coalition includes more than 100 organizations and individuals. Its goal is the production of well-built, appropriately-located homes that are affordable to families and workers in Silicon Valley. Organizations participating in the HAC include the Silicon Valley Leadership Group, the Home Builders Association, Greenbelt Alliance, the Sierra Club, the League of Women Voters, Santa Clara County Association of Realtors, and the California Apartments Association, Tri-County Division.

Lennar is proposing to build 351 rental apartments and 138 for-sale stacked flats with a density of 47 homes per acre. The project will promote urban lifestyle with easy access to the future BART station and the Great Mall. It also provides bike-lanes and on-site public parks. It is our hope that this type of growth will help to facilitate less dependency on the automobile, while creating much-needed housing opportunities. Particularly, we are pleased to see that Lennar includes large-size stacked flats. Combine with convenient access to public transit, this project will enable aging in place.

While we would like to see more affordable components included in the project, we see the addition of new rental and for sale homes as a positive in Milpitas and encourage the Council to approve Lennar's proposal for 400/450 Montague Expressway.

Sincerely,



Margaret Bard
Chair
Housing Action Coalition

SILICON VALLEY LEADERSHIP GROUP

2001 Gateway Place, Suite 101E
(408)501-7864 Fax (408)501-7861
www.svlg.org
CARL GUARDINO
President & CEO

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San Francisco 49ers
***Established in 1978 by DAVID PACKARD***

April 20, 2015

**2J**

Mayor and Councilmembers
City of Milpitas
455 East Calaveras Boulevard
Milpitas, California 95035

Dear Mayor Esteves and Councilmembers,

On behalf of the Silicon Valley Leadership Group, I write to express support for Lennar's application for a high density residential development that includes 489 homes on 400/450 Montague Expressway.

By way of background, the Silicon Valley Leadership Group, founded in 1978 by David Packard of Hewlett-Packard, represents more than 375 of Silicon Valley's most respected employers on issues, programs and campaigns that affect the economic health and quality of life in Silicon Valley, including energy, transportation, education, housing, health care, tax policies, economic vitality and the environment. Leadership Group members collectively provide nearly one of every three private sector jobs in Silicon Valley.

Lennar's proposal for 400/450 Montague Expressway, which has immediate access to a VTA station and the new Milpitas BART station, coincides with the city's vision to take advantage of public transit and transform an older light industrial area to meet the high demand for housing. The development will also provide critical community facilities including bike lanes and 3 public parks on-site. We are also pleased to se a TOD development that includes 2-4 bedroom units which are suitable for young professionals with families.

Silicon Valley Leadership Group supports projects that promote transportation alternatives, affordable housing, mixed-uses, and the creation of jobs. Overall, the development proposal meets our goals of thoughtful, well placed housing near transit stations to accommodate the growing work force in Silicon Valley. In the future, we would also encourage the city to consider encouraging a mix of affordability in TOD projects like this.

Sincerely,

Carl Guardino
President and CEO
Silicon Valley Leadership Group

2K

**Mary Lavelle**

**From:** John S Craycroft [craycroftdesign@mac.com]
**Sent:** Friday, April 17, 2015 10:22 AM
**To:** Mary Lavelle
**Subject:** Public Parks and Naming at 450 Montague: Captain Calvin Valpey
**Attachments:** Captain Valpey Biography.pdf

To: Members of the Milpitas City Council

It has come to my attention from reading the minutes of the February 2 meeting of the Parks, Recreation and Cultural Resources Commission that the City Council has been given four names for consideration for the name of the proposed park at 450 Montague. It appears that this decision will be made at the upcoming meeting on April 21. If this is the case and the decision has not yet been made, I would suggest that the name of Captain Calvin Valpey would be an excellent choice.

Calvin Valpey was an early pioneer and developer in the area having captained the schooner "Eagle" with 14 others, crew and passengers, from Nova Scotia to San Francisco in 1851. Sailing to Sacramento, he tried his hand at gold mining, and was even called upon to chair vigilante meetings for a time, but soon found his sailing skills with the trade in goods to be more profitable with Dixon/Warm Springs landing as his base to provide miners coming in to the Mission San Jose area for supplies. In 1860 he was able to send for his family to come and bought a 400 acre ranch where he raised 6 children and many grandchildren, with many descendants are still living in California. It is not well known but quite some time ago the ridge behind his ranch stretching from Mission San Jose to the east of the City of San Jose was named Valpey (sometimes spelled Valpe) Ridge, but no parks, streets or public places appear to have been named for this prominent pioneer.

I am attaching a pdf file with additional information.

Thank you for your consideration of naming the park in his name.

John Craycroft

Craycroft Design
Residential Design and Planning
Specializing in Historical Restoration
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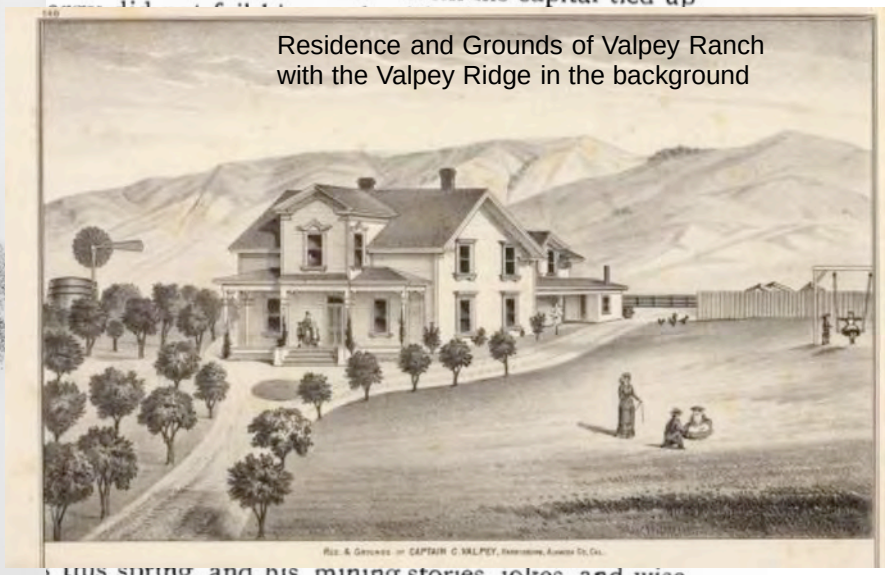
Calvin Valpey



Residence and Grounds of Valpey Ranch with the Valpey Ridge in the background

amp was almost deserted. With his capital tied up

this spring, and his mining stories, jokes, and wise
s years sat lightly, and none of us dreamed of his
cially sorry that he could not see A. J. Loomis, of
ss the plains. Upon the little mound where lies the
man we loved, we can only lay a leaf of memory and of respect for his qualities as a friend, a father, a citizen. May peace rest upon the house of mourning, and may his sons be manly and noble, as was their father. Such quiet, untroubled lives as his are the best hope of the nation."

CAPTAIN CALVIN VALPEY (deceased).—The subject of this sketch, whose portrait appears in this work, was born in Yarmouth, Nova Scotia, on the 10th day of March, 1806. When quite an infant, his father, who was a seafaring man, and master of a small vessel, was wrecked on one of the Tusket Islands, and lost with all his crew. At the age of seven years he was apprenticed to a sea-captain, with whom he lived and faithfully served during his apprenticeship. His first voyage at sea was made when twelve years of age, and from that time he continued to follow the sea, as boy, able seaman, and officer, until the year 1832, when he first took charge as captain. In the year 1833 he was united in marriage with Miss Elizabeth Gardner, the eldest daughter of the then late Captain Reuben Gardner, of Yarmouth. After his marriage he principally followed the sea; but having purchased some property in the country, he sometimes occupied his time in farming. On the 9th day of November, 1850, he left Yarmouth in the schooner *Eagle* for California, and, passing through Magellan's Straits, he arrived at San Francisco on the 20th day of April, 1851. For some years after his arrival in California he followed several occupations, such as boating, mining, merchandise, etc., but principally boating from the Warm Springs Landing, of which place he was the original proprietor. In the year 1860, his wife and children having arrived in California, he purchased the property at Harrisburgh, where he resided until his death, which occurred September 12, 1880. He leaves a wife and six children, three sons and three daughters, all of whom, except one daughter, are residents of the Pacific Coast. Their names are: Emma, Calvin, Horatio, Lizzie, Charles, and Alice.

HON. HENRY VROOMAN.—The subject of this sketch, whose portrait appears in this volume, was born at Litchfield, Hillsdale County, Michigan, July 25, 1844. At the age of eight years he accompanied his mother to Oregon, and after a short stay in Portland, located on a farm on the east bank of the Willamette River between Milwaukee and Oregon City, where he resided four years, attending school at Forest

**REGULAR**

*3A

**NUMBER: 38.821**

**TITLE: AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF MILPITAS AMENDING CHAPTER 10 OF TITLE XI OF THE MILPITAS MUNICIPAL CODE ADDING SECTION 14 TO THE ZONING CODE RELATING TO PUBLIC ART REQUIREMENTS FOR PRIVATE DEVELOPMENT**

**HISTORY:** This Ordinance was introduced (first reading) by the City Council at its meeting of April 7, 2015, upon motion by Councilmember Giordano and was adopted (second reading) by the City Council at its meeting of _____, upon motion by _____. The Ordinance was duly passed and ordered published in accordance with law by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

ATTEST:

_____
Mary Lavelle, City Clerk

APPROVED:

_____
Jose S. Esteves, Mayor

APPROVED AS TO FORM:

_____
Michael J. Ogaz, City Attorney

**RECITALS:**

**WHEREAS**, Title XI, Chapter 10, entitled "Zoning" of the Milpitas Municipal Code sets forth the Zoning standards for the City of Milpitas; and

**WHEREAS**, on February 18, 2014, the City Council directed staff to prepare an ordinance requiring Public Art on private development projects for the City Council review and consideration; and

**WHEREAS**, the Milpitas Zoning Code is proposed to be amended to add a Section 14 entitled "Public Art Requirements for Private Development Projects"; and

**WHEREAS**, on March 11, 2015, the Planning Commission conducted a duly noticed public meeting and adopted Resolution No. 15-013 recommending the City Council amend the Milpitas Zoning Code to add a new Section 14 entitled "Public Art Requirements for Private Developments"; and

**WHEREAS**, on April 7, 2015, the City Council conducted a duly noticed public hearing to consider the recommendation from the Planning Commission to amend the Zoning Code to add a new Section 14 entitled "Public Art Requirements for Private Developments."

**NOW, THEREFORE**, the City Council of the City of Milpitas does ordain as follows:

**SECTION 1. RECORD AND BASIS FOR ACTION**

The City Council has duly considered the full record before it, which may include but is not limited to such things as the City staff report, testimony by staff and the public, and other materials and evidence submitted or provided to the City Council. Furthermore, the recitals set forth above are found to be true and correct and are incorporated herein by reference.

**SECTION 2. FINDINGS**

Zoning Text Amendment (Section XI-10-57.02.G.3) - The City Council makes the following findings based on the evidence in the public record in support of Zoning Text Amendment No. ZA15-0001:

***Zoning Text Amendment (Section XI-10-57.02.G.3)***

1. *The proposed amendment is consistent with the General Plan.*

The proposed Ordinance is consistent with and implements the City of Milpitas' General Plan. The Ordinance will enhance the quality of life for residents in the City by contributing architectural variety and design to the aesthetic environment. Public art enhances civic pride and helps define the City's image to the public and visitors alike. This contributes to a sense of identity and place. It makes the City of Milpitas more livable and more visually stimulating, which creates a benefit to the public and enhances the quality of life.

The project is also consistent with the following General Plan Guiding Principles and Policies:

**Guiding Principle 2.a-G-7** – When considering development proposals, seek "community benefit," such as upgrading infrastructure facilities, constructing new infrastructure facilities, and funding contributions to programs.

**Implementing Policy 2.a-I-17 –** Foster community pride and growth through beautification of existing and future development.

The addition of the Public Art for Private Development Ordinance is consistent with the General Plan because it constitutes a "community benefit" by upgrading the aesthetic environment of the City. The requirement for art work makes the City a more livable and visually stimulating place which ultimately benefits the community. Further, the Ordinance creates a sense of place and identity that fosters community and pride and growth through

beautification of the existing and future development. For these reasons, the proposed Ordinance is consistent with the General Plan.

2. *The proposed amendment will not adversely affect the public health, safety and welfare of the residents of Milpitas.*

   The proposed zoning amendment will result in a more aesthetically pleasing environment. Incorporating art work in private developments, and throughout the City, makes buildings and their grounds more welcoming, and it creates a deeper interaction with the places visited, and which citizens work and live. For these reasons, the public health, safety and welfare will be benefited by the proposed Ordinance.

**SECTION 3. AMENDMENT OF MILPITAS MUNICIPAL CODE TITLE XI, CHAPTER 10**

Title XI, Chapter 10 of the Milpitas Zoning Code entitled "Zoning" is amended to add a new Section 14 entitled "Public Art Requirements for Private Development" to read as follows:

Section 14 - Public Art Requirements for Private Development

**XI-10-14.01 Definitions**

**"Affordable Housing"** is defined in Section XI-10-54.15.D of the Zoning Code.

**"Building Development Costs"** means those construction costs as declared on building permit applications, and as accepted by the Building Official. Building permit applications shall include building, plumbing, mechanical and electrical permit applications for the project.

**"Developer and/or Owner"** means any individual, firm, limited liability company, association, partnership, political subdivision, government agency, municipality (other than the City of Milpitas), industry, public or private corporation, or any other entity that undertakes any construction within the City subject to the requirements in this Section 14.

**"Public Art"** is a process which results in the incorporation of original works of art by artists in publicly accessible spaces and which serves a socio-environmental function identifiable with people; is accessible to the mind and the eye; is integral to the site and responds to the concept of place making; is integrated with the work of other design professionals; is of high quality; serves the City by enhancing the quality of life for citizens and contributes to the City's prestige; is unique to its moment in time and place.

**"Public Art Program In-Lieu Contribution"** means the percentage of Building Development Costs required herein.

**"Public Art Projects"** are projects which involve artists working through the public art process that result in the creation of original works in publicly accessible spaces that include but are not limited to paintings, mural decorations, inscriptions, stained glass, fiber work, statues, reliefs or other sculpture, monuments, fountains, arches, or other structures intended for ornament or commemoration, carvings, frescoes, mosaics, mobiles, photographs, drawings, collages, prints, crafts both decorative and utilitarian in clay, fiber, wood, metal, glass, plastics and other materials. Public Art Projects also include artists serving on design and development teams to identify opportunities to incorporate art in publicly accessible space.

**"Publicly Accessible Art"** means art that is accessible to the general public.

**XI-10-14.02 Purpose and Intent**

This Section 14 is intended to promote the aesthetics and arts in the City of Milpitas by requiring the inclusion of a public artwork component in new private development projects in Milpitas. A policy is hereby established to require certain private developments to include Publicly Accessible works of art for placement on the development site or contribute a Public Art Program In-Lieu Contribution as a condition of project approval.

Developers and/or Owners are encouraged to employ Milpitas artists or arts organizations to fulfill the Public Art requirement.

**XI-10-14.03 – Contribution Requirements**

A. Calculation

1. Nonresidential Building Developments. Private nonresidential building developments involving Two Thousand (2,000) square feet or more of new floor area shall devote an amount not less than one percent (1%) of Building Development Costs for acquisition and installation of Publicly Accessible Art on the development site.

2. Residential Building Developments. Private residential building developments of twenty (20) or more new dwelling units shall devote an amount not less than one percent (1%) of Building Development Costs for acquisition and installation of Publicly Accessible Art on the development site.

B. Public Art Review

All proposed Public Art to be installed on a development site under this Section 14 shall first be reviewed and approved by the Art Commission for its artistic value and appropriateness in light of the size of the development project. The cost of the proposed Public Art shall not be the sole reason for rejecting the proposed Public Art.

C. In-Lieu Contribution

1. At the discretion of the Developer and/or Owner, in lieu of installing on-site Public Art, the Developer and/or Owner may provide a Public Art Program In-Lieu Contribution to be deposited into the Public Art Fund for acquisition and placement of Public Art throughout the City.

2. The Art Commission may allow a Developer and/or Owner to satisfy the public art requirement by a combination of installing Publicly Accessible Art on the development site and make a Public Art Program In-Lieu Contribution if the Art Commission determines that the location, siting or scale of the development site makes the installation of Publicly Accessible Art inappropriate or impossible for the purposes of satisfying the one percent requirement for installing Publicly Accessible Art on the development site.

D. Subsequent Removal of Public Art or Alternative Compliance Space

If the Developer and/or Owner satisfies the Public Art requirement in accordance with subsection (A)(1), (A)(2), above, the Public Art previously installed on the development site may only subsequently be removed if the Developer and/or Owner makes a Public Art Program In-Lieu Contribution equivalent to the original amount to the Public Art Fund.

E. Exclusions

The requirements of this Section 14 shall not apply to an Affordable Housing development with a minimum of twenty percent (20%) Affordable Housing units if the Developer and/or Owner demonstrates to the satisfaction of the City Council that said requirements would cause the development project not to be economically feasible.

**XI-10-14.04 Public Art Fund**

Public Art Program In-lieu Contribution shall be placed in the Public Art Fund. The fund shall be used exclusively to (1) provide sites for works of art, (2) acquire and install works of art, (3) maintain works of art, or

(4) fund other administrative costs associated with the Public Art Program. The Art Commission shall recommend utilization of monies in the Public Art Fund to the City Council.

### XI-10-14.05 Compliance

Compliance with the provisions of this Section 14 shall be demonstrated by the Developer and/or Owner at the time of filing the Building Permit application as follows: (a) payment of the full amount of the Public Art Program In-Lieu Contribution, or (b) written proof to the Building Department and the Public Art Program of a contractual agreement to commission or purchase and to install the requested artwork on the development site by a date approved by City. The value of the Publicly Accessible Artwork shall be independently verified by a third party unrelated to the Developer and/or Owner and submitted to the City with the contractual agreement at the sole expense of the Developer and/or Owner. The Developer and/or Owner shall provide the City with proof of installation of the requested artwork on the development site or proof of full payment of the Public Art In-Lieu Contribution before issuance of the certificate of occupancy, unless the City has approved some other method of assuring compliance with the provisions of this Section 14. In the case of installation of Public Art on the development site, the Developer and/or Owner shall maintain said artwork in proper condition on an ongoing basis.

### XI-10-14.06 Violations of this Section

In addition to other fines or penalties provided by State or municipal law, the City may revoke or suspend any permit granted to any Developer and/or Owner who violates the provisions of this Section 14.

## SECTION 4. SEVERABILITY

The provisions of this Ordinance are separable, and the invalidity of any phrase, clause, provision or part shall not affect the validity of the remainder.

## SECTION 5. EFFECTIVE DATE AND POSTING

In accordance with Section 36937 of the Government Code of the State of California, this Ordinance shall take effect thirty (30) days from and after the date of its passage. The City Clerk of the City of Milpitas shall cause this Ordinance or a summary thereof to be published in accordance with Section 36933 of the Government Code of the State of California.

*3B

*BDK CAPITAL, LLC.*

*25 E. Foothill Blvd.*
*Arcadia, CA 91006*
*Tel: (626) 566-1888 Fax: (626) 566-1887*

*April 17, 2015*

The Honorable Mayor Jose Esteves
City of Milpitas
455 E. Calaveras, Blvd.
Milpitas, CA 95035

**RE: Public Art Ordinance 38.821**

Dear Mayor Esteves:

We are writing to express concern about a pending Public Art Ordinance that is currently before the Council. Proposed Ordinance 38.821 is proposing that 1% of a project's value be spent on public art, either in the form of a fee to the City or as on-site art that is publicly accessible.

We recognize the value of public art and integrating public art into a new project. However, we are requesting that you and the Council consider implementing this requirement on a sliding scale.

Large developments, such as the proposed Landmark Towers project on Barber Lane, bring significant public benefit in addition to the public art component. However, at a $300,000,000 estimated project cost, the art fee component would add an additional $3,000,000 to the overall project cost, which we feel is excessive given the competition for project dollars of other worthy project components such as sustainable design, and public open space.

As a solution, we are proposing that you and the Council consider adopting a sliding scale art fee structure whereby high dollar projects would pay a smaller percentage towards the art component. For example, projects valued at:

| | |
|---|---|
| $10 million to $99 million | 0.6% of project's value or building permit valuation |
| $100 million to $199 million | 0.5% of project's value or building permit valuation |
| $200 million and above | 0.4% of projects value or building permit valuation |

We sincerely appreciate your, and the Council's consideration of this matter.

Kin Hui
Manager, BDK Capital, LLC

cc: Councilmember Garry Barbadillo
Councilmember Debbie Indihar Giordano
Councilmember Marsha Grilli
The Honorable Vice-Mayor, Carmen Montano
City Manager, Thomas C. Williams

# CITY OF MILPITAS
# COMMISSION/COMMITTEE APPLICATION

*5

City Clerk's Office
SEP 16 2014
RECEIVED

Sister Cities/Library / Senior Advisory

*PROVIDE COMPLETE INFORMATION (in black ink)*

COMMISSION APPLYING FOR ↑

☐ Mr.

☒ Mrs./Ms./Miss

| Mary | — | LLAMAS |
|---|---|---|
| First | Middle | Last |

**Name:**

| 1331 | St Andrew Way | milpitas | Ca | 95035 |
|---|---|---|---|---|
| Number | Street (apt. # if needed) | City & Zip Code | | |

**Address:**

| 408-6555710 | mary112003 at yahoo.com |
|---|---|
| **Telephone Number(s)** | **e-mail address** |

| RETIRED | — |
|---|---|
| **Present Employer** | **Business Telephone** |

| — | — |
|---|---|
| **Business Address** | **Occupation** |

**Education:** If **Youth Advisory Commission** applicant, indicate your grade/school: _____

| College, Professional, Vocational, or other schools attended | Major Subject | Date | Degree |
|---|---|---|---|
| Pueblo Community College | nursing | 1962 | Certificate |
| | | | |

List community organizations to which you belong or have belonged (additional information may be attached). If application is for ***Veterans Commission***, indicate branch and service in any U.S. military organization (retired or active duty).

| Date | Name of Organization or Branch of Military | Officer / Member |
|---|---|---|
| 7/1963 | ST Johns | member |
| To | Our Lady of Guadalupe Society | Secretary |
| present | | |

Briefly describe the personal qualifications you possess which you believe would be an asset (additional information may be attached):

I have lived in milpitas for 50 years
I know my Community & and its needs I am active at ST. John's Church.

I have sufficient time to devote to this responsibility and will attend the required meetings if I am appointed to fill a future vacancy. I hereby certify that all statements contained in this application are true.

Mary Llamas
**Signature**

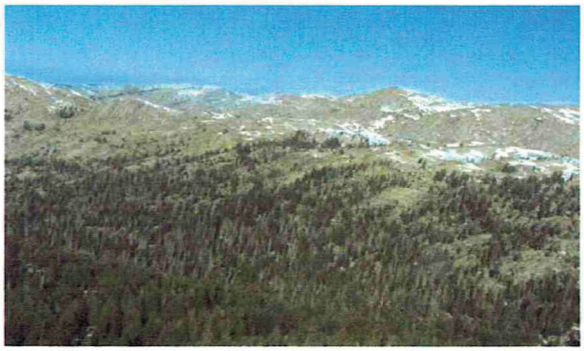
9/11/14
**Date**

Appointments to Commissions or Committees are made by the Mayor with the concurrence of the City Council. **Applications not acted upon will expire after one year from the date submitted unless renewed by the applicant.**

NOTE: ALL COMMISSION APPLICATIONS ARE PUBLIC RECORD

Mail, email or drop off your completed application to:
City Clerk, 455 E. Calaveras Blvd., Milpitas, CA 95035, email: mlavelle@ci.milpitas.ca.gov

Water Solutions, Inc.



# Water Supply Augmentation Feasibility Report

**Prepared for the City of Milpitas, California**

**March 2015**

**Prepared by: Water Solutions, Inc.**

Glenn E. Reynolds, Principal

# Water Supply Augmentation

# Feasibility Report

**Prepared for the City of Milpitas, California**

**March 27, 2015**

## Executive Summary

Water is one of the most important elements that a city provides for its citizens. We use it ubiquitously and yet we do not appreciate the engineering behind the simple turn of a tap. Milpitas with the rest of California, is going into the fourth year of a drought causing reservoirs and aquifers to be lower and lower. Time is of the essence as there are actions that will likely be required in the immediate future. The purposes of the report are to provide near term actions and long term actions for water supply augmentation. The evaluation of water augmentation includes conservation, recycled water, surface water detention, groundwater, water rights acquisition, desalination and storage.

For six months, Water Solutions, Inc. has researched, studied and honed the technical memoranda into a single document called a "Weighted Sum Decision Matrix" (Decision Matrix) shown as Figure 1. This table weights criteria that can be compared and contrasted among the augmentation tasks. It is an interactive document that tabulates and re-tabulates as you adjust the weighting of criteria. For instance, one criterion that is compared across all tasks would be "ease of implementation". In this case, the higher the number, the easier the task is to implement. Ease of implementation for Task 1: Conservation is weighted with a "1" due to limited conservation staff and customers' conservation behaviors are not easily controlled by the City. Furthermore, conservation behaviors tend to be short term. Ease of implementation for Task 4: Groundwater is weighted with a "5" as drilling a production well is a one time infrastructure improvement. The Criteria are: costs, available water, order of magnitude of infrastructure needed, issues to be resolved, operational and maintenance considerations, effectiveness, reliability, benefit, life cycle, and ease of implementation.

The Decision Matrix can change with each person's point of view. It is the aggregate of those points of view that reveal the best choice. The shown Decision Matrix has weighting of the criteria by Water Solutions as an example. Water Solutions, Inc. encourages the Council to take a tour of the Decision Matrix to see their point of view.

Figure1: Weighted Sum Decision Matrix

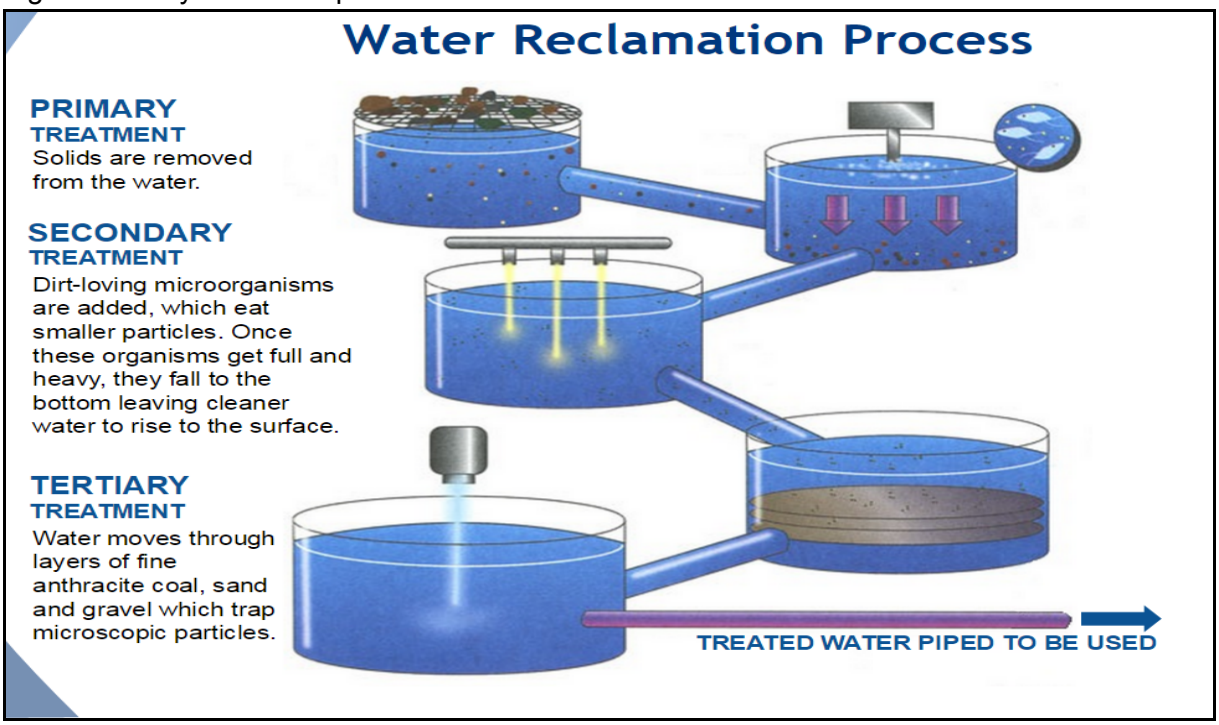
| Concerns | Importance | Task 1: Conservation | Task 2: Recycled Water | Task 3: Surface Water Detention | Task 4: New Groundwater Wells (2@2.5 MGD) | Task 5: Water Rights Acquisition (10 MGD) | Task 6: Desalination (10 MGD) | Task 7: Additional Storage Capacity* |
|---|---|---|---|---|---|---|---|---|
| **Amount of Water Saved (hcf per year)** | | 880,000 | 272,000 | 440,000 | 2,440,000 | 4,900,000 | 4,900,000 | |
| **Capital Costs** | | $6,630,000 | $37,000,000 | $17,700,000 | $6,000,000 | $76,700,000 | $20,000,000 | $6,000,000 |
| **Operating Costs (per year)** | | $140,000 | $0 | $160,000 | $1,780,000 | $1,000,000 | $2,680,000 | $60,000 |
| **Lifetime (years)** | | 20 | 75 | 50 | 40 | 50 | 20 | 50 |
| **Lifetime Costs ($/hcf)** | | $0.54 | $1.81 | $1.17 | $0.79 | $0.52 | $0.75 | |
| Available Volume of Water | **5** | 4 | 2 | 3 | 3 | 5 | 5 | 1 |
| Order of Magnitude of Infrastructure Needed | **3** | 5 | 3 | 1 | 4 | 1 | 1 | 3 |
| Issues to Be Resolved | **5** | 1 | 1 | 1 | 4 | 1 | 1 | 3 |
| Operational & Maintenance Considerations | **1** | 4 | 5 | 1 | 1 | 1 | 1 | 2 |
| Effectiveness | **5** | 3 | 5 | 3 | 3 | 5 | 5 | 1 |
| Reliability | **3** | 4 | 5 | 5 | 3 | 3 | 3 | 4 |
| Cost | **4** | 1 | 2 | 3 | 5 | 1 | 2 | 4 |
| Benefit | **5** | 2 | 5 | 4 | 4 | 5 | 5 | 1 |
| Life Cycle | **2** | 2 | 5 | 5 | 4 | 5 | 2 | 5 |
| Ease of Implementation | **5** | 1 | 4 | 1 | 5 | 1 | 1 | 3 |
| *The higher the score the better the result.* | **SCORE** | **94** | **92** | **101** | **145** | **112** | **110** | **77** |
| | | | | | | **No water made available, only stored* | | |
| | | | | | | | | |
| Lifetime cost is (capital costs + operating costs * lifetime) / (water saved *lifetime) | | | | | | | | |

**Conservation**: Milpitas' residential water usage is within the lower range of Bay Area cities. We recommend that the City continue the existing conservation efforts with the assistance of Santa Clara Valley Water District's (countywide) conservation programs (rebates/house calls). The planned Capital Improvement Program to install smart meters is a valuable tool for water conservation.

**Recycled water:** The supply of recycled water could be unlimited as it is dependent on population size and is not significantly influenced by weather. However, physical improvements are required at the treatment plant to increase the available water supply. See Additional storage task for discussion of peak shaving. Less than 10% of the discharge is being processed into recycled water. We recommend pursuing recycled water supply. See Figure 2 for a brief overview of the processes that produce recycled water. All of these processes occur at the San Jose-Santa Clara Regional Water Treatment Facility. South Bay Water Recycling adds chlorine to the tertiary water and operates the pipelines, tanks and pump stations that make up the transmission system.

Milpitas has been selling recycled water since 1997. The system could be expanded by 95,320 feet (for about $37 million) of purple pipe to serve cooling tower customers, construction watering, school, parks, golf courses and business irrigation. San Diego recently approved a $6 billion dollar, indirect potable reuse program. While Milpitas does not need to go to that extreme in its water recycling, Milpitas should commit to creating loops to complete a current system of dead-ends. Loops will increase reliability and is necessary for 24-7 type uses such as cooling towers. The investment for pipeline extensions will last for 75 years. There may be some cost to the customer to install on-site piping, but with a reduction of nearly 1 million gallons of potable water per day during peak periods, it is a top three contender for "Go Now".

Figure 2: Recycled water process




**Surface water detention:** The detention of stormwater for potable water is land intensive (land needed to capture the stormwater) and highly regulated (water supply rights and treatment process). Surface water retention and detention within Santa Clara County is performed by Santa Clara Valley Water District (SCVWD).

**Groundwater:** Our number one recommendation is to get existing wells producing and drill more if the City desires more independent water supply. Groundwater wells can be improved and new ones drilled. Pinewood Well and Curtis Well should be cleaned to confirm their potential production. If more production is required, then new wells can be drilled for $350,000 per well, treated and connected to the system for about $3 million per well. Milpitas can pump up to 8.2 million gallons per day (mgd) of water out of the aquifer, via Pinewood Well (2.5 mgd), Curtis Well (0.7 mgd) and two new proposed production wells (2.5 mgd each). Starlite Park and Hall Memorial Park, in the west section of the City, are good hydrogeological sites for new wells. Minimal treatment should be required: in-pipe ozonation and/or blending with the water distribution system.

Sustainability of wells is based on the surface water detention and subsequent aquifer recharge as currently performed by SCVWD. Theoretically, recharge credits could be earned if the City were to contribute to the recharge effort by creating more surface retention/detention areas, percolation ponds or bioswales and injection wells.

**Surface water rights acquisition:** The process of water rights is complicated and expensive, but if water can be found, this diversification can be even more reliable than ground water. Milpitas currently has two sources of water: San Francisco Public Utilities Commission (⅔) and Santa Clara Valley Water District (⅓). However, if the City wishes to pursue the acquisition of water rights, there will be extensive legal fees, before any water is acquired. This is a long-term project and the actual purchase of the rights will be very expensive. Furthermore, if water treatment is required, the cost escalates and the feasibility worsens. Additionally, if the water is far away from the City, the infrastructure (pipes, pumps, etc.) improvement costs and/or wheeling of the water must be included. It is not prudent for City to get into the very expensive and complicated water rights at this time considering the other alternatives. There is a possibility of purchasing unused treated water allotment and our recommendation is to pursue this option.

**Desalination:** The process of getting potable water from salty water or brackish water is another costly alternative. Australia had a seven year drought and built desalination plants. However, they were decommissioned after the drought ended as energy, operations and maintenance expenses of desalination were costly. The more salt in the water the more expensive it is to produce water. Milpitas may have some access to brackish water, which is less salty than the bay water, but the expense is still significant. It is recommended that the City consider a partnership with a regional water purveyor for a local desalination plant.

**Additional storage:** Additional tanks are not necessary as this does not increase the water supply (it is only a container). Tanks or reservoirs are commonly used to manage peak shaving (peak shaving is the use of tanks to feed peak demand when there is a daily limited supply). The City already exceeds the California Department Water Resources storage requirement according to Water Code §64554(a)(1). Additional potable water tanks, within the City, are not recommended. The initial obstacles include funding, permitting and finding land for the storage tank; however, Water Solutions, Inc. does recommend recycled water storage for peak shaving.

**Funding** requires constant awareness of the changing grants, loans, etc from the various agencies as they become available. There is a large amount of money that has been earmarked for water development with the passing of Proposition 1 in the last election; this funding should be sought now as such funds, historically, are used very quickly.

**In conclusion**, it is important to realize that the state of the game in the water utilities business is efficiency and clear decision making. Therefore Water Solutions, Inc. feels strongly that the effective use of a deterministic tool such as a Weighted Sum Decision Matrix is a must. As priorities change, so will the decisions we make. In order to make a sound decision at this time the City Council need to be clear on their priorities and opportunities. Given the priorities of concern that we have developed with the City of Milpitas utilities engineering staff, the matrix has shown that **New Groundwater Wells, Recycled Water and Conservation are the avenues to take to augment the water supplies of the City**.

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# Introduction

Currently, the City of Milpitas, hereafter referred to as “the City,” purchases all of it’s water used for potable distribution from San Francisco Public Utilities Commission and Santa Clara Valley Water District. Although the City is doing a good job at managing water supplies, additional measures can be taken to ensure reliability and reduce costs. The following options were examined for their feasibility to augment the water supply reliability for the City of Milpitas: Conservation efforts, increased recycled water use, surface water retention ponds, additional groundwater use, acquiring water rights, water desalination, additional storage capacity and securing funding.

The following is the Feasibility Report for the Water Supply Feasibility Study Report prepared by Water Solutions, Inc. for the City of Milpitas. The specific topics covered in this document summarize the specific recommendations and options for each of the tasks of the technical memoranda (See, Technical Memoranda - Water Supply Feasibility Study):

- Task 1 - Conservation
- Task 2 - Recycled Water
- Task 3 - Surface Water Detention
- Task 4 - New Groundwater Wells
- Task 5 - Water Rights Acquisition
- Task 6 - Desalination
- Task 7 - Additional Storage
- Task 8 - Funding

Regarding funding, Milpitas has several constraints. The City will not have sufficient reserves or revenue streams to qualify for loans, nor can it afford to pay back the loans. The City might be able to pay back $20 million in bonds. Due to these constraints, the City will have to pick which projects it to complete based on what the City can afford.

Any questions regarding the Water Supply Feasibility Study should be directed to Water Solutions, Inc. at (650) 204-9596.

# Data

This report was compiled from the technical memorandum written in response to growing concerns regarding the water supply for the City of Milpitas. Data was collected and analyzed from historical water usage and rate structures, case-studies of cities with similar water requirements and referencing water resource literature. Investigative research for agriculture, commercial and residential water use data was also used. In addition, the California Code of Regulations - Title 22, the City of Milpitas Public Utilities staff and records and consulting hydrogeologist, James S. Ulrick. Data was also collected from South Bay Water Recycling online resources, Silicon Valley Advanced Water Purification Center information, research using online articles, water resources literature and contacting water agencies for information.

Additional information regarding permits and regulations were gathered from the State Water Resource Control Board website, United States Environmental Protection Agency online publications, California Department of Fish and Wildlife and the Santa Clara Valley Water District website.

# Methodology

The tasks referenced in this report were used to analyze the effectiveness of various water augmentation strategies, the life-cycle requirements and specific questions relating to each method. The specific topics for each task addressed in this Feasibility Study are as follows:

A. Description of Proposed Water Supply Augmentation Measure
B. Available Volume of Water
C. Order of Magnitude Description of Infrastructure Needed
D. Issues to Be Resolved
E. Operational & Maintenance Considerations
F. Possible Implementation Schedule
G. Effectiveness, Reliability, Costs & Benefits
H. Life Cycle & Ease of Implementation (See conclusion for Decision Tree and Weighted Sum Decision Matrix)

# A. Description of Proposed Water Supply Augmentation Measure

## Task 1: Water Conservation Recommendations

(A. Description of measure)

A multi-pronged approach is needed to capture enough water to reduce consumption by 20% by 2020 and to manage higher water costs from San Francisco Public Utility Commission and Santa Clara Valley Water District, to allow for reliability even in a drought.

A Conservation Project Manager. This Manager will execute the conservation implementation plan:

- manage the conservation measures to be implemented
- coordinate with Santa Clara Valley Water District's residential and commercial cradle-to-grave (audit, rebates and retrofits) water conservation program
- educate customers using the media

It is important to take advantage of the District's conservation program as modern toilets, shower heads and urinals all offer significant reductions in water usage.

Second, poor data collection is the biggest weakness in any conservation program. The City

is poised to create a truly modern water system, and data collection should be a major goal. Water meters and system analysis software upgrade (Badger Beacon software) has already been budgeted through the Capital Improvement Program at a cost of $6,475,000. The cost for a baseline leak audit is $150,000; once found leaks need to be fixed. SCADA should be researched.

Third, water and wastewater rates are an administrative decision, that cost nothing, but can generate the income needed to offset the loss of water sale due to conservation. The more you save, the less you make; but we have to save! Raising of rates will generate needed revenue and encourage both residential and commercial customers to conserve further.

Fourth, outdoor irrigation conservation measures are also free to Milpitas customers. Weather-based water meters are not recommend for residential customers, but are recommended for commercial situations. All customers can be encouraged to landscape with drought resistant plants, lawn reductions and xeriscapes, also through Santa Clara Valley Water District.

Last, regulatory strategies for water conservation should be reviewed to make sure they are in line with the City's current, and evolving, water conservation goals.

## Task 2: Recycled Water Recommendations

(A. Description of measure)

The City's current recycling system can be augmented. South Bay Water Recycling can produce a lot more water for the City. The City can create incentives for adding new commercial, government and industrial recycled water customers. With only a modest investment in additional distribution pipes the City could potentially save as much as 1 million gallons per day of potable water during peak use periods. The infrastructure required to expand the City's recycled water system involves the addition of approximately 95,320 feet of purple pipe, 150 isolation valves, tees and saddles as well as purple pipe service laterals and water meters, which would be purchased by the customers. The proposed recycled water system expansion is expected to serve not only all cooling tower customers and potential industrial customers, but also the majority of high-irrigation use customers would be required to connect to the recycled water system.

San Jose Water Company is expanding the purple pipe distribution system in the City of San Jose, south of the Landess/Park Victoria intersection on the San Jose/Milpitas border. Adding a turnout there will feed the proposed Segment 5 (Figure A1 in Appendix), creating a much needed loop that will greatly improve maintenance, and therefore reliability.

Using recycled water instead of potable water will expand the potable water supply and help to secure a "drought-proof" supply of recycled water for any number of uses. Using recycled

water for non-potable applications such as construction watering, street sweeping and sewer flushing is inherently less costly than using valuable potable water. Recycled water can be used for residential landscaped common areas, schools, parks, government buildings, agriculture, golf courses, and a few other uses. This may require the construction of pump stations and a reservoir if the hillside golf courses are to be supplied with recycled water. The City is one of the first Bay Area cities to convert to recycled water for construction and can adjust the system based on operational experience.

Water Solutions, Inc. suggests multiple tiers for implementation of these conversions to recycled water, with the most cost effective water savings being afforded by the first tier of improvement and further savings by latter tiers.

Figure 2: Recycled Water Implementation Tiers

| Tier | Improvement |
|---|---|
| 1 | Conversion of Non-potable uses to recycled water along existing alignment. |
| 2 | Conversion of Cooling towers to recycled water along existing alignment. |
| 3 | Pipeline constructions |

## Task 3: Surface Water Detention

(A. Description of measure)

Water Solutions, Inc. recommends investigating surface retention ponds for use as construction water by means of stormwater retention ponds, reservoirs or lagoons. Also, the use of a surface percolation pond can be used in a sustainable manner to store stormwater and manage groundwater supplies.

“Task 3. Surface water Detention” of the technical memoranda illustrates the various strategies the City of Milpitas can employee to capture stormwater for treatment, construction water uses and even for potable use. In addition, the implementation requirements were determined for each. Also, regulatory requirements, site locations, an implementation plan and additional operational considerations were included for surface water retention ponds, water detention facilities and percolation ponds for groundwater replenishment.

Note that surface water diversions require a surface water right (see Task 5: Water Rights Acquisition).

### Augment Surface Water Retention Pond Usage

Milpitas could utilize existing or construct new surface retention lagoons to be used for

collecting and storing stormwater. These could be used for irrigation, habitat restoration, water feature purposes or as potable water (with additional treatment). Existing locations that could be expanded or retrofitted for use as construction water are Hidden Lake Park, Hall park Lagoon, the retention basin off Quince Lane, and the Glenmoore Circle Lagoon near Hall Park. Additional locations for surface water and surface water augmentation include Spring Valley Pond, Sandy Wool Lake, and retention ponds at local golf courses. Additional surface water ponds and lagoons could be constructed to provide stormwater capture and treatment.

Also, existing ponds could be modified to provide additional water treatment and/or storage for construction purposes. This would include vegetative lined canals, bioswales and constructed wetlands. Examples of possible locations for expanding retentions lagoons or using for construction or irrigation water include:

- Hidden Lake Park
- Hall park Lagoon
- Spring Valley Pond
- Sandy Wool Lake
- retention ponds at local golf courses

See “Task 3: Surface Water Detention” technical memorandum for maps locating all the available surface water ponds, as well as the local streams and creeks throughout Milpitas capable of capturing stormwater.

### Surface Percolation Ponds

Hydrological recharge to augment groundwater supplies could be accomplished by surface water percolation or by use of injection wells into appropriate geological formations/aquifers. This water could be used:

- To manage groundwater levels
- Provide additional water storage capacity
- Prevent salt-water intrusion (if present)
- Prevent land-subsidence

### Hydrological Recharge by use of Injection Wells

Injection wells are used for a variety of purposes, including:

- preventing saltwater intrusion
- managing groundwater supplies
- storing water for future use

In this scenario, stormwater is collected, treated and distributed to underground aquifers by use of abandoned wells, dry wells or newly constructed wells designed specifically for this purpose (the best option for medium to large scale projects). Although, typical appropriate well-design and well-construction techniques vary according to the specific purpose of each well. The design and construction of injection wells is critical, as they are more likely to fail

than typical wells.

### Surface Water for Construction, Irrigation and Environmental Restoration:

In regards to using surface water for construction purposes (i.e. at Hidden Lake, etc.) we recommend two options:

A. Put a side cut at the sidewalk and pad closest to the water source - Attach a gate valve to allow water trucks to pull in and fill-up their tanks with non-potable water. This could be used as a perm fill station. Fees could include a flat rate, metered withdrawals, or a keypad (or card swiper) pedestal to control water use.
B. Single phase power 100 amp at 230 volt can control water level run on regular basis.
    a. If Option A is chosen, the City is recommended to do a pump test to confirm it works (permanent installation).
    b. The City should also pull pH and total dissolved solids samples on that water.

Surface water could also be used to irrigate Spring Valley golf course, Summit Point golf course, provide water for nearby surface water features or augment water-sensitive habitats. However, City water infrastructure cannot be built in the surrounding hillside due to the enactment of Measure Z. If there is a way around this measure, then this possibility is ideal.

In addition, water credits might be acquired by negotiating with Santa Clara Valley Water District. The resulting agreement would be executed by means of water trading for groundwater or creek/stream replenishment. In this scenario water access entitlements could be traded or sold, depending on the legal status of the water rights. Water trading is a voluntary exchange and can be used to benefit environmental systems such as streams and creeks by improving instream water quality. The City should initiate an informal discussion with Santa Clara Valley Water District as soon as possible.

## Task 4: New Groundwater Wells Recommendations

(A. Description of measure)

Pinewood and Curtis wells can be refurbished and new wells could be drilled. Pinewood needs no regulatory treatment, but blending for taste may be necessary to please the Milpitas customers. The Curtis well will need both treatment and blending. Prior to use, a state water quality report must be completed, as well as treatment (not necessary if similar in quality to Pinewood) and disinfection. We would recommend the use of in-pipe blending with San Francisco Public Utilities Commission and Santa Clara Valley Water District supplies, as well as disinfection with in-pipe ozonation. This could potentially occur at the Gibraltar tank site or at the well site itself. A cost-benefit of those two choices still needs to be done. Also, groundwater use as recycled backup to water is another option; however, this would limit available water applications.

As with any managed groundwater basin, smaller monitoring wells are required throughout

the basin to manage the water level and quality of the production wells. By drilling these lower-cost wells upfront, the City would be able obtain data on the quantity and quality of new production wells, with a very modest financial outlay.

Assuming similar quality of new wells to that of Pinewood well (the primary municipal well for Milpitas emergency water supply), treatment would be minimal. We recommend the city pursue a managed groundwater well extraction program, much like what Alameda County Water District operates to the immediate North. Upon successful implementation of a groundwater well extraction plan, a groundwater percolation strategy could be implemented by the City to supplement and refresh the extracted groundwater well supplies with stormwater, or possibly even treated recycled water. However, Santa Clara Valley Water District does currently conduct instream recharge of the Santa Clara Basin deep aquifer at the upstream sites on Coyote Creek.

Options for groundwater use include the following:

- leave as an emergency supply
- point of use supply; drill pilot holes to determine the quality and quantity of water at parks, schools and government buildings to irrigate landscape. Develop groundwater wells for use, as feasible
- treat well water for hardness at Pinewood well to secondary potable standards and add to the drinking water supply
- drill pilot holes in Starlite Park and Hall Memorial Park to determine the feasibility of adding groundwater wells to augment the water supply (based on the USGS data and recommendations contained in this memo)
- drill pilot holes and determine the feasibility of shallow groundwater wells on the south-eastern section of Milpitas and at Quince Lane
- consider coordinating and forming partnerships with Santa Clara Valley Water District regarding the construction of recharge facilities; involving percolation ponds and/or injection wells
- pump groundwater for surface water features; i.e. ponds, artificial wetlands, etc. for public recreation, environmental rehabilitation and water storage

The southwestern area of the City lies above the most permeable and transmissive aquifer layers. Any well drilled to 500 feet or more in this area would have every good access to to water available in the deeper Santa Clara basin aquifer. It is this southwestern corner of the City where pilot holes are advised to be drilled.

## Task 5: Water Rights Acquisition Recommendations

(A. Description of measure)

The City of Milpitas (City) currently holds no “water rights.” The amounts purchased from San Francisco and Santa Clara Valley Water District are purchases under contract, not water rights. Similarly, Milpitas has a right to groundwater underlying the City, but the use of

groundwater in the Santa Clara Basin is managed by the Santa Clara Valley Water District.

Water rights, as applied to surface water, is a complicated topic with a number of legal implications. Unless these rights are asserted by a property owner, despite being entitled to an owner, they can be “lost” and thereafter “found” by another party, who may then claim them. It is these lost rights that the City should be looking for, if it decides to embark on a quest for water rights. That is, to identify potential rights, the City should undertake a systematic search to identify any unclaimed water in the Milpitas area.

Generally, surface water may be acquired by a new appropriation, a change in an existing water right, or by contractual agreement and transfer of water rights. For certain purposes, a water right is treated as a real property right, which may be sold and/or transferred. Water rights in certain watersheds are subject to adjudication by the court or curtailment by the State Water Board.

### New Appropriation

Where unappropriated water is available, a new water right may be established by filing an Application to Appropriate Water with the State Water Board. Appropriation is a complicated, multi-staged process with layers of environmental review and regulatory oversight. The following analysis provides a general overview of the process.

In granting an application, the State Water Board must consider the impacts of the project on water quality and the environment under the California Environmental Quality Act. In addition to California Environmental Quality Act review, water projects often include other environmental review and permitting requirements, including several certificate and permitting requirements. (See “Task 5: Water Rights Acquisition” for a complete list of permits, environmental review requirements, California Environmental Quality Act and wildlife mitigation measures).

### Water Transfers

A water transfer results in a reallocation of water among water users, providing flexible water allocation and use. The Urban Water Management Plan requires a description of the opportunities for exchanges or transfers of water (Water Code §10631(d)). There are a number of types of water transfers, which are generally grouped into short and long-term transfers. A short-term transfer is any transfer of one-year or less; a long-term transfer is any transfer longer than one year.

Transfers may be surface water transfers or groundwater transfers. For surface water transfers, two types of surface water supplies may be transferred. The first is a supply where the entity holding the water right will temporarily transfer that supply or a portion of that supply. The second is a supply where an entity contracts for the water supply (like a lease)

but does not hold the underlying water right and wishes to transfer that supply or a portion thereof. For groundwater transfers, there are three types, namely, use of groundwater in lieu of surface water, transfer of banked groundwater, and direct transfer of groundwater. The most common types of water transfer are 1) Crop Idling (leaving idle land that otherwise would have been planted in order to transfer the water thus conserved), 2) Groundwater Substitution (pumping groundwater for use in the seller's service area and transferring the surface water that the seller otherwise would have diverted), and 3) Reservoir Reoperation (releasing surplus storage for transfer).

### Water Wheeling

As mentioned above, the wheeling of water is a process wherein one entity passes water through the transmission and distribution mains of another entity in order to supply the customers of the first entity. For example, if a county owns water that is allocated to certain customers, but does not have any mains reaching those customers, it may be possible for the county to "wheel water" through a community water system that lies between the supply and the customers, even if that community water system is not owned by the county.

The best option, from a legal standpoint, for the City to obtain water through an acquisition will depend on the geographic, environmental, and political setting of the subject water right. The City would have the most control over the water if local water was available and the City could acquire it as either unappropriated water or vested water rights available to purchase (e.g., old agricultural rights).

The preliminary water sources reviewed for acquisition should be determined from the technical memorandum provided, see "Task 3. Surface Water Detention" as well "Task 4. New Groundwater Wells." A list of the major surface water features throughout Milpitas are labeled, as well as possible groundwater extraction locations.

Placer County and the City of Roseville, California, are two such entities. Placer County has customers throughout the county. However, Roseville is its own water supplier. The county and the city have worked out an agreement where the customers of the county that are on the far side of Roseville from the County supplies receive water delivered from the county via the Roseville distribution system.

Also, a prescriptive right is a right acquired through the adverse possession of someone else's water right, that is, a right obtained through the uncontested use of a water right held by another entity for a period of five years or more. Prescriptive rights are difficult to obtain and can only be granted by a court (not highly recommended).

## Task 6: Desalination Recommendations
(A. Description of measure)

The allure of desalination is the ability to create a near-endless supply of water that is resistant to drought. However, the immense costs of brine disposal, operating costs, up-front capital investment and environmental concerns are enough to make desalination the most costly of all treated waters available. However, desalination is still a viable option for a long-term augmentation method or back-up supply; especially with collaboration amongst neighboring agencies. Also, designing a system with a properly designed pretreatment system, as well as treating brackish groundwater (as compared to San Francisco Bay waters), can drastically reduce operating costs.

However, if the water is available, brackish groundwater treatment is much more feasible than seawater treatment. If the City were to perform a brackish groundwater research study, much like the one that Santa Clara Valley Water District is paying to have done at Stanford, the City could find that a reliable supply of brackish water is available at a reasonable cost (e.g. Alameda County at Newark).

If this type of project is to move forward and augment the City's water supply during this or the next drought, legal issues must be tackled head on and partnerships should be formed. Project timeline planning should take into account the considerable lengths of time legal matters often take.

## Task 7: Additional Storage Capacity Recommendations
(A. Description of measure)

Currently, Milpitas exceeds the state requirements for the quantity of treated potable water to be stored. This results in a problem where the City has a hard time "turning over" or using, the water stored in the tanks before it becomes stagnant. Stagnant water can not be used due to increased turbidity, stratification and lack of chlorine. Circulation is critical. Without circulation the water at the top of the tank sits with no circulation, leading to stratified and stagnant water. Also the chlorine which remains in the stagnated water can become depleted, leading to microbial growth as well as tastes and odors. The City must move ahead with the design, acquisition and installation of a Supervisory Control And Data Acquisition (SCADA) system to automate operator control over system management and tank turnover.

Additional potable storage could be created to enhance reliability of the drinking water supply and to store water for use during peak periods, yet that may exacerbate the turnover problem. Similarly, recycled water storage could ease the burden of peak period use. Stormwater storage tanks could be used to reduce flooding and to improve wetland productivity through controlled release. However, water storage via the construction of additional reservoirs may be difficult for the City due to land rights acquisition.

Total stored water is 16.26 million gallons. The City's 2009 Water Master Plan Update sets out a more stringent requirement resulting in an overall storage requirement of 22.8 million gallons, leaving the City 6.6 million gallons short of its self-imposed requirement.

Note also that another district tank sized at 6.6 million gallons is planned for the Transit Area Specific Plan in the Piper Drive area. This will exceed even the self-imposed requirement for water storage.

## Task 8: Funding Recommendations

(A. Description of measure)

Currently, there are a variety of funding options available to the City, which are detailed below. Though most federal funding is available through the state, some funding can be garnered directly from federal sources. Funding for water resource projects are currently available as grants and loans (State Water Resources Control Board, 2014); contact information for these sources is provided in the Conclusion section of this document. The City may be eligible for funding due to the necessity for water infrastructure that is required for continued reliability and drought management in the City.

The use of rate hikes and bonds is common for funding water infrastructure improvements. These measures would provide accessible funding for the City, although the timeline for rate hikes and bonds are dependent upon administrative functions. Bonds, loans and grants are the most effective means for allocating funding for infrastructure improvements.

Increases in connection fees, service charges and institution of fines could also be implemented for funding; however, this could prove unpopular. Fines in particular, are more effectively used to discourage negligent water use than to increase revenues to fund improvement projects. Leveraging fines can make people angry and is susceptible to issues of harassment, etc. Connection fees and service charges would be an effective way of generating funds; however, additional sources of funding would undoubtedly be required.

A tax increase could provide the required funding if the community votes in favor of such a measure. This would be an effective way for determining community support, as well as provide the necessary funding without the costs associated with loans.

# B. Available Volume of Water

## Task 1: Conservation

(B. Available volume of water)
Potential Saved: 879,454 hundred cubic feet per year.
A savings of 879,454 hundred cubic feet of water per year out of a total 4,975,000 hundred cubic feet per year (BAWSCA 2012-13) for a population of 70,000. This represents be a 17% savings from 2013 averages or 1.8 million gallons per day. Background data is provided in Task 1: Conservation.

## Task 2: Recycled Water

(B. Available volume of water)
Potential Saved: 271,692 hundred cubic feet per year.
Water usage for five months in 2014 for a number of high volume consumers was examined. This data was taken from metering records over the non-peak usage period months of January 2014 through May 2014. The potable water consumption offset through expansion of the recycled water system is a yearly 271,692 hundred cubic feet, or nearly 1 million gallons per day during peak use periods. Background data is provided in Task 2: Recycled Water.

## Task 3: Surface Water Detention

(B. Available volume of water)

Potential Saved: 435,600 hundred cubic feet per year.
The theoretical amount of water that can be retained in a reservoir from a rain event is based on the drainage area, rainfall rate and infiltration losses.

The average rainfall for Milpitas during a typical year is 15”. With an area of 13.64 sq. miles this equates to a maximum stormwater quantity of about 10,900 acre-feet of water per year that reaches the City. However, the amount that could be collected would be much less due to percolation through the soils and uncollected stream run-off

If one were to assume an imperviousness factor of 0.50, which describes an area as being approximately half-covered with impervious materials such as asphalt and concrete, then the accompanying collectable stormwater volume becomes approximately 5,000 acre-feet. Without use of the Graphical Storage Method as is dictated by standard since the calculation of stormwater detention basin sizing is an in-depth topic, we can break down the approximate maximum size of a stormwater detention basin by using the number of storms. Assuming the 5,000 acre feet falls upon the City predominantly during the winter storm season, which

generally consists of 5-20 storms, we can assume that the maximum needed size of a stormwater detention basin would be 1,000 acre feet. This is equivalent to 435,600 hundred cubic feet per year, or 0.89 million gallons per day.

### Instream Recharge

Instream recharge is used by Santa Clara Valley Water District and is the acceptable method of surface recharge. This is effectively accomplished by damming the natural creek flow and constructing a percolating detention basin via which additional recharge is accomplished. Of course, this depends upon the geology of the creekbed too. Berryessa Creek seems to be a natural location for further in-stream recharge, as it is currently unobstructed.

## Task 4: New Groundwater Wells

(B. Available volume of water)

Potential Saved: 2,439,840 hundred cubic feet per year.
The south-western section of the City of Milpitas overlays a good groundwater aquifer that is quite productive and its use is recommended. A maximum of 2.5 million gallons per day of water could be extracted per well (using a withdrawal rate of 2,000 gallons per minute) with the addition of new wells and the use of the Pinewood well (Ulrick). Maximum withdrawal can not be maintained over time due to equipment restrictions and aquifer recharge. Five million gallons per day, or 2,439,840 hcf per year per well is a more reasonable expectation, although potentially as much as 8.2 million gallons could be produced.

## Task 5: Water Rights Acquisition

(B. Available volume of water)

Potential Saved: 4,880,050 hundred cubic feet per year.
The best water rights to pursue would be old, unused agricultural rights or existing, senior rights. Compared to other options, these rights would bring fewer possibilities of protests based on environmental concerns.

Once an acceptable appropriative right has been identified as suitable for purchase, the treatment and transport of the water to Milpitas must then be considered. The cost of treatment is potentially high, but the cost of transporting raw water to a treatment plant in Milpitas is potentially much higher. To effectively treat 10 million gallons per day (or 4,880,050 hundred cubic feet per year), which is the City's average demand, a small surface water treatment plant would need to be constructed, ideally, on City-owned land near the water source. If these are not immediately appurtenant to the City, this water could then be piped to a local community and "wheeled" to Milpitas through other water districts' distribution systems.

This approach would probably involve training and maintaining a surface water treatment personnel group (an outside contractor), although treatment could potentially be conducted in-house by trained water treatment plant operators, or even contracted out to another community for operations.

### Water Wheeling

According to Section 81460 of the Water Code, Alameda County Water District is allotted 15,709 hundred cubic feet or 11.8 million gallons per day from the San Francisco Public Utilities Commission. Alameda County Water District uses 8.96 million gallons per day (or 76%) of this water for 20% of its total demand of 43.5 million gallons per day. Alameda County Water District uses 9.06 million gallons per day (or 77%) of this water for 93.7% of its total 9.67 million gallons per day demand. These figures show that Alameda County Water District is comparatively water-rich in comparison with other Bay Area water districts.

If a short-term or emergency supply were needed, the Alameda County Water District interties, both of which are 8-inches in diameter, could each suffice to supply the City with approximately 2.3 million gallons per day per day, thus providing 4.6 million gallons per day, which is nearly half of Milpitas' average demand of 10.12 million gallons per day. If more interties were constructed and connected, it would be possible to purchase an even higher volumetric flow rate from Alameda County Water District, should the need arise. In fact, discussions with Alameda County Water District management have revealed that the district is indeed interested in selling its additional capacity to the City. Alameda County Water District is interested in recouping lost revenue due to conservation by its consumers.

## Task 6: Desalination

(B. Available volume of water)

Potential Saved: 4,880,050 hundred cubic feet per year.
The available volume of water that can be derived from desalination is theoretically nearly infinite. However, in practical terms, the amount of available water from desalination would depend on brackish water sources, likely from shallow wells or groundwater aquifers. Note that the prospects don't appear to be very good thus far and further investigation will be needed. Partnerships with existing local desalination projects seems like the greatest choice at this point.

## Task 7: Additional Storage

(B. Available volume of water)

Potential Saved: no data
"Peak shaving" is the process of reducing the amount of water purchased from the utility

company during peak hours when the charges are highest to reduce demand on the supplier's system. If the average daily usage, as measured in 2011-12, is 10.12 million gallons per day, and the maximum day demand is 25.2 million gallons per day, the resulting peak-demand increase is 15.1 million gallons per day (i.e., the maximum day demand minus average daily usage). As long as there is sufficient storage to meet the maximum day demand, increased water rates can be avoided. Currently, the City has plenty of storage for full peak demand shaving and need not add any more for implementation of this process. Moreover, neither wholesaler charges peak rates. However, the City should consider installing a recycled water tank for peak shaving of recycled water. See "Task 2: Recycled Water" and technical memorandum for additional information.

# C. Order of Magnitude Description of Infrastructure Needed

## Task 1: Conservation

(C. Magnitude of infrastructure)
Many of the conservation measures do not require any additional modifications or additions to existing infrastructure. For instance, no additional City infrastructure is required for:

- rate structure adjustments
- water-efficient retrofits
- integrated land-use planning
- performing leak detections

However, minor changes to on-site infrastructure are required. These changes include:

- enhance water use data collection and analysis so use and conservation can be quantified.
- replacing low-use lawns with native vegetation
- replacing leaking pipes
- planning for multi-family residences (with recycled water irrigation)
- weather-based smart controllers for landscape irrigation (contact Water Solutions, Inc. for a smart-controller design and implementation project proposal)
- explore planning requirements to redevelop infrastructure into "mixed-use" land-use planning zones in order to encourage land-use decisions that are "water-wise" for the City.

## Task 2: Recycled Water

(C. Magnitude of infrastructure)

Approximately 95,320 feet of recycled water lines are proposed to be installed (purple pipe, saddles, tees and air relief valves). Also, purple pipe service laterals, valves and water meters would be required. Note, meters can be purchased by customers for a reduced water rate or could be supplied by the City. All new developments, street repairs and renovations should include a recycled water aspect.

A list of potential customers who could benefit the City by using recycled water is included in "Task 2. Recycled Water" of the Technical Memorandum.

## Task 3: Surface Water Detention

(C. Magnitude of infrastructure)

The rehabilitation of existing infrastructure at Hidden Lake Lagoon and at the other existing surface water ponds to provide more construction water, is an extremely easy way for the City to reduce potable water use for non-potable uses.

Surface percolation ponds would be an effective approach for stormwater catchment but would require the construction of additional facilities, infrastructure, permitting and operational considerations. From a preliminary perspective, the retention basin off Quince Lane seems like a promising location for this application; however, additional geotechnical investigation is required.

Bioswales and vegetative-lined canals should be constructed for all future stormwater collection and conveyance systems. This will reduce organics present in the water, as well as provide habitat, improved aesthetics and easier treatment options for using the water at a later date.

The design and construction of injection wells for artificial groundwater recharge is another possible, yet aggressive alternative if the Santa Clara Valley Water District is to allow a waiver for this kind of activity under its District Act.

Also, Collected stormwater and surface water must meet National Pollutant Discharge Elimination System standards before discharge into any streams, creeks or waterways. Treatment to recycled water standards, as well as periodic monitoring, must be completed before distribution to the recycled water supplies, as well as distribution for construction

purposes. Methods for treatment should be determined based on all available water quality data and reports to treat all water quality constituents of concern.

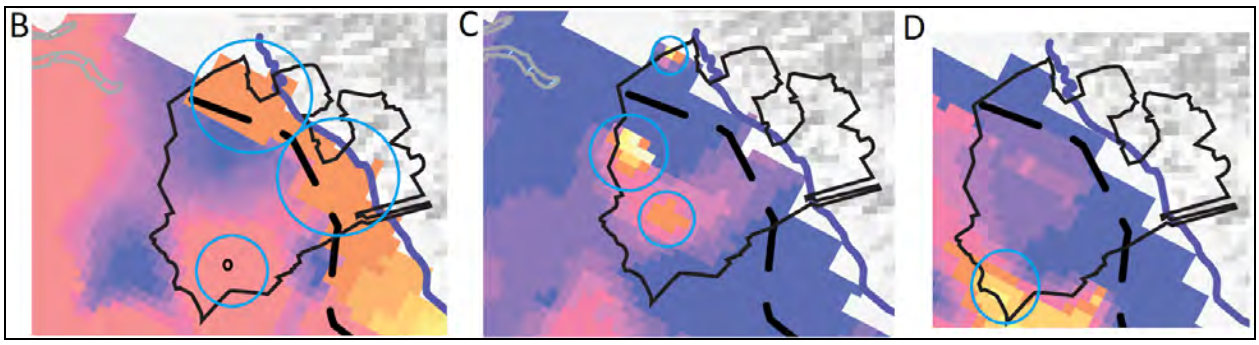
## Task 4: New Groundwater Wells

(C. Magnitude of infrastructure)

There are several considerations when selecting groundwater sources; water quality and the withdrawal rates. These constituents should be identified prior to constructing the production well systems. Pilot holes should be drilled to provide estimates for the quality and quantity of water that can be reasonably withdrawn; the location to be determined from available groundwater data.

The following figures were taken from the United States Geological Survey - Possible locations for new well sites are circled in light-blue:

Figure 3: Specific Storage Capacity




The lighter colors indicate a greater specific storage multiplier for groundwater in Milpitas. The areas with the greatest specific storage are circled in light-blue for clarity; the small dot on Layer B is the location of pinewood well; a fairly good location, based on a United States Geological Survey.

The primary infrastructure required for a municipal well includes the following:

- submersible pump
- submersible electrical cable
- well casing
- flexible or rigid downhole pipe
- centralizers
- well pad
- electrical controls
- treatment with electrical cabinet or housing
- backup generator

Treatment and chlorine injection (prophylactic or residual chlorine) should be added before the water is added to the water supply. A full Title 22 report (State Water Quality Testing) should be conducted to determine site-specific water treatment methods.

Permitting of municipal wells is a relatively simple process. First an appropriate site must be found, away from wastewater and other wells. Then, the site must be approved by the State Water Regional Control Board-Drinking Water Program, after which the County will review the site and issue a drilling permit for $400. At this point in time, the Santa Clara Valley Water Department, as the steward of the groundwater basin, will issue the well permit.

## Task 5: Water Rights Acquisition

(C. Magnitude of infrastructure)

Water rights may depend on obligations regarding wildlife and environmental mitigation measures when developing the water source. The infrastructure required may vary and can include intakes, surface water ponds, constructed wetlands, bio-swales, additional piping, vegetative-lined channels and treatment systems.

## Task 6: Desalination

(C. Magnitude of infrastructure)

The principal processes for desalination use semi-permeable membranes and large pressures to cause water to flow against the concentration gradient and through the membranes, in a process called reverse osmosis. Along with the production of fresh water, is the generation of a salty brine water effluent.

Milpitas does not have direct access to the Bay and would either need to participate in a regional project or install a small brackish groundwater desalination treatment plant.

Pretreatment is accomplished using conventional filtration, microfiltration, ultrafiltration and increasingly commonly, a combination of conventional and ultrafiltration.

- intake
- pump
- pretreatment
- chemicals
- waste disposal
- backup generator

Sometimes chemicals are added to pretreatment liquid for the purposes of enhancing filtration or for cleaning the filters.

- liquid chlorine, in the form of sodium hypochlorite, is often added as a disinfectant
- flocculants like aluminum chloride can be added to make suspended matter easier to filter.
- citric acid, phosphates and other acids may be used to clean the membranes periodically; however, this step results in an additional waste stream that must be dumped to sewerage
- water additives can be used to prevent scaling compounds in the water from precipitating and clogging the reverse osmosis unit

Reverse osmosis plants require specialized pumps that operate at high pressures (>300 psi for brackish water). The first pump is usually a well pump that pushes Bay water or brackish water through conventional treatment, and is followed by a high speed centrifugal pump. This centrifugal pump can produce pressures in excess of 1,000 or pressure per square inch and can require thousands of horsepower, accumulating electricity costs that can add up to hundreds of thousands of dollars per month.

## Task 7: Additional Storage

(C. Magnitude of infrastructure)

Steel
Welded steel tanks cost more to purchase than bolted steel tanks and have a 60-year life expectancy. Welded steel tanks must be repainted every 15 years, typically at a cost of one-third of the tank purchase cost. Painting requires that the tank be out of service for approximately one month, and requires men to be introduced to the sanitary environs of the tank. The budget cost for design and construction of a welded steel tank is $1.85 per gallon or $925,000 for a 500,000-gallon tank.

Bolted steel tanks use thin steel and must be replaced after 20 to 25 years. Given that their cost is more than half the cost of a welded steel tank and their life-cycle is shorter, their life cycle cost is therefore higher. In corrosive environments such as the California Coast, these tanks may experience paint failure in as few as 15 years due to the bolt/panel interface.

Two steel variants reduce or eliminate the paint cost issue but have aesthetic issues. The first, corten, is a self-healing or oxide-coated steel that is a rusty red color but is stable. Water reservoirs constructed of this material have to be painted on the inside, and the only color option for the exterior is “rust red.” The second, stainless steel, is much higher in cost, and typically is only used for the bolt-together, sheet-metal tanks. Although tanks of stainless steel reduce or eliminate painting inside and out, they are often considered “too shiny.”

Fiberglass

Fiberglass is an extremely long-lasting and corrosion-free material that can be used for water tanks from a thousand to millions of gallons. Although these tanks can be sited above ground, they tend to have a larger footprint than steel tanks due to lower tank heights. The cost of fiberglass tanks is typically two to three times the cost of concrete or steel tanks due to fabrication and assembly costs.

Buried cylindrical fiberglass tanks are an excellent choice due to the minimal surface footprint, tank longevity and complete corrosion immunity. While these tanks are reasonable to purchase, the cost of trucking to the site typically doubles the tank cost. In 2014, a 75,000 gallon tank delivered to the Bay Area has a budget price of $200,000, yielding a cost per gallon of $2.66. The use of multiple tanks increases the overall operational risk due to interconnections and valves, over the life of the installation. These tanks are best suited for applications where only one or two tanks are required.

Concrete

There are effectively two methods of constructing concrete tanks: pre-stressed and cast-in-place. Both methods provide effective, corrosion-free storage at all sizes. If necessary, concrete tanks can be buried. Because they are strong, concrete water tanks are ideal for under driveways, courtyards, or sheds, or in other areas where they would have to withstand loads. Concrete tanks are built on site because of the weight of the material.

## Task 8: Funding

(C. Magnitude of infrastructure)
None

# D. Issues to be Resolved

## Task 1: Conservation

(D. Issues to be resolved)

- A multi-pronged approach is needed to capture enough water to allow for 30% growth over 30 years, to reduce consumption by 20% by 2020 and to manage higher water costs from San Francisco Public Utility Commission and Santa Clara Valley Water District.
- The Milpitas community can increase their participation in the existing conservation program that Santa Clara Valley Water District offers.
- Considering rate structures and regulatory strategies will help build proactive plan for future.
- When commercial and industrial customers conserve irrigation usage, the City loses revenue that is needed to pay for overhead costs. Rate increases can be used to counteract this issue. There is a consultant looking at this at the moment.
- There is a point of diminishing returns with a conservation program; getting the last percentages of a population to participate can take more time and therefore money.

## Task 2: Recycled Water

(D. Issues to be resolved)

A recycled water system upgrade requires a substantial investment in infrastructure.

The infrastructure and planning requirements for “mixed-use” land-use planning zones should be explored to encourage land-use decisions that are “water-wise” for the City. Also, a recycled water aspect should be included in all new developments including roads, renovations or housing projects.

Coordination will be required to connect new customers to the existing and planned recycled water system.

There is a lack of reliability in the recycled water distribution system.

## Task 3: Surface Water Detention

(D. Issues to be resolved)

- investigation of the sites outlined in this memorandum for surface water detention or retention and percolation pond sites.
- pursuit of senior water rights (least likely to be protested) - less time until acquisition
- pursuit of old agricultural water rights (more likely to be available) - longer timeframe
- querying Santa Clara Valley Water District if they will reward the City will recharge credits if the City provided surface water detention that replenishes the aquifer.
- regulatory requirements, siting and treatment

## Task 4: New Groundwater Wells

(D. Issues to be resolved)

### Pinewood Well

- connect Pinewood well with the existing potable water system by means of in-pipe ozonation and blending to reduce hardness, or by one of the options as shown in Task 4: New Groundwater Wells.
- proper staffing with Certified Operators will be required.
- backup power may be recommended.

### Curtis Well

- onsite treatment/onsite blending
- pump to Gibraltar tank for centralized treatment or blending.

### New Wells

- as with any managed groundwater basin, smaller monitoring wells should be drilled throughout the basin to manage the water level and quality of the production wells. By drilling these lower cost wells upfront, the City would be able obtain data on the quantity and quality of new production wells, with a very modest financial outlay.
- an up-front investment in a series of pilot wells should be installed throughout the city at Starlite Park, Hall Memorial Park, Quince Lane and as appropriate. This should be done to determine groundwater levels, sustainable withdrawal rates and to determine suitable sites for percolation ponds or injection wells. Collaboration with the Santa Clara Valley Water District should be pursued for partnerships involving recharge facilities for ease of implementation, draft water right agreements and dependable operation.
- a sound understanding of the Santa Clara Valley groundwater basin is needed if the City wishes to drill new groundwater wells.The determination of groundwater sources should be addressed for drilling locations. Monitoring wells, in collaboration with a competent hydro geologist, geotechnical engineer or geologist, should be used to determine exact drilling locations.
- determination of sites suitable for percolation and detention capacity to groundwater

supplies at Quince Ln., etc. based on the findings of the technical memorandum “Task 4: New Groundwater Wells.” Also, determine water quality constituents of concern regarding surface water percolation for each potential site.

- the requirement of Groundwater Management Planning was instituted in 2013 by Assembly Bill 359 with the intent of “...monitoring and management of groundwater levels within the groundwater basin” (www.leginfo.ca.gov, 2014). This Bill adopts principles of sustainability that heretofore were not considered within water law. Both the Groundwater Management Plan (Santa Clara Valley Water District, 2012) and the Urban Water Management Plan (Milpitas, 2010) address the issue of new groundwater wells in the City; however, they do not state explicitly that this option is being pursued.

## Task 5: Water Rights Acquisition

(D. Issues to be resolved)

Major issues to be resolved include determination of water rights for the four surface water ponds managed by the City of Milpitas, as well as investigating potential water rights for groundwater use and additional surface water ponds throughout the City, as well as the creeks that run through the City. Regardless of water levels, rights must be held to divert these streamflows for any purpose.

## Task 6: Desalination

(D. Issues to be resolved)

Issues to resolve include the following:

- determine if there are any City land rights adjacent to San Francisco Bay waters
- locate brackish groundwater sources
- create a dialogue with other Districts with current projects underway.

## Task 7: Additional Storage

(D. Issues to be resolved)

Issues to resolve include the following:

- determine locations for additional storage capacity.
- determine usefulness of recycled water storage based upon demand and supply.

## Task 8: Funding

(D. Issues to be resolved)

None

# E. Operational and Maintenance Considerations

## Task 1: Conservation

(E. Operation and maintenance)

Annual operation and maintenance costs: $140,274
To manage this multi-pronged conservation strategy, we recommend that one full-time employee be hired. This Conservation Project Manager will be responsible for the execution of the various elements of the implementation plan, from within the Public Works Department.

This Full-Time Project Manager employee position's mission will be to:

- manage the existing Conservation program
- encourage customers to call Santa Clara Valley Water District for an audit
- educate customers on Milpitas water policy through media

The annual cost of a Project Manager (Administrative Analyst II), at a salary of $97,456, is $140,274 including taxes and benefits. Alternately a consulting firm could provide this service.

## Task 2: Recycled Water

(E. Operation and maintenance)

Annual operation and maintenance costs: $0 (South Bay Water Recycling assumes O&M tasks)

The use of recycled water for irrigation purposes by big users such as parks and industrial buildings can cause drops in pressure. On the other hand, small users such as residential buildings minimize pressure drops in the system by turning their systems on and off at varying times. When a large number of big users utilize a recycled water system, the resulting pressure drops in the system may negatively affect the availability of water for all users. In many cases, upgrading from the existing "tree distribution" to a grid distribution will mitigate the pressure drops. However, with a large number of small users, the pressure changes don't affect other users nearly as much, as smaller users can control when they turn their irrigation systems on and off. Some locations such as San Diego and Las Vegas have adopted a mandatory outdoor watering schedule requiring residents and commercial customers to limit outdoor watering to designated days and times, as determined by the City (Las Vegas Valley Water District website. 2014).

For the last ten years, South Bay Water Recycling has been capturing about 10 million

gallons per day of wastewater that would normally be lost to the Bay (approximately total 100 million gallons per day outfall). They intend to increase capacity as demand increases. Currently their capacity is greater than the need. This recycled water will be available to communities purchasing water from South Bay Water Recycling (such as the City) and will become a sustainable water supply for future generations (City of San Jose website. 2014).

There are two considerations regarding operation and maintenance reliability of recycled water systems. One is that the peak recycled water use occurs at night-time, when most irrigation of public green spaces (parks, playgrounds, golf courses) takes place. The actual peak is approximately 3.6 times the normal demand and occurs between 21:00 and 03:00 hours. Given that the low use period is around 14:00 hours, to protect system reliability, the City may wish to review requiring daytime use or additional storage (reservoirs or tanks). It seems logical that an analysis should be performed to determine if a reservoir should be constructed to smooth out the demand peaks. This is of course how water systems are designed and it follows that the recycled water system may well need the same consideration. A reservoir located within the City would help to reduce the impact of supply line repairs.

A single connection, as mentioned above, makes the system more vulnerable than a multiple connection system. To supplement this single connection, and to form a loop, additional connections could be made in two places:

- 2,200 foot connection could be made along McCandless Dr. and Trade Zone Blvd. to the 6 inch end at Ringwood Ave. and Trade Zone Blvd
- 12 inch connection could be made by horizontal boring for 900 feet, under Coyote Creek, from the intersection of Barber Lane and McCarthy Blvd. to the 30 inch transmission line under Coyote Creek Trail

## Task 3: Surface Water Detention

(E. Operation and maintenance)

Annual operation and maintenance costs: $0 as Santa Clara Valley Water District currently does this. However, if Milpitas were to assume some of this task the cost to Milpitas in operations and maintenance costs would be $160,000, or 2% of the $8 million capital cost of installation, for mowing and streamflow maintenance of a new detention basin.

If a determined effort is made to retain surface water in the City there are a number of operational challenges that will need to be met. First, the City staff will be responsible for maintenance of any new retention facilities that are built. This means regular mowing of the basin during the dry seasons, if necessary, as well as maintenance of the vegetation-lined channels that lead up to these basins. Also, the City will be responsible for maintenance of any riparian areas that the City will doubtless need to purchase prior to construction of any

basins. Lastly, the entire stormwater system the especially recharge areas themselves will be required to be free of trash at all times, thus complicating the use of such a system.

It will take one full-time-employee approximately 100 hours to mow a 1,000 acre foot basin at 10 feet deep. This is approximately two weeks of full time labor needed approximately once per two months during the dry season.

The use of surface water can have detrimental or positive effects on aquatic wildlife. Promoting projects that improve water quality and habitat development should be taken into consideration. Stormwater runoff should be directed towards bio-swales and natural filtration methods before entering surface retention ponds. Ideally, bioswales would be located in major creek tributaries, as well as between pumping and the surface retention feature. These features require maintenance that will require significant manpower and investment.

## Task 4: New Groundwater Wells

(E. Operation and maintenance)

Annual operation and maintenance costs: $1,780,000 per well for pumping electrical costs.

The Treatment Operator Certification Level 1 (T1) license is required for basic treatment procedures for water distribution systems. In order to proceed with disinfection treatment on the utilized wells, a source for chemicals such as sodium hypochlorite or calcium hypochlorite will be needed. The City must also implement a Water Quality Monitoring Plan to assess wells on a regular basis and ensure that operating wells are up to standard.

Regular well maintenance such as pump operations, response to alarms (including supply volume and pressure), treatment, additional sampling and reporting, would be required. Planning should include the cost of these ongoing activities, as well as the initial investment for the well, submersible pump, energy costs, treatment, and connection.

Additionally, a groundwater percolation strategy could be implemented by the City to supplement and refresh the extracted groundwater well supplies with stormwater, or possibly even treated recycled water. However, Santa Clara Valley Water District does currently conduct instream recharge of the Santa Clara Basin deep aquifer at the upstream sites on Coyote Creek.

## Task 5: Water Rights Acquisition

(E. Operation and maintenance)

Annual operation and maintenance costs: $1,000,000 for operation and maintenance of a 10 million gallon per day surface water treatment plant.

See Surface Water and Groundwater sections of this report for operational and maintenance considerations.

## Task 6: Desalination

(E. Operation and maintenance)

Annual operation and maintenance costs: $2,680,000 for operation and maintenance of a 10 million gallon per day brackish water desalination plant.

Often, brine processing, handling and disposal is the most significant cost when operating a desalination plant; amounting to up to 66% of operating costs and 75% of overall costs. However, energy costs are significant, and depending on the system, can be the greatest operating cost. Energy is consumed by centrifugal pumps operating at 1,000 psi or more and can total hundreds of thousands of dollars per day for large facilities. Other costs include maintenance, operator costs, analytical testing, and membrane replacement costs.

## Task 7: Additional Storage

(E. Operation and maintenance)

Annual operation and maintenance costs: $60,000.

After cleaning and painting, water storage tanks must be disinfected before being placed in service. Cleaning should be done using either 1) liquid sodium hypochlorite solution, or 2) calcium hypochlorite granules or tablets. Water entering the tank should be treated or disinfected as necessary, or screened before being stored. The storage tank should inspected periodically to find any cracks or structural problems.

The type of pump selected should be based on criteria that include maximum flow rates, piping distances, elevation changes, system pressure. Water Solutions, Inc. would recommend the use of a multistage, variable-drive submersible pump able to withstand the

harsh environment of the tank or reservoir. Often, two or more pumps can be run in parallel to allow for service/repairs without disrupting the flow and to provide emergency backup.

Management of the control system (including a depth sounding pressure transducer), pressure, volumetric flow rates, and daily operations would need to be conducted by staff. Annual inspections of the tank must be conducted, and cleaning of the tank must be conducted every five years.

A conveyance system is needed to connect incoming water supplies with tanks or reservoirs, treatment housing, and water mains for potable consumption. The design of the pipe system should be based on soil-type, water flow rates, piping distance, system pressure. Recommended materials include ductile or galvanized iron, PVC, flexible PVC or reinforced concrete (more suitable for water collection).

Additionally, a pressure reducing valve (PRV) needs to be installed from the Santa Clara Valley Water District supplied area to the San Francisco Public Utilities Commision supplied zones. Since the SFPUC supplied area operates at a higher pressure, if pressure drops low in the District sourced zones, supply from SFPUC fills the District zones. There is already a PRV supplying water in this way from the SFPUC supplied zone into Milpitas, and one is needed to support the SFPUC zones with supply from the District. This will improve reliability.

Neither intertie has a meter on the Milpitas side of the line. This should be remedied so the City can confirm the usage reported by SCVWD and SFPUC.

## Task 8: Funding

(E. Operation and maintenance)

Annual operation and maintenance costs: (see Task 1)

The only cost for seeking funding for special water projects is personnel time. A single employee could be assigned to research funds and write grants. The cost would be that of a full-time college-educated employee. This employee could very well be the same as the Conservation Manager outlined in Task 1: Conservation, or the City could hire a consultant.

# F. Possible Implementation Schedule

## Task 1: Conservation

### Task 1: Conservation, Implementation Plan

Proposed Implementation Schedule:

Ordinance

1. Complete writing of new ordinance(s) for water conservation (1 Jun. 2015)
2. Enact new ordinance for water conservation (1 Aug. 2015)
3. Begin enforcement of new ordinance (1 Oct. 2015)

Smart Meter

1. Large meter pilot testing (July-Sept 2014)
2. Large meter install (Oct.-Dec. 2014)
3. Small meter pilot (Jan.-Mar. 2015)
4. Small meter install (Apr.-June 2015)
5. Antennas install (July 2015 - Feb. 2016)

Outreach

1. Advertisement and education of SCVWD rebate programs (on-going)

SCADA

1. City-wide pressure and flow sensors installation (Jan. 2016 - Mar. 2017)
2. Remote control valve installation (July 2017 - Dec. 2018)

System-wide Leak Detection

1. Hiring of leak detection company (July 2017 - Mar. 2018)
2. Aging infrastructure field investigation (July 2015 - on-going)

## Task 2: Recycled Water

### Task 2: Recycled Water, Implementation Plan

Possible Implementation Schedule:

1. Contact potential recycled water customers from the list provided to add recycled water lines, as feasible (May, 2015)
2. Prepare new Ordinance. (June 2015)
3. City approves Ordinance. (July 2015)
4. Begin project plans for installing recycled water lines to additional customers (July, 2015)
5. TASP construction (July 2014 - June 2015)
6. Segment 1 engineering (Jan. - June 2015)
7. Segment 1 construction funding application (July 2015 - Mar. 2016)

8. Segments 2-5, tank/pump, loops planning funding application (July 2015 - Mar. 2016)
9. Ordinance enacted. (Aug. 2015)
10. Segment 1 construction (Apr. 2016 - Sept. 2016)
11. Hire a consulting engineer to design installation of all segments: (April 2016)
12. Segments 2-5, tank/pump, loops engineering (Apr. 2016 - Sept. 2016)
13. Finalize project plans for Industrial/Cooling Towers, City Potable Irrigation lines and other Potable Irrigation connections to the recycled water system. (July. 2016)
14. Open construction contracts for bid. (Mar. 2017)
15. Finalize bid documents. (May 2017)
16. Segments 2-5, tank/pump, loops construction funding application (Oct. 2016 - June 2017)
17. Segments 2-5, tank/pump, loops construction (July 2017 - Mar. 2019)
18. Permit Paperwork. (Mar. 2019)

## Task 3: Surface Water Detention - NOT IMPLEMENTED

Note: Surface water detention is not to be implemented at this time but the City will continue with construction water fill stations:

1. Engineering July 2015 - Sept. 2015
2. Construction Oct. 2015 - Dec. 2015

Task 3: Surface Water Detention Implementation Plan

Implementation Schedule:

1. Contact State Water Resources Control Board, Santa Clara Valley Water District and follow National Pollution Discharge Elimination System standards for special permitting requirements for non-potable use of stormwater. (March-July 2015)
2. Hire a geologist for geotechnical site investigations to determine appropriate sites for surface water detention and/or percolation ponds. (1 August 2015)
3. Hire a consultant to look for available water rights in this order of preference: senior appropriative water rights*;* old agricultural appropriative rights*;* riparian rights near boundaries between neighboring communities (such as Fremont) for SF Bay and wetland restoration projects. (1 October 2015)
4. Hire a consultant to prepare an application for water rights, including all supporting documents. (1 December 2015 or later)
5. Hire a consultant to prepare plan designs for additional surface water detention facilities and/or percolation ponds. (2016 or later)
6. File a fully completed water right application with the Division of Water Rights. (2016 or later)
7. Pay all required fees. (2016 or later)
8. Commence environmental review and permitting requirements. (2016 or later)
9. Finalize environmental review and permitting requirements. (2016 or later)

10. Finalize plan designs for water detention and/or percolation ponds. (2016 or later)
11. Finalize contract documents and bid contract for construction. (2016 or later)
12. Begin construction. (2017 or later)

## Task 4: New Groundwater Wells

Task 4: New Groundwater Wells, Implementation Plan

Possible Implementation Schedule:

1. Engineering funding application for treatment at Curtis, blending at Pinewood and 2 new wells (April 2015 - Dec. 2015)
2. Engineering of on-site blending treatment vs Gibraltar treatment (Jan. 2016 - June 2016)
    a. Hire a consultant to implement the “Blending Study” at Pinewood Well to dilute hardness concentration. (Apr. 2016)
3. Engineering of Curtis well treatment for hardness (Mn) (Jan. 2016 - June 2016)
4. Engineering of site selection, test bore and construction of Well #1 (Jan. 2016 - June 2016)
5. Engineering of site selection, test bore and construction of Well #2 (Jan. 2016 - June 2016)
    a. Hire a well driller to drill pilot holes at each of the proposed specific sites. (Apr. 2016)
    b. Consult with a hydrogeologist to establish a more detailed evaluation of hydrogeologic conditions, together with water quality and access to the water distribution system, of specific sites based on pilot holes. (Apr. 2016)
    c. Hire an engineering consultant to design treatment and improvements for the Curtis Well. (June 2016)
    d. Hire an engineering consultant to design improvements for the Pinewood well, dependent upon results of blending study. (June 2016)
    e. Establish sites for new wells based on consultants conclusions and results of data from pilot wells. Obtain approvals and drilling permits. (June 2016)
6. Construction application for treatment at Curtis, blending of Curtis & Pinewood and 2 new wells (July 2016 - Mar 2017)
7. Construction for treatment at Curtis and 2 new wells (Apr. 2017 - Sept. 2017)
    a. Begin drilling new wells to a depth of 800 feet. (July 2017)
    b. Hire an engineering consultant to design improvements for the new wells, dependent upon results of water quality analyses and pump testing. (July 2017)
    c. Put contracts out to bid for construction of Curtis well treatment and improvements for all new/existing wells. (August 2017)
    d. Begin construction of Curtis well treatment and improvements for all new/existing wells. (September 2017)
    e. Complete construction of all treatment and well improvements. (December

2017)

8. Construct on-site or Gibraltar blending treatment and install of Pinewood generator and control (Apr. 2017 - Sept. 2017)
9. Permitting for Gibraltar, Curtis and 2 new wells (Oct. 2017 - Mar. 2018)
    a. Submit Permit Amendment Application to State Regional Water Control Board-Drinking Water Program. (January 2018)
    b. Complete permitting process and begin supplying water. (Mar. 2018)

## Task 5: Water Rights Acquisition - NOT IMPLEMENTED

Note: Water rights acquisition is not to be implemented at this time but the City will begin a long term process of ongoing water right research. The City has also begun negotiations for an additional treated surface water allotment.

Task 5: Water Rights Acquisition, Implementation Plan

(Ideal) Implementation Schedule: (possible 10 year effort)

1. Obtain water rights for the use of surface water for construction purposes, see Task 3: Surface Water Detention for additional information, including implementation plan (July 2015)
2. Hire a consultant to look for available water rights in this order of preference: Senior appropriative water rights*;* Old agricultural appropriative rights (Oct. 2015)
3. Submit report for council approval (May 2016
4. Hire a consultant to prepare application for water rights, including all supporting documents (1 August 2016).
5. Conduct negotiations (2016-1019)
6. File a fully completed water right application with the Division of Water Right (2019).
7. Pay all required fees (2019).
8. Commence environmental review and permitting requirements (2019).
9. Finalize environmental review and permitting requirements (December 2019).
10. Open talks with other agencies for treatment and “wheeling water” (1 June 2020).
11. Finalize contract documents for surface water detention and/or surface water retention (1 September 2020).

## Task 6: Desalination - NOT IMPLEMENTED

Note: Desalination is not to be implemented at this time, but the City will make an effort to be aware of partnership opportunities.

Task 6: Desalination, Implementation Plan

Proposed Implementation Schedule:

1. Hire a consultant to pursue research on existing brackish groundwater studies. (Aug. 2015)
2. Hire a consultant to pursue cooperation agreements with other desalination partners. (Oct. 2015)
3. Hire a groundwater hydrogeologist with experience with brackish groundwater to do an up to date study on possibilities for Milpitas. (July 2015)
4. Prepare siting plan (October 2015)
5. Report Siting plan to City Council for approval to begin design (December 2015)
6. Hire a consulting engineer to design a desalination installation (for bay water or brackish groundwater). (January 2016)
7. Begin environmental and legal efforts for new desalination facility (Sept. 2016)
8. Open construction contracts for bid. (Jan. 2018)
9. Finalize bid documents. (Mar. 2018)
10. Begin construction of the brackish groundwater desalination facility. (May 2018)
11. Finish construction of the desalination facility. (Dec. 2019)
12. Complete permitting with state and federal governments. (Jan. 2020)

## Task 7: Additional Storage - NOT IMPLEMENTED

Note: Additional storage is not to be implemented at this time but the City will incorporate a recycled water tank and booster station into it's future recycled water system plans.

Task 7: Additional Water Storage, Implementation Plan

Proposed Implementation Schedule for Potable Water Storage:
None, Water Solutions, Inc. does not recommend any potable water storage improvements.
Proposed Implementation Schedule for Other Water Storage

1. Determine the potential need for additional recycled or storm water storage and the most suitable application(s) for meeting these needs. (June 2015).
2. Obtain water sources, water rights and/or cooperative water use agreements with San Francisco Public Utilities Commission and/or Santa Clara Valley Water District, or South Bay Water Recycling. (January 2016).
3. Secure funding for additional water storage (February, 2016).
4. Hire a geotechnical or hydrogeological consultant to pursue site investigations for optimal sites regarding additional water storage potential (March, 2016).
5. Site location and water quantity determination (April, 2016).
6. Develop a request for proposal or in-house project proposal documents*;* including bid documents, etc. (June, 2016).
7. Bid-procurement and awardance of contract for additional water storage (September, 2016).
8. Pre-construction meetings, determining consultants/contractors for environmental mitigation measures and developing construction schedules (October, 2016).
9. Begin environmental and legal efforts for additional water storage (November, 2016).

10. Surveying and preconstruction site tasks (February, 2017).
11. Begin construction of additional water storage structures (April 2017).
12. Finish construction of water storage structures (August, 2017).
13. Complete permitting with state and federal governments. (September, 2017).

## Task 8: Funding

Task 8: Funding, Implementation Plan

Possible Implementation Schedule

1. Determine Appropriate Projects for which to garner funding (Mar. 2015)
2. Submit Funding Pre-Applications and Search www.grants.gov
    a. U.S. Bureau of Reclamation: WaterSMART & Title XVI (5 Jan. 2016) - www.grants.gov
    b. State Water Resources Control Board: Clean Water State Revolving Fund and Propositio n 13 (5 Jan. 2016)
    c. State Water Resources Control Board-Division of Drinking Water: Drinking Water State Revolving Fund (5 Jan. 2016)
3. Evaluate property or sales tax increases within existing tax structure (1 Feb. 2016)
4. Evaluate the City's tiered water-rates for possible increase by initiating a Planning Study for Site Specific Evaluation-based Tiered Water Rate increases (1 Feb. 2016)
5. Complete Planning Study for Rate Increases (1 June 2016)
6. Complete Full Funding Applications
    a. U.S. Bureau of Reclamation: WaterSMART & Title XVI (31 Mar. 2016)
    b. State Water Resources Control Board: Clean Water State Revolving Fund and Prop. 13 (30 June 2016)
        i. CWSRF Application: Engineering for Segments 2, 3, 4 & 5, Tank & Pump Station, Loop Completion
        ii. CWSRF Application: Construction of Segment 1
        iii. CWSRF Application: Construction of Segments 2, 3, 4 & 5, Tank & Pump Station, Loop Completion
    c. State Water Resources Control Board-Division of Drinking Water: Drinking Water State Revolving Fund (30 June 2016)
        i. DWSRF Engineering plan application for treatment at Curtis, blending at Curtis and Pinewood and 2 new wells (Apr. 2015 - Dec. 2015)
        ii. DWSRF SCADA construction application (Apr. 2015 - Dec. 2015)
        iii. DWSRF construction application for treatment at Curtis, blending at Curtis and Pinewood and 2 new wells (July 2016 - Mar. 2017)
7. Signing of Funding Agreements (~6 months after Submission of an Application)
8. Begin Public Comment Period on Site Specific Evaluation Tiered Rate Increases (1 Oct. 2016)
9. Finish Planning or Construction of Water Projects
10. Submit Claims for Reimbursement if funding not yet received

# G. Effectiveness, Reliability, Costs & Benefits

## Task 1: Conservation

(G. Effectiveness, reliability, cost/benefit)

Effectiveness & Reliability:
Good data is the cornerstone of reliability and as such, the ongoing water meter upgrade within the City is an excellent program. Leak detection and water loss auditing is also a must in an old system such as the City's.

Based on the numbers of participants taking part in the Santa Clara Valley Water District's retrofit/rebate system, we believe that there is room for great effect here. New plumbing fixtures are not only more efficient these day but also more reliable than those of days past. 10% of current water usage can be achieved if retrofits become the norm. There is a point of diminishing returns with a conservation program; getting the last percentages of a population to participate can take more time and therefore money.

Costs:

- The annual operations cost of a Project Manager (Administrative Analyst II), at a salary of $97,456, is $140,274 including taxes and benefits.
- The capital cost of a leak detection audit is approximately $150,000 (one-time)
- The capital cost of the water meter upgrade is $6,475,000
- The total capital cost of this effort is then $6,625,000
- The lifetime cost per hundred cubic feet is then $0.54
- Rebates and incentives - none, to be covered by Santa Clara Valley Water District

Benefit:

- A savings of 879,454 hundred cubic feet of water per year out of a total 4,975,000 hundred cubic feet per year for a population of 70,000. This represents be a 17% savings from 2013 averages.

Figure 4: Ranking of Conservation Efforts by Infrastructure Cost-Benefit
SCVWD = Santa Clara Valley Water District; FTE = Full Time Employee; PM = Project Manager

| | Conservation Method | Administrative Costs | Infrastructure Costs | Cost of Savings ($/hundred cubic feet) or Advantages |
|---|---|---|---|---|
| 1 | Rebates, retrofits, education | City Attorney<br>City Council<br>Public Works<br>● FTE: $140,274 annually for 10 years | ● rebates and retrofit cost covered by SCVWD | ● 675,184 hcf saved per year<br>● $0.21 /hcf saved each year<br>● 13.5 million hcf saved over 20 year lifetime<br>● $0.01/hcf saved over 20 year lifetime |
| 2 | Data Collection and Leaks | City Council<br>Public Works<br>● FTE: $140,274 annually for 10 years | ● leak audit: $150,000 | ● +/-4.1% of 10.21 mgd = 560 hcf saved per day<br>● 204,268 hcf saved per year<br>● $33.12/hcf saved each year<br>● 10.2 million hcf saved over 50 year lifetime<br>● $0.66/hcf saved over 50 year lifetime |
| 3 | Water and Wastewater Rate Increases | City Attorney<br>City Council<br>Public Works | ● no cost | ● significant income<br>● moderate unquantifiable* water savings |
| 4 | Landscape and Irrigation | City Attorney<br>City Council<br>Public Works | ● cost covered by SCVWD<br>● (minor cost to Milpitas) | ● significant unquantifiable* water savings |
| 5 | Regulation | City Attorney<br>City Council<br>Public Works | ● no cost | ● moderate unquantifiable* water savings |
| | | TOTAL | $150,000 | 879,454 hcf saved per year |

* This is yet another argument for increased quality and quantity of data collection.

## Task 2: Recycled Water

(G. Effectiveness, reliability, cost/benefit)

Effectiveness & Reliability:
As recycled water originates from wastewater (often considered one of the most reliable sources of water), this is one of the most effective sources to increase the available water supply for the City, over time.

Costs:

- The total capital cost of implementation of all loops (95,000 feet) identified as ideal additions to the recycled water system would cost $36,707,000.
- The ongoing cost of operations of the new recycled water lines is $0.00 since South Bay Water Recycling will inherit the system
- The total cost (capital and O&M combined) for the lifetime of the plant is therefore $1.80 per hundred cubic feet.

Benefit:
Recycled water system expansion would save nearly 1 million gallons per day of potable water during peak use periods. Mandatory connections would increase that amount by an unforeseen number based on other possible connections such as unquantified cooling tower consumption.

## Task 3: Surface Water Detention

(G. Effectiveness, reliability, cost/benefit)

Effectiveness & Reliability:
The effectiveness of a detention basin or pond is completely dependent on weather. If there is little or no rain, there can be little surface water absorption. Also, the quality of the maintenance that is done is a critical factor.

Costs:
Implementation of a surface water detention or surface percolation ponds would accrue the following costs:

- Construction water fill stations - Approximately $25,000 each
- Water Rights Acquisition Capital Costs - Approximately $2 million for rights to Berryessa Creek.
- Retention Basin Capital Costs - Approximately $8 million to $16 million. The cost of a percolation pond should be comparable to that of a surface retention basin.
- The total capital cost of implementation of all these elements would then cost $10,000,000.
- The ongoing cost of Operation and Maintenance - Approximately $160,000 annually.

- The total cost (capital and O&M combined) for the lifetime of the surface water detention facility is therefore $0.73 per hundred cubic feet.

Over the 50 year lifetime of a retention basin, these costs amount to $0.73 per hundred cubic feet of water augmenting the City's supply. This becomes $0.83 if you include the cost of acquiring water rights.

As it stands right now, Santa Clara Valley Water District is the manager of the Santa Clara Valley Basin and conducts in-stream recharge of the basin via Coyote Creek. If Milpitas were to pursue recharge in the eastern foothills along Berryessa creek, for example, they should also look for recharge credits from the District as well. However, since the District is the manager of the basin these opportunities may not be afforded to the City.

Benefits:
Additional acquisition of water rights for surface water and percolation ponds would allow the City to reduce the amount of water purchased each year and increase the reliability of the water system. Also, using a surface water capture and reuse program could recharge aquifers (through the use of surface percolation ponds) and provide a cost effective source of additional water.

## Task 4: New Groundwater Wells

(G. Effectiveness, reliability, cost/benefit)

Effectiveness & Reliability:
Groundwater wells can be easily and inexpensively refurbished. Pinewood well has hard water that will need to be treated by blended with either Santa Clara Valley Water District or San Francisco Public Utilities Commission. New wells can be drilled for a price that is cheaper than buying water. This source diversification allows Milpitas more water reliability than it has now, and for the future.

Additionally, Santa Clara Valley Water District is the official manager of the aquifer recharge, form which Milpitas will draw its groundwater. This makes groundwater wells an even more effective and reliable option.

Costs:
- Installation of additional wells (each producing an approximated 2.5 million gallons per day) will cost $350,000 each.
- Treatment of the Curtis Well (potentially at the Gibraltar tank site) should consist of ozonation with filtration and backwash, at a cost not to exceed $250,000 or $363 per hundred cubic feet of daily production, due to it's low capacity.
- Connection of any well to the distribution system could have a variable cost from a trivial amount up to $3 million dollars depending upon the pump station design.
- If electricity costs $0.11 per hundred cubic feet and the groundwater fee is $1.71 per hundred cubic feet, the total cost for pumping groundwater from a well is $1.82 per

hundred cubic feet.

- Therefore the total capital cost of implementation of a new groundwater well with treatment would be would cost $3,000,000.
- The ongoing annual cost of operations of the new well is $890,000 in electrical costs
- The total cost (capital and O&M combined) for the lifetime of the new well is therefore $1.98 per hundred cubic feet.

Benefits:
The completion of existing wells or addition of new groundwater wells to the City potable water distribution system could result in a considerable decrease of imported water. If two new wells were constructed in addition to the Pinewood and Curtis wells, potentially 8.2 million gallons could be reduced from imported water purchases daily. However, it is most reasonable to assume 1 million gallons per day ( $1337 \text{ hcf/day} \times 365 \text{ days} = 488,005 \text{ hcf/yr}$ ) from each single source for the purpose of cost optimization.

| Source | Flow (mgd) |
|---|---|
| Pinewood Well | 2.5 |
| Curtis Well | 0.7 |
| New Well #1 | 2.5 |
| New Well #2 | 2.5 |
| TOTAL | 8.2 |

## Task 5: Water Rights Acquisition

(G. Effectiveness, reliability, cost/benefit)

Effectiveness & Reliability:
Treatment of surface water is an extremely effective way to provide a supply of water. Although water rights are rare, if surface water were to become available to the City, the City could invest in an extremely effective and time-tested, very reliable (albeit drought-prone) solution via a surface water treatment plant.

Costs:
Implementation of a surface water rights acquisition program could cost $1,700,000 or more in addition to the annual costs. Transmission of raw water would cost many millions of dollars for pipeline or canal, so water would need to be treated with a surface water treatment plant costing at least $75 million, and then transmitted via “water wheeling” or pipeline. “Water wheeling” would cost potentially hundreds of thousands of dollars, but would be a reasonable annual cost.

- Total capital cost of surface water acquisition and treatment is $76,700,000.
- Total operations and maintenance cost of surface water acquisition and treatment is $1 million annually.

- The total cost (capital and O&M combined) for the lifetime of the plant is therefore $0.52 per hundred cubic feet.

Benefits:

- Water rights acquisition would allow the City to be able to cease purchasing water from wholesalers entirely. Annual water transfers via “water wheeling” would be equivalent and would allow the city to avoid treating surface water, while purchasing from other more desirable parties.
- Approximately 10 million gallons per day of treated water (or 4,880,050 hundred cubic feet per year).
-

## Task 6: Desalination

(G. Effectiveness, reliability, cost/benefit)

Effectiveness & Reliability:
Desalination is an extremely effective way to get a new supply of water for any body of consumers. There is a nearly limited supply of salty water in the oceans and if that were to become available to the City through a brackish water aquifer or a direct intake the City could invest in an extremely effective solution via a desalination plant.

However, though desalination is effective, it is also unreliable. Desalination usually operates at very high pressures, and therefore it must be safe and reliable to pump in that way. Sadly, reverse osmosis membranes do not last long, and R/O can be considered one of the most unreliable, and therefore expensive, types of treatment systems available.

Costs:

- $20,000 for a background brackish groundwater study.
- $20,000 for a cooperation agreement with potential partners.
- Up to $20 million dollars for a brackish groundwater treatment facility producing 10 million gallons daily.
- The total capital cost of a desalination program would cost $20,040,000
- The ongoing cost of operations at the new desalination facility of $0.55 per hundred cubic feet or $2.68 million per year
- The total cost (capital and O&M combined) for the lifetime of the plant is $0.75 per hundred cubic feet.

Benefits:

- A savings of potentially 10 million gallons or 4,880,050 hundred cubic feet per year.

## Task 7: Additional Storage

(G. Effectiveness, reliability, cost/benefit)

Effectiveness & Reliability:
The addition of water storage tanks will not contribute directly to reduced water consumption. However, additional water storage will allow for greater amounts of stormwater, recycled water, groundwater or local sources of water to be stored, which can lead to opportunities for purchasing water at reduced rates by augmenting available water supplies.

Elevated tanks can be used to reduce operating costs, improve reliability and maintain constant pressures. This involves pumping water up a tower or mountain during times of reduced electrical rates in places with special rate structures.

Costs:

- ~$2.00 per gallon for small tanks less than 500,000 gallons.
- ~1.50 - $1.75 per gallon for tanks 500,000 gallons to 1 million gallons
- ~$1.25 per gallon for large tanks greater than 1 million gallons. ($1.25 Million per million gallons of storage).
- Pump Station Construction at $500,000+
- Regular maintenance costs of $3 million over the tank lifetime.
- Triennial maintenance and inspection costs.
- Routing costs at about $422,000 to $1,500,000 per mile (or about $10 to $35 per inch*foot = $422,000 / 5280 feet per 8 in pipe).
- Water rights acquisition costs
- Land acquisition costs
- The total capital cost of implementation of a 3 million gallon tank added to the recycled water system would cost $6,000,000.
- The ongoing cost of operations of the new recycled water tank is $0.00 since South Bay Water Recycling will inherit the system, although it would be $60,000 annually
- The total cost (capital and O&M combined) for the lifetime of the plant is therefore not available per hundred cubic feet since no water is saved.

Benefits:

- Additional water storage capacity for emergency supply
- Water supply reliability due to ruptured water mains, etc.
- Ability to store water when rates are lower and/or to store water from lower cost sources.
- Potential energy cost savings by pumping to elevated storage tanks when electrical rates are low and allowing gravity to supply pressure during peak hours.
-

## Task 8: Funding

(G. Effectiveness, reliability, cost/benefit)

Effectiveness & Reliability:
The acquisition of funds for any of these tasks, whether grants or loans, improves the effectiveness of any of the options by leveraging the input of City funds. The effectiveness of money is inherently high in a commodity based economy.

Even if the financial markets cause interest rates to rise from their current lows, the loans available are at a rate less than half of the prime rate. This means that outside funding is an extremely reliable source of money.

Costs:

- There is a modest cost for applying for funding. A single employee position could provide services as both a fund researcher and a grant writer.

Benefits:

- Water Planning or Construction projects could be paid for in full or with loan money at a very low interest rate.

# H. Life-Cycle & Ease of Implementation

## Task 1: Conservation

(H. Lifecycle and ease of implementation)

Life Cycle: 20 years
The lifecycle of a water fixture is approximately 20 years.

Ease of Implementation:
By implementing ordinances or other measures significant gains can be made towards conservation with minimal effort. A Project Manager could be hired to facilitate implementing these measures, or the tasks could be shared internally by the existing staff. Santa Clara Valley Water District is a major ally in this effort. Cooperation with the district is required.

## Task 2: Recycled Water

(H. Lifecycle and ease of implementation)

Life Cycle: 75 years
The lifespan of pipe for a recycled water system is approximately 75 years. This lifespan depends on a number of factors including global warming, traffic, and leaks.

Ease of Implementation:
Planning and construction of recycled water mains is a simple and common event involving the execution of a single construction contract following an engineering phase.

## Task 3: Surface Water Detention

(H. Lifecycle and ease of implementation)

Lifecycle: 50 years
The lifecycle of surface water detention ponds and percolation ponds is highly dependent on construction design. Typical detention and percolation ponds have a lifetime of 80 to 100 years or more. However, the actual operational lifetime of a basin of this kind may be more like 50 years. Annual operation and maintenance is also required.

Ease of Implementation:

- Implementing surface water for construction water is relatively straight forward, inexpensive and easy to install. This includes connecting a water line to the lake with submersible pump and a connection point with isolation valves.
- Construction of additional surface water and percolation ponds can be complex and requires acquiring available land suitable for the application, excavation, material lining, and extensive geotechnical site investigation.
- Planning for and the acquisition of water rights is a complicated and uncommon event involving the execution of multiple contracts over the course of as many as ten years.

## Task 4: New Groundwater Wells

(H. Lifecycle and ease of implementation)

Lifecycle: 40 years
The life cycle of any well installation is approximately 40 years.

Ease of Implementation:
Planning and construction of new groundwater wells is a common and uncomplicated task. The implementation plan is long and involves many steps, but through careful planning the use of wells can be a very feasible water augmentation strategy.

## Task 5: Water Rights Acquisition

(H. Lifecycle and ease of implementation)

Lifecycle: 50 years
The life cycle of a water rights contract is effectively unlimited, dependent only upon the availability of the water in question and the continued interest of all parties.

Ease of Implementation:
Planning for and the acquisition of water rights is a complicated and uncommon event involving the execution of multiple contracts over the course of as many as ten years.

## Task 6: Desalination

(H. Lifecycle and ease of implementation)

Lifecycle: 20 years
The life cycle of a brackish groundwater desalination facility is very much the same as a surface water treatment plant, being approximately 20 years.

Ease of Implementation:
By hiring consultants to do studies of past efforts and for the Milpitas area regarding brackish groundwater desalination, this process becomes much easier than if the City were to attempt to do this themselves. However, the legal entanglements of partnerships and desalination permitting are considerable.

## Task 7: Additional Storage

(H. Lifecycle and ease of implementation)

Lifecycle: 50 years
The life cycle of a water storage tank depends on the type of material used for the construction and the design parameters for water storage tanks. Typically, a plastic or fiberglass tank will last between 20-35 years, while a concrete or steel tank can last significantly longer (40-60+years). Maintenance at around 15 to 20 years will be required for most concrete and steel tanks, including repainting, replacing seals and for other maintenance issues.

Ease of Implementation:

The ease of implementing new water storage infrastructure can be greatly increased by hiring a consultant to do hydrological and geological studies, as well as prepare design concepts for construction. However, additional costs may be accrued because of this. The process for additional water storage is relatively straight-forward and requires funding, contacting agencies for permitting and construction.

### Task 8: Funding

(H. Lifecycle and ease of implementation)

Lifecycle: N/A
The life cycle of a low-interest for non-disadvantaged communities is 20 years.

Ease of Implementation:
Grant funding from U.S. Bureau of Reclamation is not as circuitous a process as are the State Revolving Funds.

## Results

Given the input received from the City of Milpitas Engineering Staff, certain priorities were given to the following categories for evaluation (see table below). The higher the score, the greater the concern. The weighted scores reflect the City's considerations when comparing these different categories.

Figure 5: Weighting of Considerations for the Decision Matrix

| Category of Evaluation | Score |
|---|---|
| Available Volume of Water | 5 |
| Order of Magnitude of Infrastructure Needed | 5 |
| Issues to Be Resolved | 2 |
| Operational & Maintenance Considerations | 5 |
| Effectiveness | 4 |
| Reliability | 3 |
| Cost | 3 |
| Benefit | 4 |
| Life Cycle | 4 |
| Ease of Implementation | 5 |

These category scores were then applied to a Weighted Sum Model, a type of Decision Matrix invented by Stuart Pugh. The Pugh Concept Selection decision matrix method is a

quantitative technique used to rank the multi-dimensional options of an option set. It is frequently used in engineering for making design decisions but can also be used to rank investment options, vendor options, product options or any other set of multidimensional entities.
A basic decision matrix consists of establishing a set of criteria options which are scored and summed to gain a total score which can then be ranked. Importantly, it is not weighted to allow a quick selection process.

Figure 6: City's Quantitative Consideration Scores for the 8 Tasks

| Concerns | Importance | Task 1: Conservation | Task 2: Recycled Water | Task 3: Surface Water Detention | Task 4: New Groundwater Wells (2@2.5 MGD) | Task 5: Water Rights Acquisition (10 MGD) | Task 6: Desalination (10 MGD) | Task 7: Additional Storage Capacity* |
|---|---|---|---|---|---|---|---|---|
| **Amount of Water Saved (hcf per year)** | | 879,000 | 272,000 | 436,000 | 2,440,000 | 4,880,000 | 4,880,000 | |
| **Capital Costs** | | $6,625,000.00 | $36,707,000.00 | $17,700,000.00 | $6,000,000.00 | $76,700,000.00 | $20,040,000.00 | $6,000,000.00 |
| **Operating Costs (per year)** | | $140,000.00 | $0.00 | $160,000.00 | $1,780,000.00 | $1,000,000.00 | $2,680,000.00 | $60,000.00 |
| **Lifetime (years)** | | 20 | 75 | 50 | 40 | 50 | 20 | 50 |
| **Lifetime Costs ($/hcf)** | | $0.54 | $1.80 | $1.18 | $0.79 | $0.52 | $0.75 | |
| Available Volume of Water | 5 | 4 | 2 | 3 | 3 | 5 | 5 | 1 |
| Order of Magnitude of Infrastructure Needed | 5 | 5 | 3 | 1 | 4 | 1 | 1 | 3 |
| Issues to Be Resolved | 2 | 1 | 1 | 1 | 4 | 1 | 1 | 3 |
| Operational & Maintenance Considerations | 5 | 4 | 5 | 1 | 1 | 1 | 1 | 2 |
| Effectiveness | 4 | 3 | 5 | 3 | 3 | 5 | 5 | 1 |
| Reliability | 3 | 1 | 5 | 5 | 3 | 3 | 3 | 4 |
| Cost | 3 | 1 | 2 | 3 | 5 | 1 | 2 | 4 |
| Benefit | 4 | 2 | 5 | 4 | 4 | 5 | 5 | 1 |
| Life Cycle | 4 | 2 | 5 | 5 | 4 | 5 | 2 | 5 |
| Ease of Implementation | 5 | 1 | 4 | 1 | 5 | 1 | 1 | 3 |
| *The higher the score the better the result.* | **SCORE** | **106** | **118** | **104** | **141** | **114** | **105** | **87** |

**No water made available, only stored*

A weighted decision matrix operates in the same way as the basic decision matrix but introduces the concept of weighting the criteria in order of importance. The resultant scores better reflect the importance to the decision maker of the criteria involved. The more important the criteria the higher the weighting it should be given. Each of the potential options are scored and also multiplied by the weighting given to each of the criteria in order to produce a result.

In decision theory, the weighted sum model is the best known and simplest multi-criteria decision analysis / multi-criteria decision making method for evaluating a number of alternatives in terms of a number of decision criteria.

Multiple-criteria decision-making or multiple-criteria decision analysis is a sub-discipline of operations research that explicitly considers multiple criteria in decision-making environments. Whether in our daily lives or in professional settings, there are typically multiple conflicting criteria that need to be evaluated in making decisions. Cost or price is usually one of the main criteria. Some measure of quality is typically another criterion that is in conflict with the cost. In purchasing a car, cost, comfort, safety, and fuel economy may be some of the main criteria we consider. It is unusual to that the cheapest car is the most comfortable and the safest one.

In our daily lives, we usually weigh multiple criteria implicitly and we may be comfortable with the consequences of such decisions that are made based on only intuition. On the other hand, when stakes are high, it is important to properly structure the problem and explicitly evaluate multiple criteria. In making the decision of whether to build a nuclear power plant or not, and where to build it, there are not only very complex issues involving multiple criteria, but there are also multiple parties who are deeply affected from the consequences.

Structuring complex problems well and considering multiple criteria explicitly leads to more informed and better decisions. There have been important advances in this field since the start of the modern multiple-criteria decision-making discipline in the early 1960s. A variety of approaches and methods, many implemented by specialized decision-making software, have been developed for their application in an array of disciplines, ranging from politics and business to the environment and energy.

The results of the Pugh method weighted sum model showed that there were three clear leaders of the three task's solutions. As such, the City should pursue the following options:

1. Task 4: New Groundwater Wells
    a. Site-specific hydrogeological investigations
        i. $20,000 per monitoring well or test-hole
    b. Development of the above-ground facilities at the Curtis and Pinewood wells
        i. Water Softening equipment for taste control at the Pinewood well
        ii. Blending facilities at the Curtis well or Gibraltar Tank Site
2. Task 2: Recycling
    a. Segment 1
    b. Segment 2
    c. Segment 3
    d. Segment 4
    e. Segment 5
    f. TASP Area Extensions
    g. Dixon Loop - City Completion
    h. California Loop
    i. Milmont Extension
    j. Yosemite-Sinclair Loop
    k. East Landess Extension
    l. Recycled Water Tank
3. Task 1: Conservation
    a. Encourage the rebates and retrofits with the Santa Clara Valley Water District (free to the City)
    b. Contract a Water Loss Auditing firm to identify and locate leaks
    c. Fund a Full-Time-Employee as a Water Conservation Manager (Admin III) to manage these programs and pursue funding opportunities (grant writing)

It is therefore recommended, that with the data in hand provided by all the available sources,

the City of Milpitas should pursue these three avenues of water supply improvement immediately. In addition, the City should consider purchasing water from Alameda County Water District as soon as possible.

# Conclusion

In the search for water, there are rarely any low hanging fruit left over any more. This study has realized the preceding statement to be as true as ever. The topics of Conservation, Recycled Water, Surface Water Detention, New Groundwater Wells, Water Rights Acquisition, Desalination, Additional Storage, and Funding were all explored and our recommendations draw from that exploration.

Conservation is a nearly tapped out source of potable water savings which is clearly shown by the City's current water use. However, it seems clear from use reports of the effort, that few residents have chosen to take advantage of the retrofit rebates available to customers in the Santa Clara Valley Water District area, including the City. Moreover, and old city such as Milpitas undoubtedly has leaks, so a Water Loss Audit seems appropriate. Pursuing these efforts could save nearly 2 million gallons per day, which is 20% of the City's current average day demand.

Recycled water is "the new 'drought-proof' source" and as such can be considered a clear winner for the City. More than 95,320 feet of new purple pipe are recommended.

Surface water detention is a possible source of water security for the City although it is not recommended. If the Santa Clara Valley Water District (the Basin Manager) were to allow the recharge of the aquifer by the City, and moreover the contribution of "recharge credits" to the City for such efforts, this might be a good avenue to pursue. Due to the cost and complexities of this type of solution, its pursuit is not advised at this time. However, for a low capital investment, Hidden Lake could be used as an "easy basin" for non-potable water use during construction.

New groundwater wells are the clear leader in this study. For a well-known and not too exorbitant cost, water security and independence can be had. Although operating costs are high, the use of groundwater wells is a sure solution to the City's water supply conundrum.

Pursuing the acquisition of water rights is a costly, lengthy and complex process. Moreover, this is an expensive process to execute to convert water rights into a water source. We do not recommend this option at this time.

Pursuing a desalination project is also a time-consuming and complex process. Although the

regional desalination project is underway, the City is too late a comer and not sufficiently funded to gain a seat at this table. However, the City could do much as Santa Clara Valley Water District has done and hire a consultant to perform a brackish groundwater study, which, if it were to result in a good site for proposal, could provide a good source of water at a low operations and maintenance cost; much less that that of regular desalinated water. We also do not recommend pursuing this project at this time.

The need for additional potable water storage in the City is not present. However, the City could pursue the construction of a recycled water tank in the system to serve as a "peak-shaving" resource. This is recommended as part of the recycled water task project. Additional potable water storage is not recommended.

The pursuit of funding on the other hand is strongly advised and is such a good idea, that as such it has been excluded from evaluation along with the other tasks. Since most funding comes from two sources, "www.grants.gov" and the funding section of the State Water Resources Control Board, it's recommended that the City either hire a Full-Time-Employee, or a consultant such as Water Solutions, Inc., as a part time grant writer (see Conservation) or delegate existing staff to pursuing these funding opportunites forthwith.

Desalination and water rights acquisition provide the most available water, at least theoretically. Conservation is the next best saver of water. Note that as a conservation program proceeds, the last to conserve are the most expensive to reach. New groundwater wells, surface water detention and recycled water also provide more accurately calculable sums of water, though these are lesser in quantity than the above. However, the theoretical amount of groundwater available is much greater per the infrastructure needed than that of these other methods. New wells are also a simple, uncomplicated and common undertaking, which if done right, can be a boon unlike any other. While operation of a new well may consume the hours of one full time licensed water operator, the operations and maintenance concerns are not very great.

Nothing is more reliable than a new, properly constructed groundwater well for effective provision of high-quality water, if said water is drawn from a properly maintained aquifer. The cost of a new well and treatment is rarely more than $3 million, and the benefits of having up to 2.9 million gallons per day from a single, simple source for up to 40 years, are immeasurable.

With these opportunities and projects well in hand it is important to note that the situation of the City is not one that is unique. Many other water systems find themselves in shortages and other dire straits at this time in California's climatic history.

# Appendices Of Technical Memoranda

# *Water Solutions Inc.*

## MEMORANDUM

**Date:** 27 March, 2015
**To:** Steven Machida, Milpitas City Engineer
**From:** Water Solutions, Inc. - Consultant
**Subject:** **Task 1: Conservation**

## Summary

The City of Milpitas (the City) has three motivations to conserve water:

- The City's growth is predicted to be 30% over 30 years (2010-2035), the population increasing from 70,000 to 106,000 citizens. Water availability is a major challenge for such growth (City of Milpitas, Urban Water Management Plan, 2010). If sufficient water is not available, the City risks being considered "water-limited" by large businesses.
- There is a state-wide regulation movement to reduce consumption by 20% between 2009 and 2020.
- Santa Clara Valley Water District has just announced the need for 30% reduction.
- Water rates from San Francisco Public Utilities Commission's 30% increase between 2014 and 2018, will increase further (KTSF TV Ch26, 2014).

The purpose of this memorandum is to compare and evaluate water usage statistics and water conservation efforts of other countries, states and municipalities with those of the City in order to identify suitable conservation strategies for the City. The memorandum examines a number of opportunities to augment the City's current water supply by improving conservation efforts and provides a cost-benefit analysis of these opportunities.

Water usage is measured in many ways. The two units of measure given below are used in this memorandum when discussing water usage:

- *gross gallons per capita per day water consumption* is the averaged amount of water supplied each day through an entire water system (residential, commercial, industrial, government, leakage, etc.) divided by the total population.
- *residential gallons per capita per day water consumption* represents the average amount of indoor and outdoor water used in each household within a given area (i.e., irrigating lawns, washing machines, showering, etc.), divided by the number of persons residing in that area.

It is important to understand the difference between these two.

Water usage statistics provided by the City, the Bay Area Water Supply and Conservation Agency (see Appendix Figures A1 and A2) and the Santa Clara Valley Water District indicate that the City's residential water usage is relatively conservative at 65 residential gallons per capita per day, compared to other cities in 2014, and in 2015 Milpitas is down to 50 residential gallons per capita per day. Although average residential usage covers a range nationally and internationally, the figure of 50 gallons per capita per day is becoming a world-wide water industry standard for indoor residential water conservation (Vickers, 2010, p.12-15).

The following recent water consumption figures show that the City compares favorably with the Bay Area as a whole (Bay Area Water Supply and Conservation Agency Annual Survey, 2012-2013). See Appendix Figure A2: Gross gallons per capita per day comparisons, for more comparisons:

- Bay Area's gross gallons per capita per day: 127.1 gallons
- Bay Area's residential gallons per capita per day: 79 gallons

- The City's gross gallons per capita per day: 140 gallons
- The City's residential gallons per capita per day in 2015: 50 gallons

Bay Area Water Supply and Conservation Agency oversees the purchase of wholesale water for 26 member water utilities. Here are the high and low users according to the Agency's Annual Survey 2012-2013:

- Daly City had the lowest water consumption at 48.8 residential gallons per capita per day
- Purissima Hills Water District had the highest water consumption at 290.4 residential gallons per capita per day

See Figures A1 and A2 in the Appendix for a comparison of usage by other Bay Area Water Supply and Conservation Agency members. While at first glance the Daly City numbers seems low, in fact the Environmental Protection Agency is advocating use in this range. The following are useful benchmarks and reflect a growing push for 50 residential gallons per capita per day:

- Using the Environmental Protection Agency WaterSense specifications as a benchmark for indoor devices, the Environmental Protection Agency Post Retrofit study group (2000) defined efficient residential water use as 40 gallons per capita per day (de Oreo, *Home Energy Magazine*, 2013).
- Australia's average usage is 54 residential gallons per capita per day (and 84 gross gallons per capita per day).

- To reduce consumption by 20% by 2020 (California Department of Water Resources, 2009) Milpitas would need to conserve approximately 27.52 gallons in gross per capita per day usage (reducing gross gallons per capita per day from 140 to 112 gallons) and 13.1 gallons in residential per capita per day usage (reducing usage from 65 to 51.9 residential gallons per capita per day, which has already been done in 2014 according to Santa Clara Valley Water District.)

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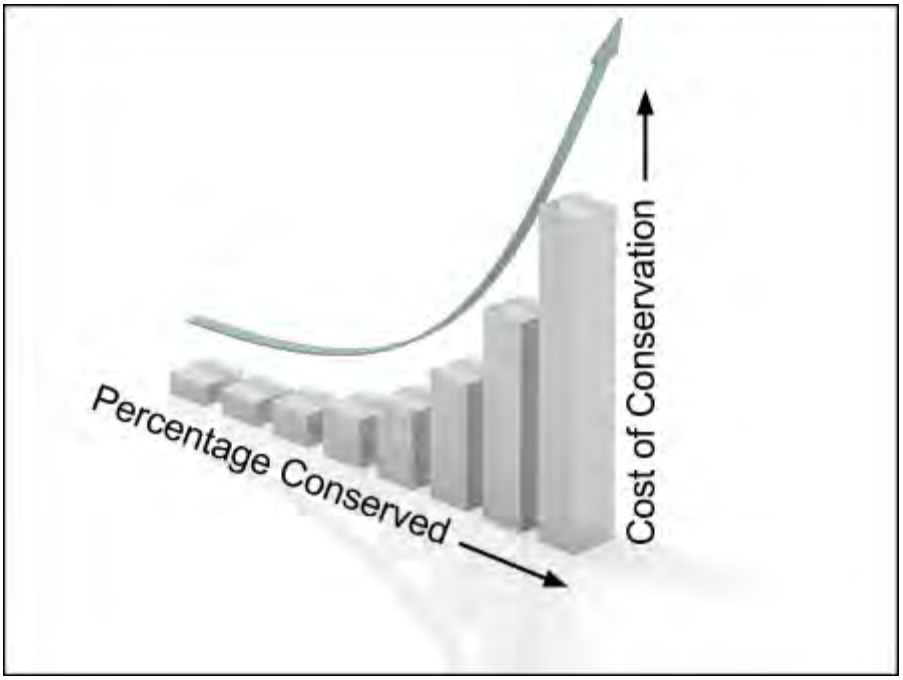
The City's water usage is already fairly conservative. As usage is reduced, approaching the goal, it becomes more expensive to save each additional gallon (Figure 1). Even so, several effective strategies are available to the City to conserve water at this time. For example, one-time conservation efforts implemented in times of drought can be continued during periods of normal rainfall.

**Figure 1 - Conservation versus Cost**




A multi-pronged approach will be needed to capture enough water to allow for 30% growth over 30 years and to reduce consumption by 20% by 2020. Conservation could achieve a 17% reduction, 879,454 hundred cubic feet per year. In addition, Recycling (see Task 2) could save 331,385 hundred cubic feet per year, nearly 1 million gallons per day, during peak use periods. (Note: a hundred cubic feet is a hundred cubic feet of water or 748 gallons; 1 million gallons is 3.07 acre-feet).

Conservation strategies for residential consumption tend towards consumer education and retrofit programs. Strategies for commercial consumption often require site specific

analysis to address technologies like recycling water to enhance conservation.

The biggest surprise in researching Conservation strategies for the City, is that Santa Clara Valley Water District offers most of the conservation resources and programs that we suggest, already. The District offers *free* cradle to grave conservation programs for both Milpitas residential and business customers. They even stated that their toilet retrofit program can be applied to the Sports Center; $300 rebate per toilet and free installation: that means the retrofit of the Sports Center will only be a small expense for the City of Milpitas. As much as 879,454 hundred cubic feet/year of water can be saved (see Figure: 9), at no cost to the City, simply by encouraging Milpitas customers to pick up the phone to start the rebate and retrofit process with the Santa Clara Valley Water District.

# Data

The California Department of Water Resources acknowledges that "easily retrievable, standardized, and comprehensive baseline urban water use data is not available in California" (*California Water Plan Update*; California Department of Water Resources, 2005). The Public Water System Survey provides an annual estimate based on non-audited self-reporting. California uses Urban Water Management Plans, which are required every five years (*California Water Code*; California Department of Water Resources, 2002), to collect water use data, but the results are not compiled into a statewide database.

Water use data collection is a significant challenge in any conservation program. Nevertheless, data collection should be a major goal. The City recently embarked on a water meter modernization program that will provide this data; however, there is a cost associated with collecting and disseminating the data in a meaningful way, and this new cost needs to be included in future City Water Operations budgets.

Data collection is difficult at present, as the current metering technology involves a 1.5% +/- inaccuracy. This technological limitation creates inaccuracies in meter-based water accounting. Although the City's new water meter program may reduce this problem, the plus or minus inaccuracy of the new meters must be applied to all water use data. Aging meters, however, lead to an even higher inaccuracy such as under-registered usage.

Further, the data for outdoor residential irrigation consumption are collected inconsistently and the variables of climate, size of property, types of vegetation, etc., add further complications. Although theoretical calculations of evapotranspiration and irrigation requirements can be done, their complexity makes analysis difficult. Outdoor consumption is usually estimated by comparing peak summer and peak winter water usage. However, as there is usually some irrigation in the winter, calculations done this way tend to overstate indoor use and understate outdoor use (deOreo, William p.152).

Australia takes data collection seriously, and it shows in their gross gallons per capita per day usage figures. Every year, all major water utilities provide information for the audited National Performance Report, which uses standardized reporting categories ("National Performance Report 2011-2012: Urban Water Utilities - Introduction", National Water Commission and Water Services Association of Australia). This report would be analogous to an audited, expanded version of the Public Water System Survey results in California, if such a compilation existed (Cahill and Lund, 2011, p.2). Accurate data collection is the means by which Australia gets water consumption rates down.

**Cost-Benefit Water Meter Retrofit to Digital with Beacon Software**

Good data can be used to inform and educate the City and its customers about water usage, and to diagnose over-use, inefficiencies and leaks. Digital meters are slowly improving in battery life and reliability. Nevertheless, the cost of digital meters is still more than that of traditional meters, at $150-250 per meter (Badger E-Series Ultrasonic Meters) plus $400 for installation (½ hour labor).

Milpitas has already budgeted for water meter and software upgrades (Badger Beacon software) using the Capital Improvement Program at an anticipated cost of $6,475,000. Despite the high cost associated with installing the new meters, the benefit of real time data in assisting both consumers and the city to monitor water use will be significant.

Currently, the City reads manually meters every other month, 6 times per year. In the event of water rationing by the wholesale water providers serving Milpitas, the City would have to respond quickly to manage city wide water use. The available options are as follows.

***Read Meters Manually Every Month***

- public outreach
- staff and City personnel patrols for visible violations
- city-wide, door-to-door water audit outreach

***Automated Meter Reading Every Month***

- targeted calls
- mailers
- financial incentive
- visits to customers using excessive water as identified by the daily water usage figures from smart meters

Highly targeted conservation water audits would do best with real time water use data.

Some types and brands of smart meters are significantly more accurate at low flows, which can result in a one-time income increase from newly captured leaks at the customer connection. This financial increase is discounted due to the typical customer response of repairing the now identified leak.

It is generally held that collecting real time water use data provides a valuable tool in city water management; however, the actual benefit is not tangible unless conservation plays a significant role in the city water supply.

# Methodology

In gathering information regarding water conservation, a number of reliable resources were uncovered. In *Water Use and Conservation,* Amy Vickers refers repeatedly to William de Oreo's *California Single Family Home Water Use Efficiency Study* from 2011. In de Oreo's work for the California Department of Water Resources, he establishes the primary data that many other authors refer to. In this way he should be credited herein as the primary resource.

A series of examinations of available information regarding water conservation in various regions was conducted. The information gathered and results of our study are recorded in the following sections of this technical memorandum.

A. Analyze historical per capita water usage data for readily available/obtainable counties within and outside of the San Francisco Bay Area region
B. Fit data to statistical distributions for the determination of statistical parameters and provide accurate comparison among data sets, including graphical illustrations. (*This task could not be completed due to lack of good data*).
C. Analyze conservation actions and related statistical results for effectiveness, to determine applicable methods considering other water retailers
D. Optional: Perform Mass Balance (water in equals water out study)
E. Optional: Conduct customer usage leak detection study (such as irrigation, toilet, etc.)
F. Optional: Conduct City-wide Home-Use audit of randomly selected representative homes
G. Optional: Perform study of distribution system using correlator
H. Optional: Perform study of point of sale water use (and loss ) using correlator
I. Provide potential examples of conservation methods (irrigation, toilets, system water lost, additional effort of water audit of city parks, etc)

Legal and financial considerations will be addressed at the end of "Methodology" below.

There will be a final *Task 1 Implementation Plan Table* at the end of this memorandum. This will define an implementation schedule, compare cost and benefit, life cycle of plan

and ease of implementation. Feasibility will be discussed in Task 9.

Current water conservation efforts were compared for the following countries, states and municipalities:

- California
    - Alameda
    - East Bay
    - Milpitas
    - Los Angeles
    - Sacramento
    - San Francisco
    - San Jose
    - San Mateo County
    - Santa Clara
    - Windsor
- Nevada
    - Las Vegas
    - North Las Vegas
- New Mexico - Albuquerque
- Arizona - Tucson
- Colorado - Denver
- Georgia - Atlanta
- Kansas
- New York
- Oregon - Portland
- Rhode Island
- Texas
- Washington - Seattle
- Australia
- United Kingdom

The City was compared to cities and agencies throughout the Bay Area (California), Las Vegas, Colorado, New Mexico and Australia. These locations were chosen due to their similarities in features such as climate, infrastructure, economies, and types of land use. There were also relevant case-studies of their current conservation strategies. Australia and Las Vegas were chosen as extremes to illustrate differences in applying conservation measures, alternative approaches to conservation and different abilities to achieve a baseline in severe or constant drought conditions. Both of these sites are known around the world as water stressed; one city has rethought its water program, the other has yet to do so.

Water usage varies greatly among locations. Variables that influence these trends include the following:

- climate
- cultural memes (or behaviors)
- cost/availability of water
- availability of water using appliances
- agricultural practices
- irrigated areas of lawns, etc.

Integrated land use planning, efficient usage strategies, recycled water augmentation and education efforts were investigated for their applicability to the City to reduce water usage in a cost-effective manner. Urban density data and land use integration options were also studied as the means to provide water saving potential for planning purposes within the City of Milpitas.

## A. Analyze historical per capita water usage data for readily available/obtainable counties within and outside of the San Francisco Bay Area region

### Milpitas

The City has several reasons to conserve water, namely to:

- possibly grow 30% over 30 years (by 2030)
- reduce water consumption by 20%
- San Francisco Public Utility Commission (⅔ water source) will raise water rates by up to 30% annually over next 4 years
- Santa Clara Valley Water District (⅓ water source) will raise its rates too

Milpitas is situated in the north section of Santa Clara County and purchases its water as follows (City of Milpitas, 2014):

- Santa Clara Valley Water District (~⅓) and
- San Francisco Public Utilities Commission (~⅔).

The City's usage quantities per source (Bay Area Water and Conservation Agency annual report 2012-2013, p. 31):

- 29% or 1,443,000 hundred cubic feet; Santa Clara Valley Water District (1,079 millions of gallons)
- 62% or 3,115,000 hundred cubic feet; San Francisco Public Utility Commission (2,330 millions of gallons)
- 8.4% or 417,000 hundred cubic feet; recycled water (312 millions of gallons)
  TOTAL 4,975,000 hundred cubic feet (3,721 millions of gallons)

As of fall 2014, both the State of California and the Santa Clara Valley Water District have set a 20% mandatory water reduction from 2013 usage levels. The San Francisco

Public Utilities Commission has asked for a 10% voluntary reduction.

The City has an effective 14% mandatory water reduction effort in place, as well as the following conservation measures:

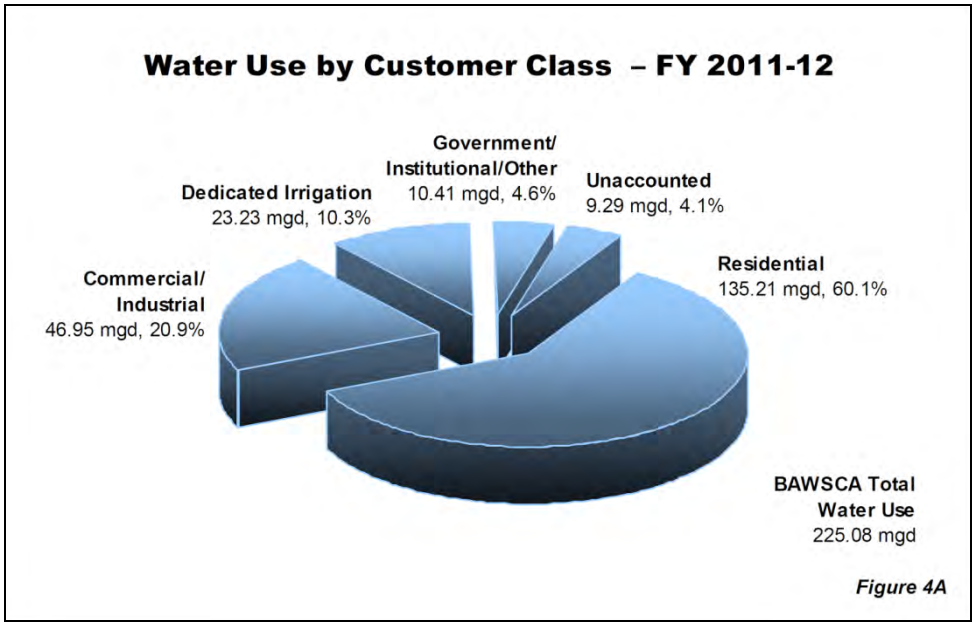
- provision of indoor and outdoor water use education, including tips on how to save water outdoors and advising residents to adjust their irrigation timers to watering before 6 a.m. or after 6 p.m.
- offering free low-flow devices
- initiating a landscape rebate program to upgrade irrigation equipment
- offering free water-wise house calls by a trained district technician
- making available high efficiency toilet rebates for up to $125
- offering a rebate of up to $175 for Tier 3 residential washing machines
- allowing commercial and industrial customers to borrow water meters for monitoring conservation efforts
- offering rebates of up to $400 per unit on high efficiency washers

All categories of water use—landscape, commercial, industrial and residential—appear to have opportunities for saving water, which include the following:

- replacing under-reading water meters
- implementing a leak detection program to fix leaky pipes

A $150,000 water audit and leak detection program would help to isolate unknown losses in the system (Gasner, Kate, 2015). This could reduce the City's water consumption by up to 4% (see "Unaccounted" 4.1% below) and possibly more (Bay Area Water and Conservation Agency data; see Figure 2, below).

**Figure 2: "Bay Area Water Supply and Conservation Agency 2012-2013 Annual Survey"**



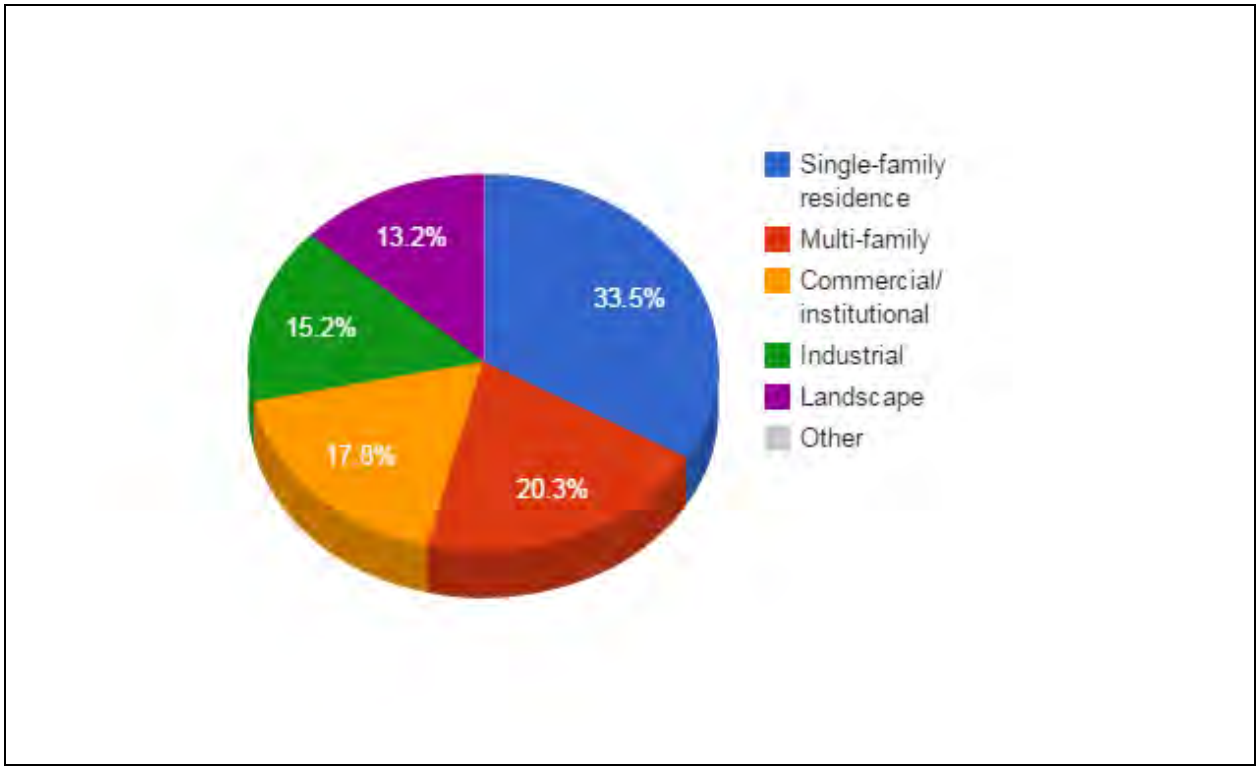

The Bay Area Water Supply and Conservation Agency 2012-2013 Annual Report presented gross per capita consumption as follows:

- Milpitas for 2007: 162 gross gallons per capita per day
- Milpitas for 2012-2013: 137.6 gross gallons per capita per day
- Bay Area average: 127.1 gross gallons per capita per day
- Daly City: 70.0 gross gallons per capita per day
- North Coast Community WD: 62.7 gross gallons per capita per day

To reduce consumption by 20% by 2020 (20x2020 California Water Resources Board), Milpitas would need to:

- reduce gross water consumption by 27.52 gross gallons per capita per day
    - reducing usage from 140 to 112 gross gallons per capita per day
- reduce residential water consumption by 13.1 residential gallons per capita per day
    - reducing usage from 65 to 51.9 residential gallons per capita per day, has already been done in 2014 according to Santa Clara Valley Water District.

**Figure 3: Water Use by Customer Class - Projected 2015**
(Figure 3 derived from Bay Area Water Supply and Conservation District Annual Survey 2012-2013 data)




Milpitas consumers *from most to least* consumption (based on 2015 projections in Figure 3 above) are as follows:

- single-family residence (largest consumer group)
- multi-family
- commercial/institutional
- industrial
- landscape
- other/fire (smallest consumer)

Using recycled water for irrigation and replacing lawned surfaces with native plants are approaches that could be taken to reduce potable water consumption.

Consumption dropped from 12.09 millions of gallons (in 2000) to 10.19 millions of gallons (in 2013), although demand seems to be increasing at a steady rate, with occasional and abrupt drops in consumption, most notably around 2002 and 2007. Although the cause of these decreases is unclear, possible explanations include economic downturn, rate increases, increased conservation efforts, drought awareness and/or reductions from large industrial customers.

The following tables outline the City's projected demand for water purchased from the Santa Clara Valley Water District, from San Francisco and for recycled water.

**Daily Demand Projections By Source: Santa Clara Valley Water District**

| 2012-2013 Actual | 2015-2016 Projection | 2020-2021 Projection | 2025-2026 Projection | 2030-2031 Projection | 2035-2036 Projection |
|---|---|---|---|---|---|
| 2.90 millions of gallons (3,877 hundred cubic feet) | 3.30 millions of gallons (4,412 hundred cubic feet) | 3.91 millions of gallons (5,227 hundred cubic feet) | 5.15 millions of gallons (6,885 hundred cubic feet) | 6.40 millions of gallons (8,556 hundred cubic feet) | 8.20 millions of gallons (10,963 hundred cubic feet) |

(Bay Area Water Supply and Conservation Agency 2012-2013 report, p. 35, Table 3D-5)

**Daily Demand Projections By Source: City and County of San Francisco**

| 2012-2013 Actual | 2015-2016 Projection | 2020-2021 Projection | 2025-2026 Projection | 2030-2031 Projection | 2035-2036 Projection |
|---|---|---|---|---|---|
| 6.48millions of gallons (8,663 hundred cubic feet) | 7.07 millions of gallons (9,452 hundred cubic feet) | 7.69 millions of gallons (10,281 hundred cubic feet) | 8.25 millions of gallons (11,029 hundred cubic feet) | 8.80 millions of gallons (11,765 hundred cubic feet) | 8.90 millions of gallons (11,898 hundred cubic feet) |

(City and County of San Francisco, 2010 Urban Water Management Plan, p. 47)

**Daily Demand Projections By Source: South Bay Water Recycling**

| 2012-2013 Actual | 2015-2016 Projection | 2020-2021 Projection | 2025-2026 Projection | 2030-2031 Projection | 2035-2036 Projection |
|---|---|---|---|---|---|
| 0.85 millions of gallons (1,136 hundred cubic feet) | 0.99 millions of gallons (1,324 hundred cubic feet) | 1.19 millions of gallons (1,591 hundred cubic feet) | 1.38 millions of gallons (1,845 hundred cubic feet) | 1.57 millions of gallons (2,099 hundred cubic feet) | 1.77 millions of gallons (2,366 hundred cubic feet) |

(Bay Area Water Supply and Conservation Agency 2012-2013 report, p. 35, Table 3D-4)

## Santa Clara County

On February 25, 2014, the Santa Clara Valley Water District board extended conservation goals to reduce water usage further, by 20% by 2015. In 2009, the District Board of Directors had already called for a 15% mandatory water conservation target supported by an innovative promotional campaign entitled "There's never enough water to waste." The campaign continued in Fiscal Year 2010-11, with a mandatory

conservation target of 10%. The public responded by achieving a 17% rate of water conservation.

Assuming continued conservation, the District had projected a reduction in revenue of approximately $5.8 million in Fiscal Year 2010-11, which was addressed through operational efficiencies. Ongoing public outreach to encourage water conservation is allocated $750,000 in the budget.

Current water conservation programs focus on:

- landscape areas for residential and commercial
- technical assistance
- water efficiency technologies [Badger E-Series Ultrasonic Meters and weather-based irrigation controllers for commercial only]
- toilet retrofits
- commercial clothes washer replacements

An example of one of these programs is the “Brown is the New Green” campaign promoting conservation awareness by providing residents with free “shower buckets” to collect extra water and yard signs to place on landscape areas with information on how to save water (“Brown is the New Green”, 2014). The campaign has been servicing all of Santa Clara County (including the City) for several months.

Santa Clara Valley Water District has also created a digital “water tracker” that makes monthly assessments of the larger water supply and usage. Residents are required to limit their irrigation use to twice a week. New incentives in 2014 include:

- rebates for drought resistant landscaping
- irrigation hardware
- greywater laundry-to-landscape programs for residential and commercial
- commercial high-efficiency toilet programs
- residential high-efficiency clothes washers
- the sub-meter rebate program
- clean water and natural flood protection program

## Bay Area Conservation

The average gross and residential water consumptions in the whole Bay Area Water Supply and Conservation Agency (excluding Stanford) for Fiscal Year 2012-13 were:

- gross gallons per capita per day: 127.1
- residential gallons per capita per day: 79

The City’s *residential* consumption is *lower* than the Bay Area average by 13.4 residential gallons per capita per day (at 65.6 residential gallons per capita per day in 2013, and 50 residential gallons per capita per day in 2014).

However, the City's *gross* consumption is *higher* than the Bay Area average by about 10 gross gallons per capita per day (at 137.6 gross gallons per capita per day).

As noted earlier, Daly City had the lowest reported residential consumption at 48.8 gallons per capita per day, while Purissima Hills Water District had the highest at 290.4 gallons per capita per day (see Figures 1 and 2 in the Appendix).

All owners of San Francisco County properties with over 1,000 square feet of newly constructed or rehabilitated landscape are required to implement efficient irrigation systems, utilize low-water-use and climate-appropriate plants and establish a site-specific water budget designed to keep the landscape healthy and water efficient. San Francisco Public Utilities Commission strongly promotes the use of water-efficient shower heads, aerators and toilets. Further, if shower heads produce more than 2.5 gallons per minute, if toilets use more than 1.6 gallons of water per flush, or if faucets use more than 2.2 gallons per minute, these devices must be replaced.

Alameda County Water District has a Water Saving Assistance Program that encourages residents to request a free water-use survey of their homes. Businesses participating in water-use efficiency programs are eligible to receive free water-conserving devices, for example, faucet aerators, toilet flappers and shower heads (Alameda County Water District website, Aug, 2014).

East Bay Municipal Utility District provides residents in the East Bay area with a rebate of $0.50 per square foot of yard if they replace their lawn with a WaterSmart California Friendly gardens, and $0.25 per square foot if a drip irrigation system is installed. Coupons for purchasing mulch are available at mulch retail locations, and free home water-audit kits are available to the public (East Bay Municipal Utility District website, 2014). The District advises taking cars to a commercial car wash that uses recycled water, to cover swimming pools to reduce evaporation and that residents be educated about how to read their water meters as a means of detecting leaks and about how to fix leaks. Also, residents are asked to run their dishwasher only when full, to install low-flow shower heads and high efficiency toilets, to put food coloring in the toilet tank so any leak becomes visible, and to plug the sink instead of running the water when rinsing a razor.

### Windsor, CA, and Recycled Water

The Town of Windsor has been able to save about 55 acre-feet per year or 7% of its total water use by mandating the use of recycled water for new developments. City ordinances require that common landscaped areas, parks, and landscaped areas surrounding high schools and multi-family buildings are irrigated with recycled water. Dual plumbing systems are required for the high school and fire station's irrigation, process water and flush water. Recycled water is also used for irrigation of vineyards and for commercial wash water. Residents are required to make use of water conservation

incentives, rebates and giveaway programs to replace water-guzzling plumbing fixtures and appliances with water efficient models. If water escapes through leaks or breaks within the distribution system, the flaw must be detected and fixed within 72 hours or the customer involved can be fined. In times of extreme drought, residents are allowed 65 gallons per capita per day. The average gross water use to date is 140-150 gallons per capita per day (City of Windsor, Paul Piazza). Windsor provides an excellent example of what can be done through local policy change; however, the modest gains recorded to date also illustrate how slowly such policy shows a measurable effect (City of Windsor, CA website, 2013)

### Los Angeles, CA

Compared to other California metropolitan areas, Los Angeles has the greatest potential for conserving water:

- before 1990, the average water use was 173 gross gallons per capita per day
- by 1990-2000, water use had fallen to 159 gross gallons per capita per day
- by 2009-2010, water use was estimated to be 117 gross gallons per capita per day

The continuing decrease is likely strongly influenced by mandatory conservation measures. Single family water use represents the majority of usage by the Los Angeles Department of Water and Power, followed by multi-family, commercial, etc. Also, outdoor use accounts for about 54% of residential use, but only about 32% of multi-family use (Los Angeles Department of Water and Power Urban Water Management Plan, 2010).

Water savings were achieved, in part, through legislation. The Water Conservation Act of 2009 (Senate Bill *X7-7*) required water agencies to reduce per capita water use by 20% by 2020 (conveniently marketed as “20x2020”). Also, assembly bills were approved to improve water management and provide funding for conservation efforts by water suppliers. Additionally, City ordinances have been utilized to mandate efficient shower heads, low-flow toilets and water-efficient landscaping. Customers with three acres or more of turf are required to reduce water by 10% or face a 100% surcharge on their water bill. Los Angeles Department of Water and Power will pay homeowners $2 per square foot of property and commercial customers $1 per square foot of property to replace conventional turf with water-wise landscaping (“Urban Water Conservation and Efficiency Potential in California” Pacific Institute, Natural Resources Defense Council, June, 2014).

### Denver, CO

In Denver, Colorado, a homeowners association, helped reduce water use by 40% through joining with Denver Water. Together they installed eight new weather-based smart controllers that regulate the irrigation system in residential locations based on precipitation, soil makeup, wind and other environmental factors (“Saving Water for the

Future." Solutions, 2011). They also rebuilt storm drainages to promote more water soakage to plants, rather than letting the water running into the street. Homeowners are now required to maintain a grass height of 3.5 inches on residential lawns, which helps retain soil moisture. Denver Water pays commercial, industrial and institutional customers $18.50 for every thousand gallons of water they save.

Denver's "Accelerated Conservation Plan: 2007-2016" set a goal of reducing water usage by 20% and expanding the recycled water system to additional schools, parks and the local zoo. Denver Water has started delivering recycled water, which is dechlorinated, to Lake Ladora, Lower Derby Lake and Lake Mary, and to four wetlands. Denver Water is now partnering with 17 entities in a program called WISE, which stands for Water Infrastructure and Supply Efficiency. This program has yet to be approved, but if it is, the partnership will provide a new water supply through combining unused capacities (Denver Water website, 2014).

### Las Vegas, Nevada

Gross per capita water use in the Las Vegas Valley is significantly higher than in other Western communities, owing in large part to high outdoor water demand—the average Las Vegas Valley resident uses approximately 100 gallons of water outdoors each day. The Southern Nevada Water Authority is among the highest for indoor water demand, using about 165 gallons per capita per day (Las Vegas Valley Water District website, 2014). Las Vegas provides a useful comparison for studying water conservation due to the combination of the following factors: excessive water use, water-demanding landscapes, large number of hotels, unsustainable groundwater withdrawal, an arid climate and poor conservation habits. This comparison, along with the disruptions to the economy that the City faces now, can be used to envision what might happen without proper water management. Already economic and residential growth are being threatened due to a lack of water, as water costs are quickly escalating. A run-away water demand has caught up with the City and is limiting its growth potential.

### Water Conservation in Australia

Urban centers throughout Australia were selected for this study due to their similarities with Milpitas in economy, infrastructure, climate, including a history of drought cycles (every 18 years), and culture. Although the urban water use data are sometimes configured differently, average gross per capita water use in Australia is lower than for California. Australia was battered by an extreme drought lasting from 2003 to 2012. It forced a rethinking of water use, and the lessons they learned can be applied to the City of Milpitas.

The Australian Bureau of Statistics creates a "water account" every three years with summary statistics and urban water usage. Data are retrieved through surveys, water utilities and research papers. An extensive report of water audits known as the National

Performance Report is then issued. Figure 4 below).

**Figure 4: "Water Use in Selected Australian and Western Cities, 2010" Cahill and Lund - November, 2013**:

| Location | Residential use[b], lpcd (gpcd) | Urban use[b], lpcd (gpcd) |
|---|---|---|
| Portland, OR | 219 (58) | 390 (103) |
| Albuquerque, NM[c] | 282 (74) | 587 (155) |
| Tucson, AZ[d] | 367 (97) | 544 (144) |
| Denver, CO | 393 (104) | 604 (160) |
| California | 394 (104) | 568 (150) |
| San Francisco | 172[a] (46[a]) | 295[a] (78[a]) |
| Oakland/East Bay | 277[a]–316 (73[a]–83) | 439[a]–469 (116[a]–124) |
| San Diego | 277[a]–350 (73[a]–92) | 490[a]–524 (129[a]–138) |
| San Jose | 307–323[a] (81–85[a]) | 489–519[a] (129–137[a]) |
| Los Angeles | 345[a]–376 (91[a]–99) | 450[a]–547 (119[a]–145) |
| Sacramento | 428[a]–455 (113–120[a]) | 642–667[a] (170–176[a]) |
| Australia | 204 (54) | 318 (84) |
| Melbourne | 150 (40) | 238 (63) |
| Brisbane | 172 (45) | 289 (76) |
| Canberra | 191 (50) | 288 (76) |
| Sydney | 207 (55) | 312 (83) |
| Perth | 284 (75) | 399 (106) |

Note: Data sources are Portland Water Bureau (PWB) 2011; Yuhas 2010; Tucson Water 2008; Denver Water 2011; DWR 2011; San Francisco Public Utilities Commission (SFPUC) 2011; East Bay Municipal Water District (EBMUD) 2011; Los Angeles Department of Water and Power (LADWP) 2011; San Jose Environmental Services Department (SJESD) 2011; San Diego Public Utilities (SDPU) 2011; Sacramento Department of Utilities (SDU) 2011; WSAA 2011.

[a]This data is from the Urban Water Management Plan.

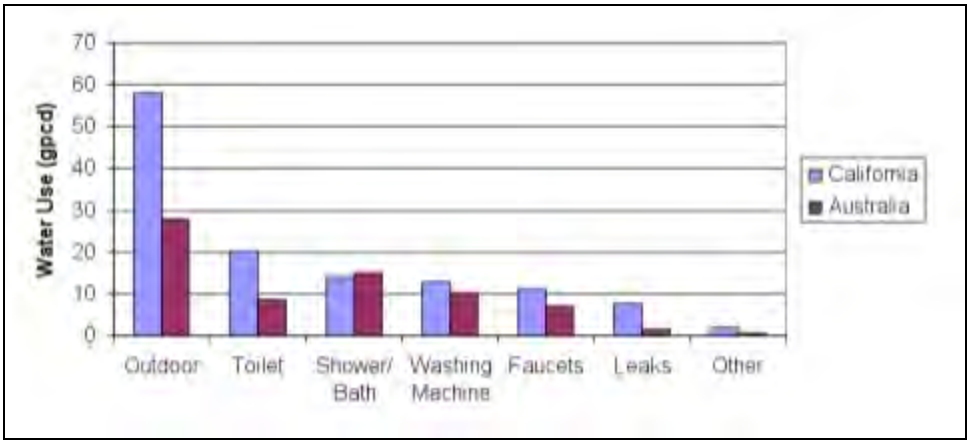
[b]This data does not include distribution system losses.

[c]This data is from 2009.

[d]This data is from 2007.

The methodology for determining outdoor residential water usage varies greatly among geographical areas. Outdoor water usage is the most significant type of usage for urban water consumption. The per capita outdoor residential water use is much lower in Australia than California (Figure 5).

**Figure 5: Comparison of Californian and Australian End Uses of Water** (California Water Blog website)




Average California residential water use is 104 residential gallons per capita. In comparison, average Australian residential use averages to 54 gallons per capita per day (Figure 4). The greatest differences between California and Australian residential water use relate to the following, in order of decreasing magnitude (Figure 5):

- outdoor water use
- toilets, leaks
- faucets
- washing machines
- other uses and lastly shower/baths

Since 1997, Caroma, Australia, has been using “dual flush” toilets that use half the amount of water per flush compared to common household toilets. In cities such as Melbourne, outdoor watering is prohibited between 10 a.m. and 8 p.m. and may be restricted more in particularly dry weather conditions. This prohibition has given residents the incentive to choose a less water-intensive landscape and to invest in rainwater tanks, which are exempt from watering restrictions and which reduce demand on the water supply system (Cahill and Lund, 2011). It should be noted that rainwater tanks have a limited value in California due to the long dry summer. Between 1994 and 2009, water usage in Australia fluctuated, with an overall decrease by 2009. This pattern is likely the result of the continuing implementation of conservation methods due to the seven year drought.

## B. Fit data to statistical distributions for the determination of statistical parameters and provide accurate comparison among data sets, including graphical illustrations.

Note that the *theoretical* minimum for the residential water usage of a highly efficient household is approximately 32 gallons per capita per day**,** according to the "Urban Water Conservation and Efficiency Potential in California" (2014, p.4).
As noted earlier, the Environmental Protection Agency's Post Retrofit study group (2000), using the Environmental Protection Agency's WaterSense specifications as a benchmark for indoor devices, defined water efficiency as 40 residential gallons per capita per day (*Home Energy Magazine,* de Oreo, 2013 and California Department of Water Resources, *2011*).

California and Australia exemplify the wide range of gross water consumption that can occur in different areas (See Figure 4, Cahill and Lund, 2013):

- across California is 104 gross gallons per capita per day
- for Australia is approximately 54 gross gallons per capita per day, with an average usage of 50 residential gallons per capita per day

The following table (Figure 6) shows the range of residential water use averages throughout the United States and Australia. The water efficiency ratings and corresponding water use averages (residential gallons per capita per day) are given, as well as the amount of water Milpitas would need to save to achieve this rating.

**Figure 6: Residential Gallons Per Capita per Day Usage Comparisons** (Water Solutions, Inc.)

| Rating* | rgpcpd | rgpcpd saved** | Relative Cost | Typical Example |
|---|---|---|---|---|
| Platinum | 35 | 30 | Very High | Theoretical Minimum |
| Gold | 40 | 25 | High | Australia - Low Average |
| Silver | 47 | 18 | Moderate | |
| Bronze | 55 | 10 | Low | |
| Excellent | 65 | 0 | No Cost | Milpitas |
| Good | 79 | -14 | Less Available Water | Bay Area Average |
| Fair | 100 | -35 | Limited Water Available | California Average |
| Poor | 165 | -100 | Limited Water Available | Las Vegas |
| *Water Solutions, Inc. Rating | | | **rgpcpd minus previous rating value | |

## C. Analyze conservation actions and related statistical results for effectiveness, to determine applicable methods considering other water retailers: Milpitas Water Conservation Strategies

### Water Rates Structure

Conservation pricing can encourage customers to conserve, but the pricing structure must be designed appropriately. This approach is the least expensive way to encourage water conservation. The following defines the three rate structures commonly in use.

A *Flat Rate* structure, such as that used in Sacramento, means everyone pays the same flat rate no matter what their usage. No one is motivated to conserve, as people can use as much water as they want with no financial consequence.

A *Uniform Rate* structure means that a dollar amount is assigned to the number of gallons used, for example $3.00/1,000 gallons. With this structure, as more water is used, more is paid, but along a single pricing tier (or at a set rate).

An *Increasing Block Rate* structure works by increasing the water rate based on usage. Low volumes are priced low, and higher volumes are tiered at higher prices. With this structure, water price effects water demand. Many large cities have implemented Increasing Block Rate structures, but they differ in:

- the number of blocks/tiers
- the block volume thresholds
- the block prices

Not all Increasing Block Pricing structures work to encourage conservation. A lesson can be learned by comparing Seattle and North Las Vegas. Seattle's Increasing Block Rate structure (per hundred cubic feet) sends a strong message to its customers by setting a modest rate for the first block of peak period usage ($5.13 per 3,740 gallons or 5 hundred cubic feet) to cover the essentials of cooking, cleaning, and bathing.

- The next two block structures are:
    - +23.6% ($6.34 per hundred cubic feet up to 13,464 gallons or 18 hundred cubic feet)
    - +130% more expensive than the first tier ($11.80 per hundred cubic feet for over 13,464 gallons or 18 hundred cubic feet)
- The third tier addresses peak period usage over sixty day periods:
    - $5.13 per hundred cubic feet for up to 10 hcf in 60 days
    - $6.34 per hundred cubic feet for the next 26 hcf in 60 days
    - $11.80 per hundred cubic feet for more than 36 hcf in 60 days

Peak use periods are the weeks and months when Las Vegas is hot, which is rare in Seattle, but can be an issue at times in Milpitas, especially considering nighttime irrigation.

The lowest Seattle price is higher than the highest North Las Vegas price, as can be seen below. Also, the volume thresholds are lower in Seattle, which means that Seattle is paying more for low usage than North Las Vegas. Smart block rate structuring can inspire conservation. It is the least expensive way to communicate to the population the value of water, linking the cost of water with the need to conserve.

North Las Vegas, in comparison, has four block rate structures. While increases of 30% to 40% are used in its Increasing Block Rate structure, it starts out with such a low block price and high block volume threshold that there is little incentive to conserve.

- $1.16 per 1,000 gallons up to 5,000 gallons
- $2.08 per 1,000 gallons up to 10,000 gallons
- $3.09 per 1,000 gallons up to 20,000 gallons
- $4.58 per 1,000 gallons over 20,000 gallons

North Las Vegas's water consumption is 165 residential gallons per capita per day. Note that this figure represents residential usage, not gross usage. In comparison, Seattle's residential usage is 63 gallons per capita per day. Of course, Seattle is located in the Pacific Northwest where the temperatures, humidity and annual rainfall are radically different from those in Las Vegas, which is bound to affect residential water usage.

A tiered rate structure can also be based upon Site Specific Evaluations. With this approach, each customer has a base index of water use. As long as that customer's water use stays below his particular base index, indicating that water is being conserved, the charge is below the nominal rate. However, if and when the base index is exceeded, indicating a higher-than-usual use of water, the charge to the customer is higher than the nominal rate.

There is no question that adjusting water rate structures to encourage conservation is an inexpensive way to curb consumption. Educational programs will help to explain why rate structuring helps everybody. Water consumption goals can monetarily encourage people to think twice about the amount of water they use.

The water industry has a goal of 50 gallons per capita per day for residential water consumption. When cities create well-priced and appropriately blocked rate structures for consumers, they communicate the value of water and encourage conservation with every statement that consumers receive. The following consumption figures (Gleick, 2010. p.105) provide an interesting comparison when you compare usage and rate structures:

- Seattle: 54 indoor + 9 outdoor residential gallons per capita per day = 63 gallons total

- Atlanta: 71 indoor + 20 outdoor residential gallons per capita per day = 91 gallons total
- Las Vegas: 65 indoor + 100 outdoor residential gallons per capita per day = 165 gallons total

### Wastewater Rates Structure

As part of the continuum, wastewater is a product/service that, when priced appropriately, can encourage further water conservation. Wastewater rate structures vary markedly among Las Vegas, Atlanta and Seattle.

- Las Vegas has both a relatively weak inclining block structure for water and a low, flat wastewater charge. The way both variables are managed communicates limited appreciation of the value of water; as a result, the consumer will make little or no effort to conserve.
- Atlanta does better, using a two block increasing price structure for water, but the pricing is lower than for Seattle. For wastewater, Atlanta uses an increasing block structure that is more aggressive than Las Vegas and helps restrain consumption.
- Seattle uses aggressive block pricing for both water and wastewater, and the results are visible in the customers' low daily consumption.

### The Milpitas / Santa Clara Valley Water District Water Conservation Programs

The Santa Clara Valley Water District offers a comprehensive conservation program that includes all of the rebates and retrofit opportunities that are calculated below. These calculations show how much water can be saved, and the money that can be saved as a result of not having to pay for expensive water. The calculations include the cost that the City would have to pay to implement its own rebate and retrofit program. *But,* because the Santa Clara Valley Water District already offers these rebate and retrofit services to Milpitas customers, it seems redundant for Milpitas to create their own program. A lot of water can be saved by marketing Santa Clara Valley Water District's conservation programs to Milpitas customers. A large amount of water can be saved, with little financial cost to the City.

The City of Milpitas could also try novel information marketing campaigns. Awards and demonstrations can get customer attention and encourage action. Business awards can be awarded to business who are 100% retrofitted to Environmental Protection Agency benchmarks. These awards should be publicized via billing statements, advertising, newspaper articles, social media, etc.

The City can inspire residential conservation by using inexpensive web technologies, in an innovative manner. Using the Environmental Protection Agency Post Retrofit study group (2000) and the The California Single-Family Home Water Use Efficiency Study (de Oreo, 2011) as examples, a house in Milpitas could be chosen and used as a conservation model. There could be an on-line capture of the example house whose

usage can be tracked and viewed as an example for other customers using electronic data loggers. Customers could apply to be a model house; two a year. In a series of interviews, the resident would blog or podcast their experience of the audit, the changes made, and water saved. The sample houses would agree to having their water use being tracked per toilet, shower, and appliance, and reflected on an online accounting website. A graduate student could find this a good project.

## Residential Retrofit Cost-Benefits

The consumers of the City of Milpitas, to date, have not taken up this opportunity to conserve; the number of participants has been low. As described above, Milpitas will need to budget for an employee to market the Santa Clara Valley Water District's Conservation programs to the customers of Milpitas.

### *Residential Usage Benchmarks*

As seen in Figure 7, below, there is a range of indoor residential conservation benchmarks. These benchmarks provide useful models. The table shows how benchmarks can range from the 2011 California Single-Family Home Water Use Efficiency Study, of 66 residential indoor gallons per capita per day, and the theoretical possibility of only 32 residential indoor gallons per capita per day (Figure 8).

**Figure 7: Summary of Residential Benchmarks**

| **Study** | **Indoor residential gallons per household per day** | **Indoor residential gallons per capita per day** (divided by 2.64 people per household) | **Study Summary** |
|---|---|---|---|
| Residential End Uses of Water Study (1999) | 186 | 70 | flow trace data was obtained from portable data loggers attached to water meters of each study homes |
| EPA Retrofit Study (2000) | 107 | 40 | this figure is a suitable target for best management practices conditions |
| California Single-Family Home Water Use Efficiency Study (2011) | 175 | 66 | flow trace data was obtained from portable data loggers attached to water meters of each study homes |

| | | | |
|---|---|---|---|
| Urban Water Conservation and Efficiency Potential in California (2014) | --- | 35 | Theoretical minimum. (see Figure 4) |
| Melbourne and Brisbane; "Residential Water Conservation in Australia and California" (Ryan Cahill and Jay Lund, 2011, p.4) | | 40-45 | tri-yearly "Water Account" by the Australian Bureau of Statistics; data from surveys, water utilities, research papers, broadly consolidates information about water use |
| Milpitas; Bay Area Water Supply and Conservation Agency, 2012-2013 | | 66 | |

**Figure 8: Water Budget for One Person Using Efficient Appliances and Fixtures**
*(Urban Water Conservation and Efficiency Potential in California, 2014)*

| End Use | Assumptions | Gallons per person per day |
|---|---|---|
| Leaks | Reduced to zero | 0 |
| Toilets | 4.8 flushes per day @ 1.28 gallons per flush | 6.1 |
| Clothes washer | 2.3 loads per week @ 14.4 gallons per load | 4.7 |
| Shower | 4.7 showers per week for 8.7 minutes each with conserving showerhead rated at 2.0 gpm and throttle factor of 72% for actual flow rate of 1.44 gpm | 8.4 |
| Bath | 2.24 baths per week @ 18 gallons each | 5.8 |
| Faucets | 10.1 minutes per day at an average flow rate of 0.64 gpm | 6.5 |
| Dishwasher | 0.85 times per week @ 3.5 gallons per load | 0.4 |
| **Total** | **Efficient Household Water Budget** | **32** |

*Note:* Average duration and frequency of usage were derived from the *California Single Family Water Use Efficiency Study* (DeOreo et al. 2011) and a 2005 article in the journal *Risk Analysis* whose authors summarized statistical studies of the showering and bathing behavior of Americans (Wilkes, Mason, and Hern 2005).

### *Cost-Benefit to Retrofit Residential Toilets*

The following outlines the history regarding regulatory toilet conservation:

- Prior to 1970, most toilets consumed 6 gallons or more per flush.
- Effective January 1, 1978, California law required that all new toilets consume no

more than 3.5 gallons per flush.

- Congress enacted the *Energy Policy Act* of 1992 requiring that all new toilets use no more than 1.6 gallons per flush (gallons per flush) by 1994. At this time, there were only 16,000 homes in Milpitas (citydata.com).
- In 2007, the California Legislature enacted *Assembly Bill 715* (Laird, 2007), requiring that all toilets have an effective flush volume of 1.28 gallons per flush, by 2014.

Note that one can now purchase the Niagara brand conservation Stealth White 0.8 gallons per flush toilet, which is described later in this section.

Given that toilets have a 40 year lifespan, only a small fraction of toilets are likely to be changed each year. However, new building with conservation permitting may trigger retroactive compliance and require that fixtures like toilets be brought up to code. An additional 5,000 houses were built in the City between 1994 and 2014, for a total of 21,000 houses, and those 5,000 houses have 1.6 gallons per flush toilets as part of the new construction. Of the 16,000 older homes, perhaps 25% have replaced their toilets to meet the 1994 requirement of 1.6 gallons per flush. As a result, an estimated 12,000 toilets are still flushing at the 1978 requirement of 3.5 gallons per flush.

*Residential Toilet Water Consumption in 2014:*
The total number of households in the City in 2014 was 21,000.

Number and type of toilets in the houses:

- The 5,000 remodeled or new homes (since 1994) have 1.6 gallons per flush toilets.
- Another 4,000 homes (25% of 16,000 homes existing in 1994) have Retrofit voluntarily to 1.6 gallons per flush since 1994.
- 12,000 homes still use 3.5 gallons per flush toilets
- Very few have 1.28 gallons per flush toilets in 2014 (and thus the City may wait another 40 years to see a significant reduction in the amount of water used per flush).

Estimated residential toilet flushing in gallons per year in 2014:

- For the 21,000 houses in Milpitas in 2014:
    - 9,000 houses x 1.6 gallons/ flush x 2.64 people per house x 5.1 flushes/day = 193,882 gallons/day
      193,882 gallons/day x 365 day/yr
      = 70,766,784 gallons/year for 9,000 homes.
    - 12,000 houses x 3.5 gallons per flush x 2.64 people per house x 5.1 flushes/day = 565,488 gallons/day x 365 days
      = 206,403,120 gallons/year for 12,000 homes
      70,766,784 + 206,403,120 = 277,169,904

**Estimated amount of water used in residential toilet flushing in the City is:**

$$70,766,784\ gallons/year\ (for\ 9,000\ homes\ with\ 1.6\ gallon\ per\ flush\ toilets) + ...$$
$$... + 206,403,120\ gallons/year\ (for\ 12,000\ homes\ with\ 3.5\ gallon\ per\ flush\ toilets)...$$
$$... = 277,169,904\ gallons/year.$$

Calculations with 0.8 gallons per flush toilets:

Below are calculations for the water savings possible if the whole of Milpitas switched to toilets that flush at 0.8 gallons per flush. The 0.8 gallons per flush toilet is not a regulatory requirement, but is available for the consumer local hardware stores. The toilet cited here is the Niagara Stealth, Model number: 77000WHAI1, which sells for approximately $150 (Lowes website, 2014).

- 5.1 flushes/day/person x 0.8 gallons/flush
  = 4.08 gallons/person/day for toilet use
- At 2.64 people per house x 4.08 gallons/day
  = 10.77 gallons/day for the average household toilet usage
- At 21,000 houses in Milpitas in 2014 x 10.77 gallons/day average toilet usage
  = 226,170 gallons daily for household toilets

**Toilet Flushing with 100% of Milpitas Homes Using 0.8 Toilets in 2014:**

$$226,170\ gallons/day \times 365\ days = 82.6\ million\ gallons/year = 110,400\ hundred\ cubic\ feet/year$$

In the 2011 California Single-Family Home Water Use Efficiency Study, deOreo observed that as many as 30% of the 1.6 gallons per flush toilets were actually flushing at more than 2.0 gallons per flush. However, toilet technology continues to improve.

Based on the calculations above, the water saving that could be obtained if the City invested in 0.8 gallons per flush toilets for its customers is estimated at:

**Water Saved Annually by City Using 0.8 Toilets:**

$$277,169,904\ gallons/year - 82.6\ million\ gallons/year = 194,617,854\ gallons/year$$
$$194,617,854\ gallons/year \div 748\ gallons/hundred\ cubic\ feet = 260,184\ hundred\ cubic\ feet/year$$

*Cost to the City to replace toilets - $6.3 million*

The cost of upgrading all toilets in the City is estimated at 21,000 homes x 2 toilets/home x $150/toilet = $6,300,000. These calculations show that an estimated 260,000 hundred cubic feet could be saved each year for the one-time cost of approximately $6,300,000 at a rate of $24.23 per hundred cubic feet. This amounts to $0.61 per hundred cubic feet saved over the lifetime of the toilets, forty years. Thus, if a consumer buys water for $2.62 per hundred cubic feet (the City's lowest water rate), the city is spending approximately one-fifth of that amount on new toilets.

**Cost to the City to Retrofit Toilets: over 1 year and over 40 years:**

$$\$6,300,000 \div 260,000\ hundred\ cubic\ feet\ per\ year = \$24.23\ per\ hundred\ cubic\ feet\ saved$$
$$\$6,300,000 \div (260,000\ hundred\ cubic\ feet\ per\ year \times 40\ years) = \$0.61\ per\ hundred\ cubic\ feet$$

*amortized over 40 years*

*Cost to residential customers to replace toilets - $5-$11 million*
Each consumer household will pay for toilet installation, the cost of which will vary from plumber to plumber. Current figures suggest the cost of one toilet installation is $125-$260 (Angie's List website). Therefore, with an installation cost of $125, the total cost to consumers is $5,250,000 ($125 x 21,000 homes x 2 toilets), and for an installation cost of $260, the cost is $10,920,000.

**Cost to Residential Customers to Retrofit Toilets:**

$$\$125/\textit{toilet installation} \times 21{,}000\ \textit{homes} \times 2\ \textit{toilets/house} = \$5{,}250{,}000$$
$$\$260/\textit{toilet installation} \times 21{,}000\ \textit{homes} \times 2\ \textit{toilets/house} = \$10{,}920{,}000$$

It is assumed that, should the City manage the installation, a lower contract installation price could be negotiated.

Some households may have other plumbing issues (such as pipe inclination or aged pipe) that would incur additional costs. In particular, pipe inclination becomes a critical factor as toilet water flow is reduced. A 2% decline is considered best; 1% is too slow, not moving solids along quickly enough, and 3% is too fast, leaving solids behind. Both situations require a plumber to be fixed.

Regarding the recycling of used toilets, numerous articles have been published on describing municipalities crushing porcelain toilets and using the material for sidewalks and road base material.

Note that the cost of conservation and subsequent reduction in rates income will be offset by the fact the City will buy considerably less water.

***Cost-Benefit to Retrofit Residential Washing Machines***
Prior to the 1980s, clothes washer water consumption was as much as 56 gallons per load. On average, the high-efficiency front-loading machines of today use 27 gallons (Vickers, p. 118).

Using the same rubric as used above for toilets, one can estimate that 12,000 homes are still using old washers. If each home has 2.64 persons in it, and each person washes 0.37 loads per day, this is 356.5 loads per year per home. This is a savings of 10,300 gallons per year per service connection. Thereby, by shifting from old to new machines, the City could save 124 millions of gallons per year (12,000 homes x 10,300 gallons). The life cycle of a clothes washer is 14 years (sfgate.com). If 124 millions of gallons (166,000 hundred cubic feet) is saved per year, the saving over the lifetime of all of the

washing machines would be 2.3 million hundred cubic feet.

This option has a lower payoff in terms of water saved per cost of a new appliance than that of toilets for example. Also, the cost of a new washing machine could be a challenge for most customers. However, the installation cost usually is included in the delivery, and the vendor usually will take the older washer away.

***Cost-Benefit to Retrofit Residential Shower Heads***

*Water Savings*

In 1994, shower heads were regulated for efficiency. At that time, there were 16,000 homes/condos/apartments in the City (*citydata.com*). The lifespan for shower heads is shorter than for toilets, and their replacement is less expensive, and so it is likely that 25% of the 16,000 homes have changed their shower heads already. Old shower heads used 6.5 gallons per minute, whereas the new 1994 rated shower heads use 2.5 gallons per minute. The following calculations assume that the average person showers for 5.3 minutes per day (Vickers p.94):

- Pre-1980 shower head water use was 12,600 gallons per person annually (6.5 gallons per minute x 5.3 min/day x 365 days/year).
- Post-1994 shower head water use is 4,800 gallons per person annually (2.5 gallons per minute x 5.3 min/day/person x 365 days/year).
- If new "low-flow" shower heads were installed throughout the City, the water savings would be 245 million gallons per year (4 gallons per minute saved x 12,000 homes x 5.3 min/day/person x 365 days/year x 2.64 persons/household).

*Life cycle analysis of replacing shower heads*

A shower head has a potential lifetime of 100 years or more; however, faucets have a lifetime of 20 years. When faucets go, they often trigger remodels which would include upgrading showerheads. One can then surmise that the actual lifetime of a shower head is approximately 20 years. Given that the amount of water saved by the installation of "low-flow" shower heads in all City homes would be 245 million gallons (or *328,000 hundred cubic feet) annually,* water savings over the lifetime of the shower heads is 4,903 million gallons (or 6.6 million hundred cubic feet) .

*Cost to Retrofit shower heads*

The cost of upgrading all remaining pre-1980s shower heads in the City is $144,000 (12,000 houses x 1 shower head/house x $12/shower head).

The 328,000 hundred cubic feet of water saved every year for a cost of $144,000 is equivalent to $0.44 per hundred cubic feet saved annually. This is equivalent to $0.02 per hundred cubic feet saved over twenty years.

**Cost to Residential Customers to Replace Shower heads:**

$$\$144,000 \div 328,000 \; hundred\ cubic\ feet\ per\ year = \$0.44 \; per\ hundred\ cubic\ feet\ saved\ annually$$
$$\$144,000 \div (246,000 \; hundred\ cubic\ feet\ per\ year \times 20 \; years) = \$0.02 \; per\ hundred\ cubic\ feet$$

Thus, if a consumer buys water for $2.62 per hundred cubic feet (the City's lowest water rate), the City would be spending only slightly less than one percent of that amount if it purchased new shower heads.

***Cost-Benefit to Retrofit Residential Faucets***

Prior to the 1980s, faucet water use was as high as 7 gallons per minute; however, today's high-efficiency faucets use only 1 gallon per minute. There are roughly four faucets per household, and faucets have a lifetime of approximately 15 years (Vickers, p. 103).

Using the same rubric as used for toilets above, one can estimate that 12,000 homes are still using old faucets. At a saving of up to 18,000 gallons per year per household for switching from old to new faucets, the City could save 216 millions of gallons (or 289,000 hundred cubic feet) of water per year (12,000 homes x 18,000 gallons) by upgrading faucets, or 3,240 millions of gallons over the lifetime of the new faucets (or 4.33 million hundred cubic feet).

Although faucet retrofits seem like a feasible rebate option for the City as the payoff in terms of water saved is high, the changeover cost to the customer may be prohibitive. The cost of a new faucet varies a great deal, ranging from $40 to $600. Moreover, faucet installation can be expensive, more along the line of toilet installation, than shower head installation.

## Commercial Retrofit Cost-Benefits

***Cost-Benefit for Commercial Retrofit to Waterless Urinals***

There are slightly under 6,000 commercial and industrial businesses in the City. Of these, approximately 1,700 have paid employees, for a total of approximately 50,000 employees (census.gov). The remaining 4,300 businesses are owner operated. Each of the 1,700 businesses is likely to have either a unisex restroom or one restroom for males and one for females. Therefore, using a conservative assumption that approximately half of the workforce is male, there likely are at least 1,700 locations where urinals would be used by a total of 25,000 or more males.

*Water Savings*

Waterless urinals, on the market since 1990, use no water to flush, as opposed to earlier models, which use from 1 to 5 gallons per flush. Assuming each male uses a urinal twice per day on average, the use of waterless urinals in the workplace would result in an

average annual saving of 2,600 gallons per male (3.5 gal/flush x 2 times/day x 365 days/year). For the total workforce, a *savings of 65 million gallons per year* (87,000 hundred cubic feet) annually (2,600 gallons x 25,000 males) will be achieved.

*Life cycle analysis of installing waterless urinals*
Given that the lifetime of a urinal is 20 years, water saving over the lifetime of an urinal is 1.74 million hundred cubic feet (87,000 hundred cubic feet x 20 yrs), and given that the cost of a waterless urinal is $350, this water savings is achieved for an initial cost of $600,000 ($350/urinal x 1,700 locations). This amounts to a lifetime cost per volume of $0.34 per hundred cubic feet.

*Cost to install waterless urinals*
The 87,000 hundred cubic feet of water saved every year for a cost of $600,000 represents a water savings cost of $6.90/hundred cubic feet per year, or $0.34 per hundred cubic feet over twenty years.

**Cost to Commercial Customers to Replace Toilets with Waterless Urinals:**

$$\$600,000 \div 87,000\ \textit{hundred cubic feet per year} = \$6.90\ \textit{per hundred cubic feet saved annually}$$
$$\$600,000 \div (87,000\ \textit{hundred cubic feet per year} \times 20\ \textit{years}) = \$0.34\ \textit{per hundred cubic feet}$$

As a result, if a consumer buys water for $2.62 per hundred cubic feet (the City's lowest water rate), the City is only spending just over ten percent of that amount on new urinals.

These urinals do have some odor issues. As there is no water wash the urine away, the coating of urine on the vertical surface can stagnate and smell, if proper cleaning is not conducted regularly.

Note: The following options were not researched:

**J. Optional: Perform Mass Balance (water in equals water out study)**
**K. Optional: Conduct customer usage leak detection study (such as irrigation, toilet, etc.)**
**L. Optional: Conduct City-wide Home-Use audit of randomly selected representative homes**
**M. Optional: Perform study of distribution system using correlator**
**N. Optional: Perform study of point of sale water use (and loss ) using correlator**

# I. Provide potential examples of conservation methods (irrigation, toilets, system water lost, additional effort of water audit of city parks, etc)

**Municipal Building Pilot Study - Sports Center Retrofit**

Water conservation awareness should be achieved through "lead by example" approaches. Many of the conservation efforts in this memorandum can be implemented at government buildings, libraries, firehouses, schools, etc. Conservation measures can then be seen by customers, employees and business owners and evaluated to determine their relative effectiveness before being implemented throughout the City. This approach will advocate for conservation, lead to knowledgeable staff, promote awareness and encourage informed decisions.

A thorough retrofit of the City Sports Center might include a number of high-efficiency (or waterless) urinals, low-flow per flush toilets, faucets, as well as showerheads. When asked, the Santa Clara Valley Water District said their water conservation rebate/retrofit program would cover the costs of such a retrofit for the Sports Center (Santa Clara Valley Water District, phone call, Dec. 2014). Toilet installation by the District is included for commercial customers, making such a retrofit no cost the customer or the City of Milpitas. The benefit of such an effort is great, while the cost is nil.

**Residential and Commercial Retrofit Cost-Benefits - Summary**

Why reinvent the wheel? The Santa Clara Valley Water District has already created a cradle-to grave conservation program that offers a comprehensive selection of rebates and retro-fits for both commercial and residential customers. We outline the detailed calculations above to illustrate how much water can be saved through a good conservation program. What we discovered is that Santa Clara Valley Water District can do it all, at very little cost to the City of Milpitas.

As an example, Santa Clara Valley Water District gives a $300 rebate for high-efficiency toilets and waterless urinals, and installs them, at no cost to the City. The District said they would replace all the toilets in the Sports Complex, at no cost to the City, as part of the District's rebate and retrofit programs (Santa Clara Valley Water District, phone call, Dec. 2014).

To increase the awareness of Milpitas' customers to use the Santa Clara Valley Water District conservation programs:

- website - Use the City's website Conservation page to better lead people directly to Santa Clara Valley Water District's site, instead of embedding the link deep in

the Milpitas page.

- newspaper, radio and signs
- Milpitas Model House blog and podcast series. The City can inspire conservation by using inexpensive web technologies, in an innovative manner. Using the Environmental Protection Agency Post Retrofit study group and the The California Single-Family Home Water Use Efficiency Study as examples, a house in Mllpitas could be chosen and used as a conservation model. There could be an on-line capture of the sample house whose usage can be tracked and viewed as an example for other customers. Customers could apply to be a model house; two a year. They would interviewed, at least once a month, for a blog/podcast of their audit and retrofit experience, relating the fixes and the water saved. The sample houses would agree to having their water use being tracked per toilet, shower, and appliances with data-loggers, and the results reflected in an online accounting. A graduate student may find this a great project for their studies.

### Outdoor Water Use

Santa Clara Water Valley Water District already offers landscape conservation programs for both residential and commercial customers. Residential customers are served by the Water-Wise program where a customer can call for a pre-inspection, then have someone assigned to them to shepherd the customer through the entire rebate process.

Businesses can ask for the same pre-inspection and follow-through. Santa Clara Valley Water District offers a rebate of $2 per square foot for converting high water using landscape to qualifying low water using landscape. They also offer rebates for landscape meters, flow sensors and hydrometers, and weather-based irrigation controllers.

The City can perform water efficiency evaluations for lawn sprinklers, the view of this report is that this measure is not aggressive enough and that City policy should be changed to eliminate potable water use for commercial landscape.

### Municipal Water Leak Detection

The East Bay Municipal Utility District and others have implemented comprehensive leak detection programs for utility main leaks. One of the concepts is to deploy acoustic recording devices throughout the distribution system, which then report water main leaks. These programs start at $150,000 and can involve annual operating costs if special equipment is used (Gasner, Kate, 2015). Leak reduction results can be significant, as shown by the 4.1% figure referenced above.

### Integrated Land-Use and Water-Use Planning

Land-use decisions “lock-in” specific water consumption patterns for decades. As a

result, strategic planning and collaboration among agencies regarding land-use decisions can have enormous impacts on the potential to reduce water use. Even simple meetings over coffee or lunch can provide valuable insight for efficient land-use design and water saving opportunities. Also, workshops for land-use planners, water providers, economic developers, elected officials and environmental experts can have many benefits, leading to more efficient land-use planning, greater customer satisfaction and a more enjoyable environment for a greater number of people. The results achieved for every dwelling, town and city have an impact on others (Journal - American Water Works Association, September 2014).

Urban density and zoning regulations are major factors in the amount of water being used. In general, large distances between houses lead to large areas of landscaping requiring irrigation, as well as providing potential for additional leakage surfaces along pipe routes. Efficient planning designs that cluster large water consumers and compact urban growth will reduce water usage.

Overlaying zoning, creating mixed-use zoning requirements and inspecting planned unit developments can also lead to enormous water savings. Water conservation targets could be grouped together to increase efficiency.

### Multi-Family and Single Family Residential

Encouraging multi-family units with efficient water use is an effective strategy to conserve water. While the overall usage per parcel may be much higher than that of a single-family residence, the amount of water used by each person is much less (Vickers, p14). This approach would allow more people to live within Milpitas, using less water per person. The benefits of multi-family residences also include the following: benefits of shared cost for water-efficient strategies/appliances, more available “open space,” less lawned-irrigated surface, and shorter piping distances between customers. More opportunities for water conservation exist with multi-family residents, including dual-plumbed systems for flush/process water, grey water collection systems, weather and soil moisture compensating controllers for landscaping irrigation, and more sophisticated native vegetation selection. The downside of multi-family residential units includes disruption of view of the skyline and the possibility of water demand exceeding the supply (due to the possibility of a large influx of residents if many multi-family residences are constructed simultaneously).

In general, single family residences use more water per person than multi-family residences and require more land. Outside water use opportunities tend to increase as the amount of outside useable area increases. Also, the possible leakage area of pipes and water mains increases proportionately with the distance that water is conveyed. Clustering of water customers promotes ease in maintenance, as it is easier to upgrade infrastructure and locate leaks within a smaller area. Also, more open space, parks and

preserves can be available for recreational use when future residential growth is restrained to a smaller footprint.

***Transit Area Specific Plan***

The Transit Area Specific Plan (TASP) addresses high-density infill growth. It will be important to integrate into this plan the water saving measures available for such a design. Water efficient appliances, xeriscapes, open space, and use of alternative non-potable water sources for landscape irrigation (where absolutely necessary) will help to make this a sustainable design opportunity.

## Lowering Water Pressure

The City currently controls the pressure in one pressure zone by means of valve and pump settings. Elsewhere in the system, customers use individual pressure regulators. The publication “Lowering Water Pressure to Conserve Water” (Watts website) describes how to reduce water use by lowering pressure. There can, however, be problems from lowering system pressure, as fire sprinkler systems may no longer operate correctly due to lower incoming pressure. An alternative is to install pressure reducing valves on the domestic line and maintain normal system pressure for fire service. Pressure reducing valves are used to lower the pressure between water mains and residential and commercial water systems; a pressure of 35-60 psi is considered adequate for most residential and commercial uses. In general, lower pressure causes less stress on household piping and appliances, thus reducing the likelihood of leaks in the pipes and fixtures. Lower pressure also reduces the amount of water used at faucets, shower heads and spigots over a given interval of time. Studies have shown that lowering the pressure from 100 psi to 50 psi reduces the flow rate of by approximately one third.

Although certain customers (such as firefighters) depend on higher water pressure, most customers could benefit from monitoring pressures and setting pressure reducing valves at lower levels. Large savings could be achieved by setting the water pressure between 36 and 42 psi. (“Water Pressure and Your Plumbing System,” Orange Water and Sewer Authority). There can be significant public dissatisfaction from water pressure less than 50 psi, however.

## Legality

The implementation of water conservation measures can be supported by law enforcement and California Water Code provisions directed at water conservation and water shortages. Under the California Constitution a city may make and enforce within its limits all local, police, sanitary, and other ordinances and regulations, as long as they are not in conflict with state or federal laws. This provision includes regulations designed to promote public convenience, general prosperity, public health and/or public safety. Thus, conservation measures designed to make the most efficient use of a limited water supply are within the City's law enforcement jurisdiction.

The City may, by ordinance or resolution, adopt and enforce a water conservation program to reduce the quantity of water used for the purpose of conserving the water supplies of the public entity (Water Code §375). This step may include rate structure design, public education programs, and/or the requirement to install water-saving devices.

Water conservation measures can also be supported by the City's Urban Water Management Plan and the Water Shortage Contingency Plan under Water Code section 10610 et seq. As an urban water supplier, the City is obligated to pursue the efficient use of available supplies, including reasonable and practical efficient uses, and reclamation and demand management activities. The Urban Water Management Plan requires implementation of a Water Shortage Contingency Plan to ensure that the level of reliability of water service is sufficient to meet the needs during normal, dry, and multiple dry-water years. Most Water Shortage Contingency Plans set out a series of increasingly demanding, mandatory conservation measures to be used at the various stages of water-shortage severity.

Finally, the City may declare a water shortage emergency, when the ordinary demands and requirements of water consumers cannot be satisfied without depleting the water supply, and may adopt such regulations and restrictions on water delivery and consumption as are needed to conserve the water supply for the greatest public benefit (Water Code §350).

**Financial**

Capital costs are $6,475,000 for residential water meter and software upgrades and $150,000 for the leak detection audit, totalling $6,625,000.

Lifetime costs were calculated by adding capital costs of $6,625,000, and yearly operating costs of $140,274 over 20 years is $2,805,480, equals $9,430,480 . The yearly water usage of 879,454 hundred cubic feet per year is also multiplied by the lifetime of 20 years is 17,589,080/hcf. By dividing the costs by the water usage the lifetime cost is calculated as $0.54 per hundred cubic feet over the lifetime of the conservation measures

# Results

The City is a fairly conservative water user when compared to other locations within and outside of the Bay Area. However, conservation leaders and water usage studies suggest that the City could do more. Australia leads in conservation through the use of high-efficiency fittings and consistent water auditing. The Environmental Protection Agency Post Retrofit Group creates a concrete benchmark for modern indoor residential

usage.

Various water conservation strategies could be implemented by the City of Milpitas to address the following issues:

- The City growth is predicted at 30% by 2035 from 70,000 to 106,000 citizens (City of Milpitas, Urban Water Management Plan, 2010).
- There is a state-wide conservation movement to reduce consumption by 20% by 2020. The goal in terms of gross usage is to reduce consumption from 140 gross gallons per capita per day to 110.1 gross gallons per capita per day.
- San Francisco Public Utilities Commission will increase water rates by 30% between 2014 and 2018 (see ktsf.com/en/sfpuc-water-rate-increase-proposal/).

**Conservation Cost-Benefit Summary**

In the following table (Figure 9), conservation strategies are presented in the order of the best cost-benefit to the least, first in a summary table, and then with more detail in a bulleted list. As mentioned earlier, acquiring good data is very difficult. Where possible we have put emphasis on the amount of water saved and the cost of the effort in dollars per hundred cubic feet:

**Figure 9: Ranking of Conservation Efforts by Cost-Benefit**

*SCVWD = Santa Clara Valley Water District*

| | Conservation Method | Administrative Costs | Infrastructure Costs | Cost of Savings ($/hundred cubic feet) or Advantages |
|---|---|---|---|---|
| **1** | Rebates, retrofits, education (retrofit only recommended for toilets, showerheads and urinals) via SCVWD | City Attorney<br>City Council<br>Public Works | ● rebates and retrofit cost covered by SCVWD | ● 675,184 hcf saved per year<br>● $0.21 /hcf saved each year<br>● 13.5 million hcf saved over 20 year lifetime<br>● $0.01/hcf saved over 20 year lifetime |
| **2** | Data Collection and Leaks | City Council<br>Public Works<br>● FTE: $140,274 annually for 10 years | ● meters: $6.475 million<br>● leak audit: $150,000 | ● +/-4.1% of 10.21 mgd = 560 hcf saved per day<br>● 204,268 hcf saved per year<br>● $33.12/hcf saved each year<br>● 10.2 million hcf saved over |

| | | | | |
|---|---|---|---|---|
| | | | | 50 year lifetime<br>● $0.66/hcf saved over 50 year lifetime |
| **3** | Water and Wastewater Rate Increases | City Attorney<br>City Council<br>Public Works | ● no cost | ● significant income<br>● moderate unquantifiable* water savings |
| **4** | Landscape and Irrigation | City Attorney<br>City Council<br>Public Works | ● cost covered by SCVWD<br>● (*minor cost to Milpitas*) | ● significant unquantifiable* water savings |
| **5** | Regulation | City Attorney<br>City Council<br>Public Works | ● no cost | ● moderate unquantifiable* water savings |
| | | **TOTAL** | $6.625 million | 879,454 hcf saved per year |

** This is yet another argument for increased quality and quantity of data collection.*

The lifetime costs for conservation is then:

$$(\$6,625,000 + (\$140,274 \times 20)) \div (879,454\ \textit{hundred cubic feet saved per year} \times 20\ \textit{years}) = \ldots$$
$$\ldots = \$0.54\ \textit{per hundred cubic feet}$$

**Figure 10: Cost-Benefit Retrofit Summary Residential and Commercial Fixture Retrofit**

| Appliance | Water Saved per Year | Water Saved over Appliance Lifetime | Cost to City | Cost to Customer |
|---|---|---|---|---|
| Toilet | 260,184 hcf | 10.5 million hcf over 40 years | $6,300,000 total<br>$24.23/hcf saved per year<br>$0.61/hcf over 40 yrs<br>($0 Free via SCVWD) | $125-$260<br>($125 rebate/toilet) |
| Washing Machine | 166,000 hcf | 2.3 million hcf over 14 years | $0 | $350-$1000<br>($150 rebate from SCVWD) |
| Showerheads | 328,000 hcf | 6.6 million hcf over 20 years | $144,000 total<br>$0.44/hcf saved per year | $0<br>(free from SCVWD) |

| | | | | |
|---|---|---|---|---|
| | | | $0.02/hcf over 20 yrs<br>($0 Free via SCVWD) | |
| Faucets | 289,000 hcf | 4.33 million hcf over 15 years | $0 | $40-$600 +install costs. No rebates. |
| Waterless Urinals | 87,000 hcf | 1.74 million hcf over 20 years | $600,000 total<br>$6.90/hcf saved per year<br>$0.34/hcf over 20 yrs<br>($0 Free via SCVWD) | $0 (minimal)<br>($300 rebate/installation free) |

*Note: Shaded cell costs can be covered by Santa Clara Valley Water District, not Milpitas.*

*1a. The Milpitas / Santa Clara Valley Water District Water Conservation Program*
Milpitas should take advantage of the cradle-to-grave conservation program that Santa Clara Valley Water District already offers. Santa Clara Valley Water District can provide:

- audits for all customers
- offer rebates for WaterSense appliances, efficient washing machines, high efficiency toilets, shower heads and faucets
- provide retrofit appliances
- assess for leaks
- conduct pressure checks (38-42 pounds per square inch for efficient residential water pressure), determine the accuracy of metered water accounts
- replace or repair water meters as needed

The City of Milpitas could try novel information marketing campaigns. Awards and demonstrations can get customer attention and encourage action. Business awards can be awarded to businesses who are 100% retrofitted to Environmental Protection Agency benchmarks. These awards should be publicized via billing statements, advertising, newspaper articles, social media, etc.

The City can inspire residential conservation by using inexpensive web technologies in an innovative manner. Using the EPA Post Retrofit study group (2000) and the The California Single-Family Home Water Use Efficiency Study (de Oreo, 2011) as examples, a house in Milpitas could be chosen and used as a conservation model. There can be an on-line capture of the model house, the water usage of which can be tracked and viewed as an example for other customers using electronic data loggers. Customers could apply to be a model house; and as many as two homes per year could be chosen to participate. The resident would blog/podcast their experience of the audit, plus the fixes and water saved, in series of monthly interviews. The sample houses would agree to having their water use being tracked per toilet, shower, and appliance, and reflected in an online accounting. A graduate student might find this project compelling.

*1b. Environmental Protection Agency Retrofit Goals (see retro-fit Summary Table above)*

- Residential Toilet Retrofits could save at least 260,184 hundred cubic feet per year. The cost of conservation and the subsequent reduction in rates income is offset by the fact the City will purchase less water.
- Residential Washing Machine Retrofits are not a feasible rebate option for the City as the payoff is very low and the cost of a new washing machine could be a challenge for most customers.
- Residential Shower head Retrofits will save at least 328,000 hundred cubic feet per year or 4.92 million hundred cubic feet over 20 years, if all 12,000 shower heads in the City are replaced.
- Residential Faucet Retrofits are not a feasible rebates option for the City as the cost of a new faucet can be quite high and faucet installation is expensive.
- Commercial Waterless Urinal Retrofits will save 87,000 hundred cubic feet per year or 1.74 million hundred cubic feet over 20 years.

*1c. Education:* Educational materials can be distributed to all customers to encourage efficient water use. Although this is not the most effective tool to encourage conservation, retrofit business awards and residential house retrofit modelling using social media, may be worth trying.

*2a. Data Collection* is critical for conservation optimization. Reliable data can be used to inform and educate the City and its customers about their water usage and to diagnosis over-use, inefficiencies and leaks. Implementing programs to achieve accurate data collection is the way that Australia reduced its water consumption rates. The price of digital meters is now $75-250 per meter. Installation adds approximately $400 (½ hour labor; City equipment could depreciate single installation costs by ganging meter changes geographically). Milpitas has already budgeted for residential water meter and software upgrades (Badger Beacon software) via the Capital Improvement Program at $6,475,000.

*2b. Leaks* involve a small number of clients but represent a high percentage of water loss. Milpitas is an old town, and according to the Bay Area Water Supply and Conservation Agency, its residential water usage has increased in the last two years from 61 to 66 gallons per capita per day. A digital metering system would help to find leaks with accuracy and consistency. As infrastructure continues to decay, all cities in the United States will have to consider leaks, as London did in the last decade. A water system loss audit would cost the City $150,000 for a baseline water loss evaluation. Like London's "Leak Squad", the City needs a Water Loss Auditing program for monitoring system and residential water lines, responding quickly to leaks, encouraging citizen involvement and investigating peculiar water runoff concerns in a timely manner.

3a. *Water Rate structures* can be very effective in communicating the value of water to customers, whether they are residential, commercial, industrial or agricultural**.** Rate

structures can be designed so that lifestyle is not changed significantly and rates are not regressive, but so that conservation awareness is encouraged, action to reduce leaks and overuse is promoted and other water conservation measures are encouraged.

*3b. Wastewater Rate structures* can also encourage conservation.

*4. Landscaping and Irrigation:* Unlike indoor usage, which is highly definable, outdoor irrigation has many variables. According to the 2011 California Home Study Group only 54% of all homes irrigate with excess water (deOreo, 2011), and 62% of the excess is used by just 18% of the lots. This is critical information for water management, as it shows that for a typical water system, most of the outdoor saving will result from achieving changes with just a few of the customers. It is not recommended that weather-based irrigation controllers be made mandatory as research shows the controllers would use more water than the under-irrigators.

- use efficient watering schedules: weather-base controllers may not be cost effective for reducing residential usage (except for "rain shut-off"), but maybe useful for commercial usage; increase the duration between watering large lawned areas
- select drought-resistant plants, especially for corporate, commercial and public facilities
- supplement potable water with recycled water, when available
- implement low-flow irrigation
- maintain a grass height of 3.5 inches for residential lawns
- replace lawns with native landscape or "xeriscapes" and mandate water efficient landscaping for large areas (over 1000 sq. ft. of irrigated coverage)
- capture runoff by means of sidewalk planters
- promote municipal collaboration with volunteer organizations to achieve sustainable replanting (see DailyActs.org in Petaluma)
- data collection, even with a 1.5% +/- meter error rate, is vital to find leaks
- water bills that illustrate water usage clearly will help customer awareness
- water rates can be tiered to discourage water wasters
- audits can also help educate

*5. Regulatory Steps*

- promote land-use decisions that "lock-in" customers to efficient water practices:
  - dual plumbed systems (purple recycled and potable water) for irrigation and flush-water; possible locations include high schools, fire stations, and new large developments
  - recycled water for irrigation
  - greywater collection (for example from laundry for irrigation)
  - multi-family residences reduce urban sprawl and infrastructure costs. Note that this approach reduces the per capita consumption, but increases citywide consumption.

    - require Environmental Protection Agency retrofit standards for water efficient appliances
    - plan efficient water system infrastructure (eg. “mixed zones”, purple pipe routes). Land-use planning to promotes recycled water infrastructure and collaboration among neighboring agencies for recycled water sources
    - evaporative cooling systems for commercial developments and industrial process equipment
- drought and regulation: Implementation of policies and ordinances should be used, depending upon drought-severity. These measures should be used as a guideline for establishing new ordinances, policies and educational opportunities to save water for the City in a practical sense to allow the population to grow and prosper.

The increasing cost of implementing additional conservation measures over time will decrease the value of saving water. As noted earlier, as water usage is reduced over time, the water conservation efforts and spending required to achieve a given saving will increase. This is because the most effective measures are usually implemented first, and successive efforts impact the amount of water used less and less (see Figure 1).

# Conclusion

The City’s water usage is already fairly conservative. As water reduction approaches the goal, savings through conservation become more expensive. However, Water Solutions, Inc. believes the City is especially fortunate to be able to circumvent that rising cost.

A multi-pronged conservation approach is needed to capture enough water to allow for 30% growth over 30 years, to reduce consumption by 20% by 2020 and to manage higher water costs from San Francisco Public Utility Commission and Santa Clara Valley Water District.

First, the City can further use Santa Clara Valley Water District’s residential and commercial cradle-to-grave (audit, rebates and retrofits) water conservation program. Educate customers using the media. It is important to take advantage of the District’s conservation program as modern toilets, shower heads and urinals all offer significant reductions in water usage.

Second, lack of, or poor water use data collection is the biggest weakness in any conservation program. The City is poised to create a truly modern water system, and data collection should be a major goal. A good start for the City will be the water meters and system analysis software upgrade (Badger Beacon software) that has already been budgeted through the Capital Improvement Program at a cost of $6,475,000. Once there is good data collection Milpitas will have more work to do. The cost for a baseline leak audit is $150,000.

Third, water and wastewater rates are an administrative decision, that cost nothing, but can generate the income needed to offset the loss of water sale due to conservation. It is one of the more complex cause and effects of the water trade: The more you save, the less you make; but we *have* to save! Raising of rates will encourage both residential and commercial customers to conserve further.

Fourth, outdoor irrigation conservation measures are free to Milpitas and should be eagerly encouraged to all City customers. While deOreo (California Single Family Home Water Use Efficiency Study, p152) does not recommend weather-based water meters for residential. He does recommend these meters for commercial situations. Residential and Commercial customers can both be encouraged to landscape with an attention to conservation with drought resistant plants, lawn reductions and xeriscapes, also through Santa Clara Valley Water District.

Last, regulatory strategies for water conservation should be reviewed to make sure they are in line with the City's current, and evolving, water conservation goals.

# Task 1: Conservation, Implementation Plan

**Proposed Implementation Schedule:**

Ordinance

1. Complete writing of new ordinance(s) for water conservation (1 Jun. 2015)
2. Enact new ordinance for water conservation (1 Aug. 2015)
3. Begin enforcement of new ordinance (1 Oct. 2015)

Smart Meter

1. Large meter pilot testing (July-Sept 2014)
2. Large meter install (Oct.-Dec. 2014)
3. Small meter pilot (Jan.-Mar. 2015)
4. Small meter install (Apr.-June 2015)
5. Antennas install (July 2015 - Feb. 2016)

Outreach

1. Advertisement and education of SCVWD rebate programs (on-going)

SCADA

1. City-wide pressure and flow sensors installation (Jan. 2016 - Mar. 2017)
2. Remote control valve installation (July 2017 - Dec. 2018)

System-wide Leak Detection

1. Hiring of leak detection company (July 2017 - Mar. 2018)
2. Aging infrastructure field investigation (July 2015 - on-going)

**Costs:**

- The capital cost of a leak detection audit is approximately $150,000
- The capital cost of the water meter upgrade is $6,475,000
- The total capital cost of this effort is then $6,625,000
- The lifetime cost per hundred cubic feet is then $0.54
- Rebates and incentives - none; to be covered by Santa Clara Valley Water District

**Benefit:**

- A savings of 879,454 hundred cubic feet of water per year out of a total 4,975,000 hundred cubic feet per year for a population of 70,000. This represents be a 17.7% savings from 2013 averages.

**Life Cycle:**

The life cycle of new water meters is approximately 50 years. The life cycle of new fixtures is approximately 20 years.

**Ease of Implementation:**

By implementing ordinances or other measures significant gains can be made towards conservation with minimal effort. Santa Clara Valley Water District is a major ally in this effort. Cooperation with the district is required.

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# Appendix

**FIGURE A1 and FIGURE A2:**

From Bay Area Water Supply and Conservation Agency (BAWSCA) Annual Report

**Residential Per Capita Consumption and Single-Family Average Monthly Use Among BAWSCA Members - FY 2012-13**

| Member | Service Area Population | Residential Consumption* (ccf) | *Residential Per Capita Consumption (gpcpd) | **Single-Family Average Monthly Use (ccf) |
|---|---|---|---|---|
| Daly City | 102,820 | 2,450,378 | 48.8 | 8 |
| Westborough | 13,259 | 320,606 | 49.6 | ***n/a |
| Brisbane/GVMID | 4,282 | 104,478 | 50.0 | 4.5 |
| CWS - South SF | 59,567 | 1,478,039 | 50.8 | 7.9 |
| East Palo Alto | 25,927 | 653,028 | 51.6 | ***n/a |
| Hayward | 148,756 | 4,213,609 | 58.0 | 9 |
| San Bruno | 41,114 | 1,220,423 | 60.8 | ***n/a |
| North Coast | 39,000 | 1,226,220 | 64.4 | 7.6 |
| Milpitas | 67,894 | 2,173,280 | 65.6 | 10.0 |
| Coastside | 16,900 | 554,030 | 67.2 | 6.8 |
| Millbrae | 21,532 | 737,836 | 70.2 | 8.2 |
| San Jose | 15,178 | 537,869 | 72.6 | 8.6 |
| Redwood City | 86,647 | 3,078,065 | 72.8 | 9.9 |
| Mountain View | 73,656 | 2,715,045 | 75.5 | 9.2 |
| Mid-Peninsula | 26,270 | 1,004,087 | 78.3 | 9.1 |
| CWS - Mid-Peninsula | 128,037 | 4,922,016 | 78.8 | 10.7 |
| Burlingame | 30,282 | 1,178,972 | 79.8 | 10.2 |
| Santa Clara | 119,311 | 4,782,059 | 82.1 | 13.1 |
| Sunnyvale | 145,973 | 5,924,513 | 83.2 | 12.2 |
| Alameda CWD | 336,000 | 13,656,723 | 83.3 | 11.7 |
| Estero | 30,567 | 1,372,204 | 92.0 | 10.9 |
| Palo Alto | 66,368 | 3,183,737 | 98.3 | 13.3 |
| Menlo Park | 14,198 | 687,547 | 99.2 | 13.0 |
| CWS - Bear Gulch | 58,098 | 5,099,148 | 179.9 | 24.7 |
| Hillsborough | 10,850 | 1,417,783 | 267.8 | 28.3 |
| Purissima Hills | 6,127 | 868,180 | 290.4 | 35.1 |
| **Agency Totals** | 1,688,613 | 65,559,875 | | |
| **Average Single Family Monthly Use** | | | | 12.2 |
| **Average Residential Per Capita Consumption** | | | 79.6 | |

*Includes multi-family and single family accounts.

**Individually metered single family homes, townhouses, and condos.

***East Palo Alto, San Bruno and Westborough WD report multi-family with single family use.

**Notes:** Due to its unique service area, Stanford is excluded.

## Gross Per Capita Consumption
## Among BAWSCA Members - FY 2012-13

**California Water Service (CWS) is separated into its three service areas.**

| Member | Service Area Population | *Total Consumption (ccf) | Gross Per Capita Consumption (gpcpd) |
|---|---|---|---|
| North Coast | 39,000 | 1,192,485 | 62.7 |
| Westborough | 13,259 | 441,233 | 68.2 |
| Daly City | 102,820 | 3,512,499 | 70.0 |
| East Palo Alto | 25,927 | 1,010,939 | 79.9 |
| San Bruno | 41,114 | 1,752,095 | 87.3 |
| CWS - Mid-Peninsula | 128,037 | 6,046,107 | 96.8 |
| Hayward | 148,756 | 7,552,956 | 104.1 |
| Millbrae | 21,532 | 1,113,147 | 105.9 |
| Redwood City | 86,647 | 4,747,255 | 112.3 |
| Stanford University | 29,401 | 1,624,555 | 113.2 |
| Mid-Peninsula | 26,270 | 1,453,047 | 113.4 |
| Coastside | 16,900 | 996,377 | 120.8 |
| CWS - South SF | 59,567 | 3,620,826 | 124.6 |
| Alameda | 336,000 | 21,209,862 | 129.4 |
| Burlingame | 30,282 | 1,952,965 | 132.2 |
| Sunnyvale | 145,973 | 9,453,326 | 132.7 |
| Estero | 30,567 | 2,000,497 | 134.1 |
| Brisbane/GVMID | 4,282 | 287,290 | 137.5 |
| Milpitas | 67,894 | 4,558,000 | 137.6 |
| Mountain View | 73,656 | 5,070,586 | 141.1 |
| Santa Clara | 119,311 | 9,323,132 | 160.1 |
| Palo Alto | 66,368 | 5,547,735 | 171.3 |
| CWS - Bear Gulch | 58,098 | 6,116,162 | 215.7 |
| Menlo Park | 14,198 | 1,584,636 | 228.7 |
| San Jose** | 15,178 | 2,173,663 | 293.5 |
| Hillsborough | 10,850 | 1,609,532 | 304.0 |
| Purissima Hills | 6,127 | 972,733 | 325.4 |
| **Totals** | 1,718,014 | 106,923,640 | |
| | | **Average gpcpd** | 127.5 |
| | | **Median of Agencies** | 129.4 |

*Exclusive of recycled water; inclusive of unaccounted for water.

**Service area predominantly commercial/industrial.

# *Water Solutions Inc.*

## MEMORANDUM

**Date:** 27 March 2015
**To:** Steven Machida, Milpitas City Engineer
**From:** Water Solutions, Inc. - Consultant
**Subject:** City of Milpitas Conservation and Recycling Decision Matrix Report

Water Solutions, Inc. was asked to follow up on their City of Milpitas Water Augmentation Feasibility Study, to provide a breakdown of Conservation and Recycling measures by creating a Weight Sum Decision Matrix (Pugh Method) for the following data:

- amounts of water saved
- capital costs
- operating costs
- lifetimes
- lifetime costs of each sub-element

The above data will be weighted against the following choices:

- A Weighted Sum Decision Matrix for the proposed conservation tasks:
  - Residential Indoor
  - Residential Outdoor
  - Commercial Indoor
  - Commercial Outdoor

- A Weighted Sum Decision Matrix for the proposed recycled water tasks:
  - California Loop
  - Dixon Loop Completion
  - Milmont Dr. Extension
  - Yosemite-Sinclair Loop
  - E. Calaveras Extension
  - S. Milpitas-Landess Extension
  - Segment 1
  - Segment 2
  - Segment 3
  - Segment 4
  - Segment 5
  - TASP Area Extensions

**Residential Indoors Results**

The net savings of a residential indoor water conservation retrofit program are easily calculated by adding the savings from pages 24 through 28 of the Technical Memorandum *Task 1: Conservation*. Indoor toilet retrofits would save 328,000 hundred cubic feet per year, while indoor shower retrofits would save 260,184 hundred cubic feet per year. The combined total is 588,184 hundred cubic feet per year of indoor residential water savings.

**Residential Outdoor Irrigation Data Results**

As mentioned in the Water Solutions, Inc. Water Augmentation Feasibility Study, *Task 1: Conservation* there is very little good data:

> *"The California Department of Water Resources acknowledges that "easily retrievable, standardized, and comprehensive baseline urban water use data is not available in California" (California Water Plan Update; California Department of Water Resources, 2005). The Public Water System Survey provides an annual estimate based on non-audited self-reporting. California uses Urban Water Management Plans, which are required every five years (California Water Code; California Department of Water Resources, 2002), to collect water use data, but the results are not compiled into a statewide database."*

As a consequence of poor data availability and reliability, outdoor water use is often estimated by comparing maximum summer water usage with minimum winter water usage, the assumption being that outdoor irrigation is minimal in California during the winter.

From William de Oreo's 2011 paper (p.32), the California Single Family Water Use Efficiency Study we glean further data:

- only 87% of Californians are irrigating
- of that 87%, only 54% are over-irrigating
- average Theoretical Irrigation Requirement (TIR) is 89.9 kgal/year per connection
- average excess over TIR is 26.2 kgal/year
- 62% of excess use is attributed to 18% of the irrigation lots (15% of all the lots in the City).

In the general scope of residential irrigation the "under irrigation in the less-than-TIR group just about balances the over-irrigation in the more-that-TIR group" and the majority of excess savings will occur from only 15% of the lots (de Oreo, p 32).

Outdoor savings can be calculated by multiplying the average excess per lot by the number of service connections in Milpitas, and then converting to hundred cubic feet for colloquial use. This number, outdoor savings, is 735,561 hundred cubic feet per year.

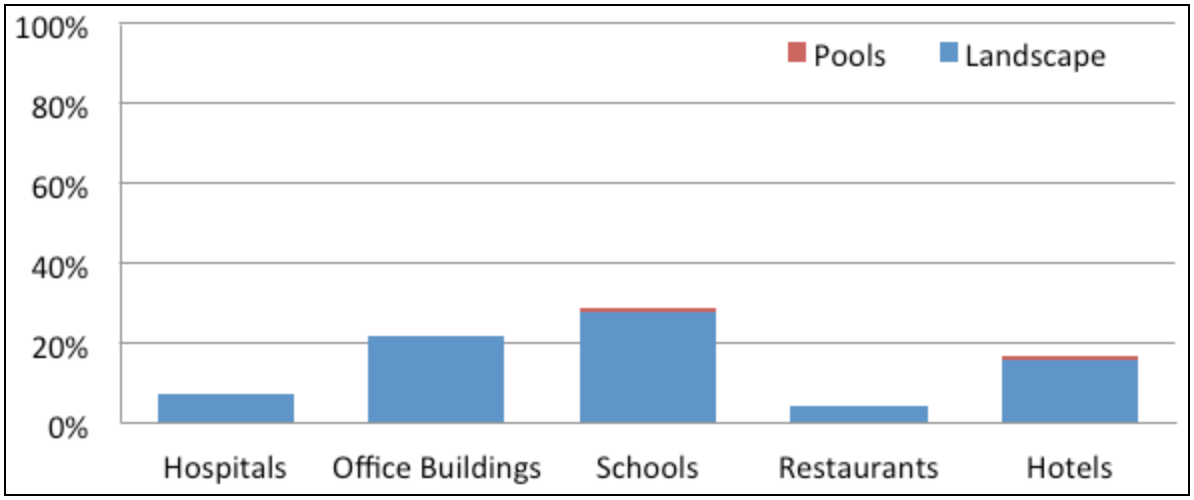
**Commercial Indoor Results**
Commercial indoor conservation can be done by retrofitting commercial toilets with waterless urinals, 1.28 gallon per minute or 0.08 gallon per minute low-flow toilets for a savings of 87,000 hundred cubic feet per year.

**Commercial Outdoor Irrigation Data Results**
Data for commercial irrigation is even less accessible than residential irrigation data. No one has done a study on commercial irrigation in California. The Environmental Protection Agency indicates irrigation water use can account for between 5 and 30 percent of a facility's total water use, as shown below.

Facilities can manage their own landscape in a manner that would save significant amounts of water. Facilities with large landscaped areas such as schools and commercial landscapes can improve landscape design, maintenance of irrigations system (particularly leaks) and weather/time controlled irrigation systems.

Milpitas enacted the Water Efficient Landscape Ordinance 238 in 2006. This ordinance required all new development be designed to comply with efficient water use for landscaping.

**Percent Water Attributed for Outdoor Use**




Studies have reported savings of 18-50% when switching commercial landscaping from water intensive landscape plants to those with lower water needs. Since the City currently uses 569,676 hundred cubic feet per year for outdoor commercial irrigation, it is feasible that as much as 284,838 hundred cubic feet per year could be saved by replanting commercial lawn grass with low-water use plantings.

| Milpitas Conservation Decision Matrix Concerns | Values | Residential Indoor (toilets, showerheads) | Residential Outdoor Irrigation* | Commercial Indoor (toilets) | Commercial Outdoor Irrigation |
|---|---|---|---|---|---|
| **Amount of Water Saved (hcf per year)** | | 588,184 | 735,561 | 87,000 | 284,838 |
| **Capital Costs** | | $0.00 | $0.00 | $0.00 | $0.00 |
| **Operating Costs (per year)** | | $140,274.00 | $140,274.00 | $140,274.00 | $140,274.00 |
| **Lifetime (years)** | | 20 | 20 | 20 | 20 |
| **Lifetime Costs ($/hcf)** | | $0.24 | $0.19 | $1.61 | $0.49 |
| Available Volume of Water | **5** | 4 | 5 | 2 | 3 |
| Order of Magnitude of Infrastructure Needed | **5** | 3 | 3 | 3 | 3 |
| Issues to Be Resolved | **2** | 1 | 1 | 1 | 1 |
| Operational & Maintenance Considerations | **5** | 5 | 5 | 5 | 5 |
| Effectiveness | **4** | 5 | 5 | 5 | 5 |
| Reliability | **3** | 5 | 5 | 5 | 5 |
| Cost | **3** | 2 | 2 | 2 | 2 |
| Benefit | **4** | 4 | 5 | 2 | 3 |
| Life Cycle | **4** | 5 | 5 | 5 | 5 |
| Ease of Implementation | **5** | 4 | 4 | 4 | 2 |
| *The higher the score the better the result.* | **SCORE** | **159** | **168** | **141** | **140** |

* from William DeOreo California Single Family Water Use Efficiency Study, 2011

| Milpitas Recycle Decision Matrix Concerns | Values | California Loop | Dixon Rd. Loop Completion | Milmont Dr. Extension | Yosemite-Sinclair Loop | E. Calaversas Ext. | S. Milpitas-Landess Ext | Segment 1 | Segment 2 | Segment 3 | Segment 4 | Segment 5 | TASP Area Extensions |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **5-Month Consumption Total (hcf per 5-mon)** | | 2,796 | 5,339 | 1,787 | 1,745 | 1,735 | 2,846 | 5,039 | no data | 62,603 | 13,765 | 741 | no data |
| **Amount of Water Saved (hcf per year)** | | 6,710 | 12,814 | 4,289 | 4,188 | 4,164 | 6,830 | 12,094 | no data | 150,247 | 33,036 | 1,778 | no data |
| **Linear Feet of Pipe** | | 8,612 | 5,496 | 837 | 6,246 | 3,001 | 8,528 | 10,200 | 5,000 | 8,500 | 8,600 | 5,300 | 25,000 |
| **Volume saved/Pipe Length (efficiency)** | | 0.78 | 2.33 | 5.12 | 0.67 | 1.39 | 0.80 | 1.19 | no data | 17.68 | 3.84 | 0.34 | no data |
| **Capital Costs** | | $3,229,500.00 | $2,748,000.00 | $313,875.00 | $2,342,250.00 | $1,125,375.00 | $3,198,000.00 | $3,900,000.00 | $1,975,000.00 | $3,187,500.00 | $3,225,000.00 | $2,087,500.00 | $9,375,000.00 |
| **Operating Costs (per year) SBWR does O/M** | | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 |
| **Lifetime (years)** | | 75 | 75 | 75 | 75 | 75 | 75 | 75 | 75 | 75 | 75 | 75 | 75 |
| **Lifetime Costs ($/hcf)** | | $6.42 | $2.86 | $0.98 | $7.46 | $3.60 | $6.24 | $4.30 | no data | $0.28 | $1.30 | $15.65 | no data |
| Available Volume of Water | **5** | 1 | 2 | 1 | 1 | 1 | 1 | 2 | 1 | 5 | 3 | 1 | 1 |
| Order of Magnitude of Infrastructure Needed | **5** | 3 | 2 | 1 | 3 | 2 | 3 | 4 | 2 | 3 | 3 | 2 | 5 |
| Issues to Be Resolved | **2** | 5 | 3 | 5 | 3 | 5 | 5 | 5 | 5 | 2 | 5 | 5 | 5 |
| Operational & Maintenance Considerations | **5** | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| Effectiveness (efficiency) | **4** | 1 | 3 | 4 | 1 | 2 | 1 | 2 | 1 | 5 | 4 | 1 | 1 |
| Reliability | **3** | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| Cost | **3** | 2 | 2 | 5 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 1 |
| Benefit | **4** | 1 | 2 | 1 | 1 | 1 | 1 | 2 | 5 | 5 | 3 | 1 | 1 |
| Life Cycle | **4** | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| Ease of Implementation | **5** | 4 | 1 | 4 | 2 | 4 | 2 | 4 | 4 | 3 | 4 | 4 | 4 |
| *The higher the score the better the result.* | **SCORE** | **124** | **117** | **135** | **110** | **123** | **114** | **142** | **135** | **165** | **154** | **119** | **131** |
| | | | *BART, UPRR, Thru SJ, Fremont* | | *RR & Creek Xing* | | | | *improves reliability* | *tank & pumps* | | | |

## Preliminary recycled water tank sizing

| | | | | | | |
|---|---|---|---|---|---|---|
| **RW: Yearly Usage** | 417000 | ccf = | 311916000.0 | gals, FY12-13 = | 311.92 | MGY |
| ***RW: Average Daily Usage*** | 1142 | ccf = | 854564.4 | gpd, FY12-13 = | 0.85 | MGD |
| ***RW: Calc'd Max Day Demand*** | 2571 | ccf = | 1922769.9 | gpd, FY12-13 = | 1.92 | MGD |
| **RW: Peak Hourly Usage** | 11 | ccf = | 7901.8 | gph, FY12-13 = | 0.01 | MGph |
| **RW: Peak Usage Demand** | 42 | ccf = | 31607.2 | gals, FY12-13 = | 0.03 | MG |
| ***RW: Peak Demand Increase*** | 1428 | ccf = | 1068205.5 | gals, FY12-13 = | 1.07 | MG |
| | | | | | | |
| **RW: Golf Course 5 Mon Usage** | 62603 | ccf = | 46827044.0 | gals, FY12-13 = | 46.83 | MG |
| **RW: Golf Course Average Daily Usage** | 412 | ccf = | 307903.9 | gpd, FY12-13 = | 0.31 | MGD |
| ***RW: Average Daily Usage w/Golf Courses*** | 1554 | ccf = | 1162468.2 | gpd, FY12-13 = | 1.16 | MGD |
| ***RW: Calc'd Max Day Demand w/Golf Courses*** | 3497 | ccf = | 2615553.5 | gpd, FY12-13 = | 2.62 | MGD |
| ***RW: Peak Demand Increase w/Golf Courses*** | 1943 | ccf = | 1453085 | gals, FY12-13 = | 1.453 | MG |
| | | | | | | |
| **Recomended Tank Size** | | | | | 3.00 | MG |
| Number of days storage without golf courses | | | | | 3.51 | Days |
| Number of days storage with golf courses | | | | | 2.58 | Days |

# *Water Solutions Inc.*

## MEMORANDUM

**Date:** 16 March, 2015
**To:** Steven Machida, Principal Civil Engineer - City of Milpitas
**From:** Water Solutions, Inc. - Consultant
**Subject:** **Task 2: Recycled Water**

## Summary

The use of recycled water appears to be one of the best options for offsetting potable water consumption; by using non-potable recycled water for irrigation, etc., less potable water will be used. The City of Milpitas (the City) has been a recycled water retailer since 1997 via an agreement with the City of San Jose. The City is in a unique position of having both the infrastructure and the potential recycled water demand to be a regional leader in recycled water use. With a modest investment in additional distribution pipes the City could save as much as one million or more gallons per day of potable water.

The infrastructure required to expand the City's recycled water system involves approximately 95,000 feet of purple pipe in loops and extensions, as well as purple pipe service laterals and water meters, which would be purchased by the customers. The proposed recycled water system expansion is expected to serve all cooling tower customers, a number of potential commercial customers, as well as the majority of the irrigation customers. Currently, the City's irrigation customers, which include residential users, use potable water. In the long term, it is feasible that all irrigation water could come from purple pipe.

A list of potential recycled water customers is included in the conclusion, along with the recycled water main extensions or loops that may need to be installed to serve these customers.

The cost of commercial connections would need to analyzed as each customer will incur a cost to get connected to the purple pipe, which will depend on their distance to the pipe. A regulatory step may encourage people to comply in order to avoid fines.

## Data

The information in this memo was gathered from:

- California Code of Regulations, Title 22, Article 3
- City of Milpitas Public Utilities staff and records
- Pedro Hernandez of the City of San Jose, Environmental Services Department, South Bay Water Recycling; phone.
- Eric Lacy, State Water Resources Control Board; phone.

Maps of the City recycled water mains were correlated with location data taken from water meter records and from known cooling tower and industrial users. This information was then analyzed to correlate nearness to existing recycled water mains with quantity of use. A subset of the listed users was identified as being within “range” of the recycled water mains, based on their use of potable water for nonpotable purposes, and studied as potential candidates for conversion to recycled water use. Similarly, the City utilities engineering staff has identified some pipeline extension routes and has drawn up a plan of proposed recycled water extensions (See Appendix A1).

This sort of analysis was conducted for all potential customers, taking into account the distance between each consumer and the existing recycled water lines. The resulting loops and extensions suggested as additions to the recycled water system are designed to maximize potable water consumption reductions while minimizing the construction of additional recycled water piping.

# Methodology

A series of examinations of available information regarding recycled water in the City was conducted. The information gathered and results of our study are recorded in the following sections of this technical memorandum.

A. Evaluate the feasibility of converting existing potable landscape irrigation and cooling tower customers to recycled water
B. Discuss source of recycled water (treatment plant) related to supply and water quality, including how recycled water is relatively not affected by drought cycles (rainfall patterns)
C. Evaluate the construction of recycled water fill stations for construction activities (compaction and dust control)
D. Evaluate other possible demands that can be offset by recycled water
E. Discuss the concept of a few big user and many small users as they affect the distribution system, ownership vs. operational/maintenance responsibility of the South Bay Water Recycling system and Milpitas interest in growth of South Bay Water Recycling
F. Prepare infrastructure needed to implement recycled water system expansion for the proposed offset
G. Discuss South Bay Water Recycling modeling effort to date
H. Optional: Prepare preliminary hydraulic model (pressure, velocity, flow, pipe size,

pipe length, valve locations with illustration) as part of the expansion

I. Provide potential list of customers (irrigation and cooling tower), estimated reductions of consumptions

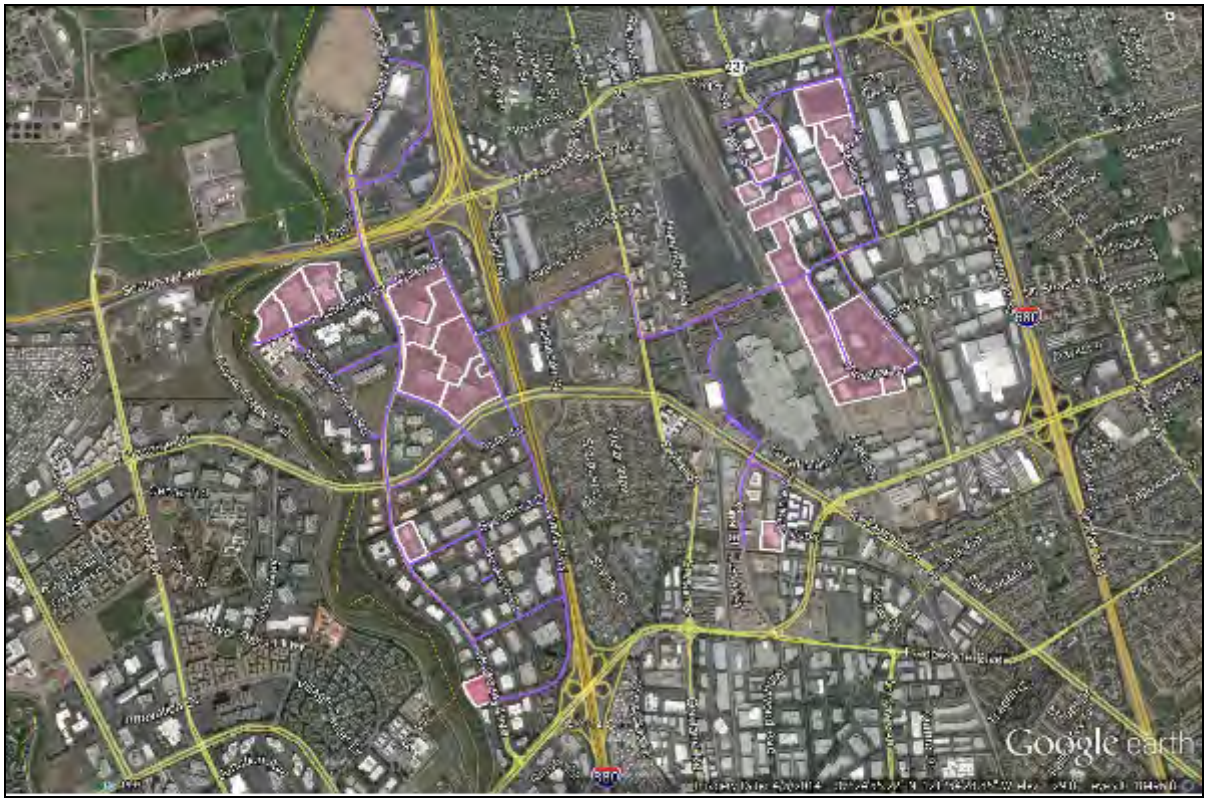
Legal and financial considerations will be addressed at the end of "Methodology" below.

There will be a final *Task 2 Implementation Plan Table* at the end of this memorandum. This will define an implementation schedule, compare cost and benefit, life cycle of plan and ease of implementation. Feasibility will be discussed in Task 9.

## A. Evaluate the feasibility of converting existing potable landscape irrigation and cooling tower customers to recycled water

The feasibility of converting existing potable-landscape-irrigation customers and cooling-tower customers to recycled water is quite good. All of the potential industrial and/or cooling tower customers are appurtenant to recycled water mains, which suggests that the possibility of such a conversion was foreseen earlier. It makes sense, therefore, to institute a mandatory connection for the existing list of potential industrial and cooling tower customers (see Figure 1).

**Figure 1: Recycled Water Mains and Potential Industrial and Cooling Tower Customers**



The following table indicates which additional recycled water mains could and should be installed forthwith to ensure significant reductions in potable water use for irrigation purposes:

| Loop Name | Length | Cost @$375/ft | Water Savings (per 5 months) |
|---|---|---|---|
| California Loop | 8,612’ | $3,229,500 | 2,796 hundred cubic feet |
| Dixon Rd. Loop Completion | 5,496' | $2,748,000 ($500/ft. horizontal bore) | 5,339 hundred cubic feet |
| Milmont Dr. Extension (must be subsequent to Dixon Rd. Loop Completion) | 837’ | $313,875 | 1,787 hundred cubic feet |
| Yosemite-Sinclair Loop | 6,246’ | $2,342,250 | 1,745 hundred cubic feet |
| E. Calaveras Extension | 3,001’ | $1,125,375 | 1,735 hundred cubic feet |
| S. Milpitas-Landess Extension | 8,528' | $3,198,000 | 2,846 hundred cubic feet |
| City Staff Proposed Segment 1 | 10,200’ | $3,900,000 ($500/ft. x 600’ horizontal bore) | 5,039 hundred cubic feet |
| City Staff Proposed Segment 2 | 5,000’ | $1,975,000 ($500/ft. x 800’ horizontal bore) | No data |
| City Staff Proposed Segment 3 | 8,500’ | $3,187,500 | 62,603 hundred cubic feet |
| City Staff Proposed Segment 4 | 8,600’ | $3,225,000 | 13,765 hundred cubic feet |
| City Staff Proposed Segment 5 | 5,300’ | $2,087,500 ($500/ft. x 800’ horizontal bore) | 741 hundred cubic feet |
| TASP Area Extensions | 25,000’ | $9,375,000 | No data |

| | | | |
|---|---|---|---|
| **TOTALS** | **95,320'** | **$36,707,000** | **113,205** (5mos.)<br>**hundred cubic feet** |

The information in this table is useful for assessing the feasibility of extending recycled water mains to potential new recycled-water customers. The data suggest that extending these lines would impose a one-time cost of $135.11 per hundred cubic feet of water saved annually and provide ongoing potable water savings of more than 271,692 hundred cubic feet per year or nearly 1 million gallons per day during peak water use periods. Given that the recycled water system would last for 75 years, this investment would save the City at least $71 million in purchased water savings over the lifetime of the system, at a lifetime cost of $1.80 per hundred cubic feet.

$$113,205\ hundred\ cubic\ feet/5 months \div 5 months \times 12 months = 271,692\ hundred\ cubic\ feet/year$$

$$\$36,707,000 \div 271,692\ hundred\ cubic\ feet\ per\ year = \$135.11\ per\ hundred\ cubic\ feet\ saved$$
$$\$36,707,000 \div (271,692\ hundred\ cubic\ feet\ per\ year \times 75\ years) = \$1.80\ per\ hundred\ cubic\ feet$$
*amortized over 75 years.*

This is a reasonable cost/benefit for a construction project that would be executable within a relatively short timeframe such as five years. It is logical, therefore, that mandatory connections to recycled water would then be required where a recycled water main is appurtenant to the property and the customer is using potable water for irrigation. Additionally, main-to-house lateral pipe can be pre-installed for all new development. Once a predetermined number of developments come online, such as ten, a transmission line could then be installed.

## B. Discuss source of recycled water (treatment plant) related to supply and water quality, including how recycled water is relatively not affected by drought cycles (rainfall patterns)

Wastewater is collected in Milpitas by the City-run sewer system. The sewer water flows to the San Jose-Santa Clara Regional Wastewater Facility (new name, also known as San Jose Water Pollution, old name, at 700 Los Esteros, SJ), which treats an average of 110 million gallons per day of wastewater and has the capacity to process up to 167 million gallons per day. Despite this sizeable production capacity, the consumption of recycled water by the County is only 14 million gallons per day on average, regardless of drought. San Jose-Santa Clara Regional Wastewater Facility treats the water to "disinfected secondary" (per Title 22 requirements).

This San Jose-Santa Clara Regional Wastewater Facility tertiary water is sent to South

Bay Water Recycling, also at the Esteros site, which treats the water further to provide 14 million gallons per day of “Disinfected Tertiary” water (per Title 22 requirements).

San Jose-Santa Clara Regional Wastewater Facility also sends its tertiary treated water to Silicon Valley Advanced Water Purification Center (also at the Esteros site). The Silicon Valley Water Advanced Purification Center uses micro-filtration, reverse osmosis, and ultraviolet disinfection, which is a standard above tertiary (per Title 22 requirements). The Silicon Valley Advanced Water Purification Center provides 8 million gallons per day at a quality of +/- 500 total dissolved solids (which is cleaner than tertiary) to South Bay Water Recycling.

Finally, at the South Bay Water Recycling main pump station, the South Bay Water Recycling tertiary water and the mixed low-dissolved solids and the cleaner-than-tertiary water from Silicon Valley Advanced Water Purification Center, are blended. South Bay Water Recycling provides water that ranks among the highest quality recycled water in California.

The South Bay Water Recycling blended water is then delivered to the following:

- City of Milpitas Water & Sewer
- City of Santa Clara Water & Sewer Utility
- San Jose Municipal Water System - Recycled Water
- San Jose Water Company (all neighboring districts)

Silicon Valley Advanced Water Purification Center currently uses a quarter of its available footprint and is considering the construction of satellite facilities closer to its users. The future of the Silicon Valley Advanced Water Purification Center looks to be indirect potable reuse via groundwater augmentation and recovery/active storage and recovery.

Note that the San Jose Water Company has also constructed a recycled water distribution line along its border with the City, which, according to some sources, may lead to an intertie and thus the completion of a “looped system” for the City. Water recycling in Milpitas began as a solution to a flow cap imposed (by the Regional Water Quality Control Board) on the San Jose-Santa Clara Regional Wastewater Treatment Facility. As a result, the hastily designed system did not necessarily meet all design needs. The “tree” approach to pipe construction needs to be modified by joining up dead-ends, to create loops that will increase the consistency of water delivery as water can be rerouted during system maintenance and repair.

Australia has been investigating the option of using recycled water for drinking purposes. Through the “National Demonstration, Education and Engagement Program” the Australian Water Recycling Centre of Excellence has been able to develop tools that can be used by the water industry when considering recycled water for potable use. This

project won the 2014 WateReuse International Award and can be used as an example for ways in which California can introduce the concept of drinking recycled water (Australian Water Recycling website, September 2014).

Orange County California has been operating a drinking-water-grade waste water treatment plant ("Orange County's Groundwater Replenishment System", p.11, Orange County Water District, 2010) since the 1970s. Called Water Factory 21 (the 21 representing a 21st century goal). In 2008, replacing Water factory 21, a Groundwater Replenishment System came online. With a new high-tech water purification system, it began to produce water similar in quality to bottled water. The Groundwater Replenishment System water will be used to service a larger, expanded seawater barrier and to help drought-proof Orange County's groundwater basin by providing better water reliability and more local control over part of our water future. While human consumption of re-used, treated wastewater is still technically and politically experimental, it has the possibility of being cutting edge. Non-consumptive use of recycled water is, however, a generally accepted industry goal.

San Diego recently approved "Pure Water San Diego," which will cost $3.5 billion to provide more than a third of the City's potable water by 2035. The price tag for recycled, purified water is currently higher than that of imported water, but this trend is widely expected to be reversed in the longer term. Mike McSweeney of the Building Industry Association of San Diego said that a reliable water supply is crucial to San Diego's growing population: "Without it, we can't build; without it, we can't live." ("SD OKs Landmark Water Recycling". U-T San Diego. 2014)

Some of the single family residential houses within the town of Windsor (known as Vintage Greens) were one of the first class of developments to utilize recycled water for irrigational purposes in Northern California. Since that time, the town of Windsor has been consistently using recycled water for irrigation of agricultural land and residential front/backyards and for recreational purposes in schools. The wastewater is treated to tertiary standards allowing for unrestricted use in reclaimed water applications throughout the city (City of Windsor website, 2014).

The Monterey Regional Water Pollution Control Agency has partnered with Monterey County Water Resources Agency to build reclamation projects including the Salinas Valley Reclamation Project recycled water plant and the Castroville Seawater Intrusion Project. The Salinas Valley recycled water plant has been treating wastewater to advanced tertiary level since 1998. This water continues to be used for unrestricted purposes throughout Monterey County. The Castroville Seawater Intrusion Project distributes recycled water (treated to secondary standards) to 12,000 acres of farmland within Northern Monterey County ("Changing Waste Water into Safe Water." Monterey Regional Water Pollution Control Agency website. 2014.).

Recycled water is often considered a more reliable water source than normal potable water sources such as watersheds and groundwater, as its production is influenced by population alone, rather than by seasonal changes. This assessment is not entirely true, as conservation efforts during times of drought may reduce wastewater. However, given that the volume of available recycled water is much greater than the current demand, the ceiling is rarely hit, and the common sentiment is that recycled water is nothing if not reliable.

The current recycled water infrastructure consists of a single connection to the 30 inch Transmission Pump Station line at the end of Technology Dr., coming directly from the Transmission Pump Station approximately 1 mile to the northwest. The Transmission Pump Station operates at 110 pounds per square inch and 700-3,000 gallons per minute, providing more than enough capacity for growth in the use of recycled water. This area, called Zone 1, is supplied by highly robust recycled water wholesaler supplies and facilities, however the infrastructure in the City lacks reliability, should it choose to increase its recycled water consumption.

South Bay Water Recycling is expanding the purple pipe distribution system in the San Jose Water Company territory, south of the Landess/Park Victoria intersection on the San Jose/Milpitas border. Adding a turnout there will feed the proposed Segment 5 (Figure A1 in Appendix), creating a much needed loop that will greatly improve maintenance, and therefore reliability. SBWR will also be addressing its planned expansion to keep up with consumption needs.

Moreover, there are two other considerations regarding reliability. One is that the peak recycled water use occurs at night-time, when most irrigation of public green spaces (parks, playgrounds, golf courses) takes place. The actual peak is approximately 3.6 times the normal demand and occurs between 21:00 and 03:00 hours. Given that the low use period is around 14:00 hours, to protect system reliability the city may wish to review requiring daytime use or additional storage (reservoirs or tanks). It seems logical that an analysis should be performed to determine if a reservoir should be constructed to smooth out the demand peaks. This is, of course, how water systems are designed, and it follows that the recycled water system may well need the same consideration. A reservoir located within the City would also reduce the impact of supply line repairs.

A second consideration is that the City has only one connection to the recycled water system. That connection, as aforementioned, makes the system more vulnerable than a multiple connection system. To supplement this single connection, and to form a loop, two additional connections could be made as follows:

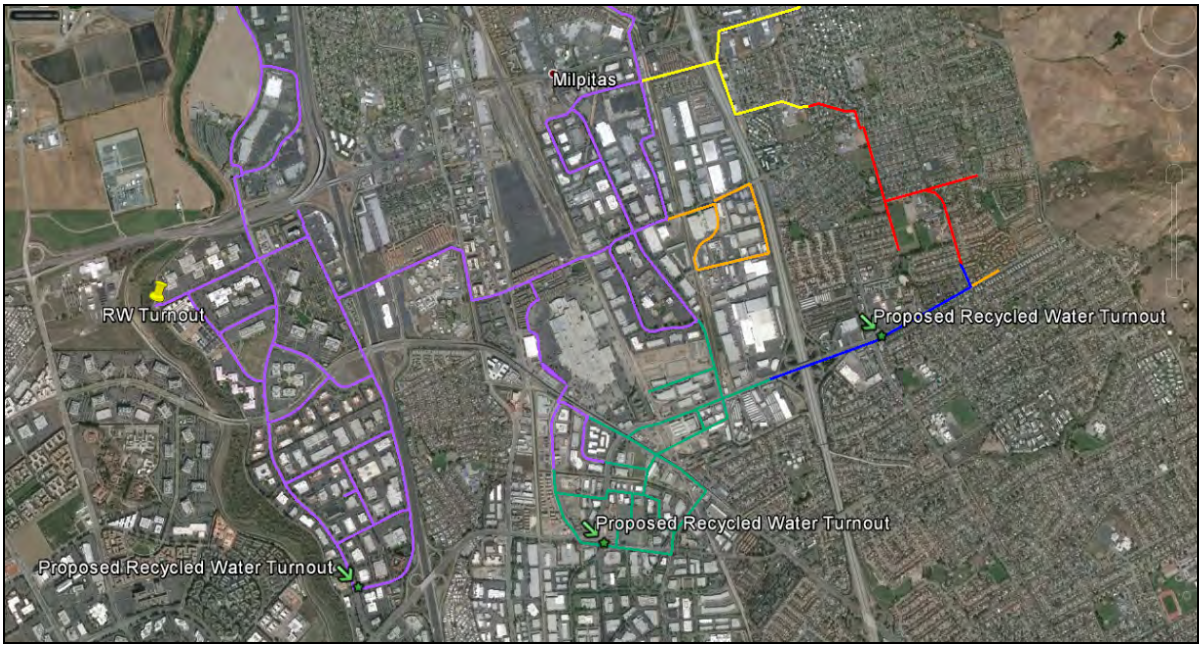
- A 2,200 foot connection could be made along McCandless Dr. and Trade Zone Blvd. to the 6 inch end at Ringwood Ave. and Trade Zone Blvd. This would be accomplished by the Transit Area Specific Plan extensions planned by the City.
- A 12 inch connection could be made by horizontal boring for 900 feet, under

Coyote Creek, from the intersection of Barber Lane and McCarthy Blvd. to the 30 inch transmission line under Coyote Creek Trail

## C. Evaluate the construction of recycled water fill station for construction activities (compaction and dust control)

Using recycled water for non-potable applications such as construction watering, street sweeping and sewer flushing is inherently less costly than using valuable potable water. Following a Water Solutions, Inc. technical memorandum and design, four construction water fill stations have been created, two along McCarthy Boulevard, one at Eastern Curtis Park, and one along Gibraltar Drive. The City is one of the first Bay Area cities to convert to recycled water for construction and can adjust the system based on operational experience.

**Figure 2: Proposed Recycled Water Turnout Locations**




## D. Evaluate other possible demands that can be offset by recycled water

According to the California Code of Regulations, Title 22, section 60304, multiple types of allowable water recycling applications are available to the City. An abbreviated list of these possibilities is given below, followed, in some cases, by the number of potential customers. A detailed list of recommended potential customers is provided at the end of

the document.

- Irrigation
    - parks & playgrounds
    - school yards
    - residential landscaping
    - public golf courses (2)
    - cemeteries (1)
    - freeway landscaping
    - restricted golf courses
    - nurseries
    - pasture
    - any non-edible vegetation
- cooling
- industrial process
- fire-fighting
- fountains
- commercial laundries (10)
- commercial car-washes (9)
- mixing concrete (1-7)
- dust control
- cleaning outdoor areas

## F. Prepare infrastructure needed to implement recycled water system expansion for the proposed offset

Numerous infrastructural items are required to successfully implement an expanded recycled water system. They are as follows:

- approximately 95,000 feet of purple pipe is needed to connect all of the potential loops inserted in the expanded system
- around 150 isolation valves will need to be installed onto the purple piping to facilitate the flow of recycled water at approximately 1,000 foot intervals
- tees and saddles will also be needed at locations in the purple pipe where the system is accessed

Based on an analysis of potential connections, the expected increase from the expansion is an average of 1 million gallons per day of recycled water for irrigation use, plus additional flow for commercial and cooling tower users.

Purple pipe service laterals will be purchased as needed by customers, along with other connection-related appurtenances. As well, recycled water meters will be purchased by the customer to ensure that water usage data is readily available. These purchases will be made in accordance with a City or County ordinance requiring the installation of appropriate fittings.

## H. Optional: Prepare preliminary hydraulic model (pressure, velocity, flow, pipe size, pipe length, valve locations with illustrations) as part of the expansion (optional; not researched)

## I. Provide potential list of customers (irrigation and cooling tower), estimated reductions of consumptions

The following tables defines water usage for five months for a number of high volume consumers. This data was taken from metering records over the non-peak usage period months of January 2014 through May 2014. As described in section A of this memorandum, the water consumption reduction through expansion of the recycled water system is a yearly 271,692 hundred cubic feet, at a cost of $36,707,000. We suggest multiple tiers for implementation of these reductions, with the most water savings being afforded by the first tier of improvement and further savings by latter tiers.

**Recycled Water Implementation Tiers**

| Tier | Improvement |
|---|---|
| 1 | Conversion of Non-potable uses to recycled water along existing alignment. |
| 2 | Conversion of Cooling towers to recycled water along existing alignment. |
| 3 | Pipeline constructions |

**Tier 1: Recommended Potable Irrigation Connections**

| ADDRESS | 5 MON. CONSUMPTION TOTAL (hundred cubic feet) |
|---|---|
| 367 CYPRESS DR | 140 |
| 1851 MCCARTHY BLVD | 547 |
| 501 MURPHY RANCH RD | 52 |
| 800 BARBER LN | 121 |
| 1551 CENTER POINTE DR | 347 |
| 1077 GIBRALTAR DR | 40 |

| | |
|---|---|
| 1007 GIBRALTAR DR | 73 |
| 1177 GIBRALTAR DR | 73 |
| 500 YOSEMITE DR | 478 |
| 730 TASMAN DR | 258 |
| 888 TASMAN DR | 534 |
| 601 YOSEMITE DR | 349 |
| 755 YOSEMITE DR | 383 |
| 601 S MILPITAS BLVD | 497 |
| 463 S MILPITAS BLVD | 212 |
| 147 METROPOLITAN DR | 250 |
| 200 S HILLVIEW DR | 19 |
| 830 S HILL VIEW DR | 370 |
| 1500 ESCUELA | 13 |
| 690 S HILLVIEW DR | 156 |
| 734 S HILLVIEW DR | 86 |
| 480 S HILLVIEW DR | 39 |
| 300 S HILLVIEW DR | 139 |
| 233 S HILLVIEW DR | 354 |
| 350 S MILPITAS BLVD | 60 |
| 570 S MILPITAS BLVD | 255 |
| 1107 SANDALWOOD LN | 75 |
| 901 E CALAVERAS BLVD | 807 |
| 555 LOS COCHES ST | 28 |
| 511 LOS COCHES ST | 46 |
| 48 LOS COCHES ST | 83 |
| 765 E CALAVERAS BLVD | 182 |

| | |
|---|---|
| 700 YOSEMITE DR | 478 |
| 920 S MILPITAS BLVD | 69 |
| 1090 S MILPITAS BLVD | 179 |
| 240 E CURTIS AVE | 15 |
| 700 S ABEL ST | 162 |
| 800 S ABEL ST | 95 |
| GREAT MALL @ MCCANDLE ST | 517 |
| 185 S MILPITAS BLVD | 214 |
| 182 TOPAZ ST | 50 |
| 190 TOPAZ ST | 421 |
| 311 TURQUOISE ST | 25 |
| 374 TURQUOISE ST | 293 |
| **TOTAL** | 9,584 hundred cubic feet |

**Tier 1: Recommended City Irrigation Connections**

| **ADDRESS** | **5 MON. CONSUMPTION TOTAL (hundred cubic feet)** |
|---|---|
| 1101 S MAIN ST | 6 |
| 209 GREAT MALL PKWY | 281 |
| 130 HORIZON ST | 408 |
| 511 PLATT/SARATOGA AVE | 133 |
| PIEDMONT RD @ST.JOHN'S CEMETERY | 34 |
| 2087 ALVISO ADOBE | 86 |
| 1331 E CALAVERAS | 2271 |
| 120 N MILPITAS | 84 |
| 1005 N MCCARTHY | 60 |

| | |
|---|---|
| 1425 N MCCARTHY BLVD N SIDE DRIVEWAY | 116 |
| 1265 N MILPITAS BLVD | 183 |
| 355 JURGENS/MILMONT WAY | 1563 |
| **TOTAL** | 5,225 |

**Tier 2: Recommended Industrial/Cooling Tower Connections**

| **COMPANY NAME** | **ADDRESS** |
|---|---|
| Jefferson Smurfit Corp | 201 S Hillview Dr |
| LINEAR TECHNOLOGY CORPORATION | 275 S Hillview Dr |
| MISSION WEST PROPERTIES LP | 233 S Hillview Dr |
| Headway Technologies | 497 S Hillview Dr |
| KLA TENCOR CORP | 3 Technology Dr |
| KLA TENCOR CORP | 5 Technology Dr |
| KLA TENCOR CORP | 7 Technology Dr |
| Trinet Milpitas Assoc LLC | 345 Los Coches St |
| TRINET MILPITAS ASSOCS LLC | 1530 Mccarthy Blvd |
| CISCO TECHNOLOGY INC | 465 Barber Ln |
| CISCO TECHNOLOGY INC | 510 McCarthy Blvd |
| CISCO TECHNOLOGY INC | 771 Alder Dr |
| CISCO TECHNOLOGY INC | 758 Barber Ln |
| CISCO TECHNOLOGY INC | 0 Barber Ln |
| FR CAL NORTHWEST ALPHA LLC | 1557 Centre Pointe Dr |
| Flextronics | 1077 Gibraltar Dr |
| Flextronics | 1007 Gibraltar Dr |
| Flextronics | 727 Gibraltar Ct |
| LIFESCAN INC (already on RW) | 1001 S Milpitas Blvd |

| | |
|---|---|
| Orinda Equity Parts LLC | 461 S Milpitas Blvd |
| Peripheral Storage Inc | 304 Turquoise St |
| Deck Stanley R | 311 Turquoise St |
| Bryan Family Partnership II Ltd | 195 S Milpitas Blvd |
| Seagate Technology LLC | 155 S Milpitas Blvd |

**Tier 3: California Loop**

| **ADDRESS** | **5 MON. CONSUMPTION TOTAL (hundred cubic feet)** |
|---|---|
| 1081 CADILLAC CT | 129 |
| 380 FAIRVIEW | 604 |
| 120 CALIFORNIA CIR | 1128 |
| 1430 CALIFORNIA CIR | 549 |
| 1494 CALIFORNIA CIR | 276 |
| 1524 CALIFORNIA CIR | 110 |
| **TOTAL** | 2,796 |

**Tier 3: Dixon City Loop Completion**

| **ADDRESS** | **5 MON. CONSUMPTION TOTAL (hundred cubic feet)** |
|---|---|
| 1854 N MILPITAS BLVD | 666 |
| 98 DIXON RD | 213 |
| 120 DIXON RD | 238 |
| 1775 MILMONT DR | 978 |
| 1770 MILMONT DR | 163 |
| 231 DIXON LANDING RD | 507 |

| | |
|---|---|
| 1901 MILMONT DR | 1219 |
| 1900 MILMONT DR | 1355 |
| **TOTAL** | 5,339 |

**Tier 3: Yosemite-SinClair Loop**

| **ADDRESS** | **5 MON. CONSUMPTION TOTAL (hundred cubic feet)** |
|---|---|
| 734 HILLVIEW DR | 86 |
| 890 YOSEMITE DR | 483 |
| 650 VISTA WAY | 45 |
| 1021 YOSEMITE DR | 38 |
| 565 SINCLAIR FRONTAGE RD | 452 |
| 750 YOSEMITE DR | 85 |
| 876 YOSEMITE DR | 56 |
| 983 AMES AVE | 27 |
| 945 AMES AVE | 234 |
| 901 AMES AVE | 212 |
| 871 AMES AVE | 3 |
| 1250 AMES AVE | 8 |
| 990 AMES AVE | 11 |
| 980 AMES AVE | 1 |
| 970 AMES AVE | 4 |
| **TOTAL** | 1,745 |

**Tier 3: E. Calaveras Extension**

| **ADDRESS** | **5 MON. CONSUMPTION TOTAL (hundred cubic feet)** |
|---|---|

| | |
|---|---|
| 901 E CALAVERAS BLVD | 807 |
| 770 E CALAVERAS BLVD | 272 |
| 1255 E CALAVERAS BLVD | 581 |
| 95 DEMPSEY RD | 4 |
| 49 DEMPSEY RD | 54 |
| 98 PARK VICTORIA DR | 17 |
| **TOTAL** | 1,735 |

**Tier 3: Milmont Dr. Extension**

| **ADDRESS** | **5 MON. CONSUMPTION TOTAL (hundred cubic feet)** |
|---|---|
| 1775 MILMONT DR | 978 |
| LARKWOOD CT | 646 |
| 1770 MILMONT DR | 163 |
| **TOTAL** | 1,787 |

**Tier 3: South Milpitas Landess Extension**

| **ADDRESS** | **5 MON. CONSUMPTION TOTAL (hundred cubic feet)** |
|---|---|
| 1090 S MILPITAS BLVD | 179 |
| 999 MONTAGUE EXPY | 380 |
| 905 MONTAGUE EXPY | 92 |
| 1486 GLADDING CT | 2 |
| 1051 PECTEN CT | 38 |
| 1031 PECTEN CT | 90 |
| 1475 DEMPSEY RD | 79 |

| | |
|---|---|
| 1535 LANDESS AVE | 1020 |
| 1350 S PARK VICTORIA DR | 71 |
| 1785 LANDESS AVE | 2 |
| 1795 LANDESS AVE | 83 |
| 2154 CALLE VISTA VERDE DR | 810 |
| **TOTAL** | 2,846 |

**Tier 3: City Staff Proposed Segment 1**

| **ADDRESS** | **5 MON. CONSUMPTION TOTAL (hundred cubic feet)** |
|---|---|
| 1331 E CALAVERAS BLVD | 3272 |
| CARDOZA PARK AVE | 1320 |
| KENNEDY DR #1 | No data |
| KENNEDY DR #2 | 447 |
| **TOTAL** | 5,039 |

**Tier 3: City Staff Proposed Segment 3**

| **ADDRESS** | **5 MON. CONSUMPTION TOTAL (hundred cubic feet)** |
|---|---|
| COUNTRY CLUB DR (Summitpointe Golf Course) | 39,023 |
| OLD CALAVERAS DR #1 (Ed Levin Park) | No data |
| OLD CALAVERAS DR #2 (Spring Valley Golf Course) | 23,580 |
| **TOTAL** | 62,603 |

**Tier 3: City Staff Proposed Segment 4**

| ADDRESS | 5 MON. CONSUMPTION TOTAL (hundred cubic feet) |
|---|---|
| 1300 EDSEL DR | 863 |
| FOOTHILL PARK (no address) | No data |
| #1 300 ROSWELL DR | 1033 |
| #2 300 ROSWELL DR | 170 |
| MURPHY SCHOOL DR | 958 |
| #1 511 PLATT/SARATOGA AVE | 63 |
| #2 511 PLATT/SARATOGA AVE | 752 |
| #1 1596 EVERGLADES DR | 60 |
| #2 1596 EVERGLADES DR | 945 |
| #1 EVERGLADES #511-10 DR | 927 |
| #2 EVERGLADES #511-10 DR | 78 |
| SKYLINE PARK WAY | 419 |
| FIELDCREST PARK WAY | 753 |
| 915 SEQUOIA DR | 140 |
| YELLOWSTONE EAST OF SPV | No data |
| CHIPMAN/LYNWOOD | 553 |
| 2154 CALLE VISTA VERDE DR | 1482 |
| CUESTA/TER HOA | 1,182 |
| RIDGEMONT COMMON DR | 1,380 |
| 2300 LYNWOOD TERRACE | 1,243 |
| 1357 TERRA ALTA DR | 688 |
| #1 YELLOWSTONE AVE | 76 |

| | |
|---|---|
| #2 YELLOWSTONE AVE | 0 |
| 1500 YOSEMITE (Montessori School) | No data |
| 2025 YOSEMITE (Sinnott School) | No data |
| **TOTAL** | 13,765 |

**Tier 3: City Staff Proposed Segment 5**

| **ADDRESS** | **5 MON. CONSUMPTION TOTAL (hundred cubic feet)** |
|---|---|
| #1 CREIGHTON PARK AVE | 134 |
| #2 CREIGHTON PARK AVE | 607 |
| **TOTAL** | 741 |

## Legal

The State legislature has declared that:

> The use of potable domestic water for nonpotable uses, including, but not limited to, cemeteries, golf courses, parks, highway landscaped areas, irrigation of residential landscaping and industrial and irrigation uses, is a waste or an unreasonable use of the water if recycled water is available (Water Code section 13500).

Retail water suppliers are required to identify potential uses for recycled water. The Urban Water Management Plan (Water Code section 10633) requires information on recycled water and its potential for use as a water source in the service area of the urban water supplier. The City is required to use recycled water for certain irrigation and industrial purposes, if suitable recycled water is available. Further, the City may require the use of recycled water for certain uses at a reasonable cost to the user (i.e., supplying the treated recycled water at a cost comparable to, or less than, the cost of supplying potable domestic water). Such uses include:

- Irrigation of residential landscaping, under certain conditions
- Floor trap priming, cooling towers, and air-conditioning devices, under certain conditions
- Toilet and urinal flushing under certain conditions

Note that these applications will require permitting and approval from State Water Resources Control Board..

Standards for the use of recycled water in various applications fall into three categories. Below are the allowed uses for each of these categories.

(a) Tertiary Disinfection Treatment: Recycled water used for the following shall be disinfected tertiary recycled water, except for filtration being provided pursuant to California Code of Regulations, Title 22, section 60301.320(a). Coagulation need not be used as part of the treatment process, provided that:

- the filter effluent turbidity does not exceed 2 nephelometric turbidity units
- the turbidity of the influent to the filters is continuously measured
- the influent turbidity does not exceed 5 nephelometric turbidity units for more than 15 minutes and never exceeds 10 nephelometric turbidity units
- there is the capability to automatically activate chemical addition or divert the wastewater should the filter influent turbidity exceed 5 nephelometric turbidity units for more than 15 minutes (Water Code section 60307):
    - flushing toilets and urinals
    - priming drain traps
    - industrial process water that may come into contact with workers
    - structural fire fighting
    - decorative fountains
    - commercial laundries
    - consolidation of backfill around potable water pipelines
    - artificial snow making for commercial outdoor use
    - commercial car washes, including hand washes if the recycled water is not heated, where the general public is excluded from the washing process

(b) Secondary 23 Disinfection Treatment: Recycled water used for the following uses shall, at the least, be disinfected secondary-23 (total coliform count of 23 colonies per 100 milliliters or less) recycled water:

- industrial boiler feed
- non-structural fire fighting
- soil compaction
- mixing concrete
- dust control on roads and streets
- cleaning roads, sidewalks and outdoor work areas
- industrial process water that will not come into contact with workers

(c) Undisinfected Secondary Treated: Recycled water used for flushing sanitary sewers shall, at the least, be undisinfected secondary recycled water.

According to the Water Conservation Ordinance 240 the use of potable water for irrigation is prohibited where reclaimed water is available, except in the following situations:

- Abel/Main streetscape
- cultural resources
- temporary native planting establishment

The City Municipal Code Title VIII, Chapter 6, sections 3.05-06 should be changed to

require new developments, cooling and other potential uses of recycled water to take advantage of recycled water where reasonably available. *Reasonable availability* can be determined by evaluating the cost of installation against the cost of maintaining consumption at increasing rates, with savings projected over a 30 year infrastructure lifetime.

However, before a site can connect to recycled water, the construction documents (plans, engineering report, etc.) must be prepared by the new customer and approved by the City, the South Bay Water Recycling and the State Water Resources Control Board. The construction must be inspected for South Bay Water Recycling permit issuance. Dual plumbing is more complicated, with a periodic cross-connection testing after the initial construction, which typically occurs every four years. An annual self-inspection report by the customer is also required.

The California Code of Regulations Water Code (section 60310-60316) sets out the construction and other ongoing requirements. For example, no recycled water other than disinfected tertiary grade water can be used on parks or playgrounds or for irrigation near a well. In addition, signs displaying the wording "RECYCLED WATER - DO NOT DRINK" must be posted wherever recycled water is used.

### Financial

It is advised that the City pursue additional funding in the form of grants and/or loans via the California and US governments (see technical memorandum *Task 8: Funding*). Alternately the recycled water system improvements could be incorporated into the City's sizeable Capital Improvement Program.

Milpitas will not have to pay operations and maintenance costs as South Bay Water Recycling will assume that responsibility after construction is complete.

## Results

### Evaluation of the available volume of water

Immediately connecting existing City and other irrigation customers to the existing recycled water system would save a small yet significant amount of potable water. Also attaching existing cooling tower customers to the recycled water system would save a similarly significant amount of water, especially during peak-use summer months.

The information provided to Water Solutions, Inc. by the City shows that expanding the recycled water pipelines would provide ongoing annual potable water savings of 271,692 hundred cubic feet or nearly 1 million gallons per day during peak periods.

### Issues to be resolved

Reduction of potable water use by nearly 1 million gallons per day represents a

ten-percent reduction of average daily usage. Extrapolating that reduction into peak-use summer months shows a likely yield of even greater potable water savings.

## Order of magnitude description of infrastructure needed

Between $30-40 million will be necessary to pay for the installation of all of the proposed recycled water lines. This represents a very large commitment by the City infrastructurally speaking however, the conversion to recycled water for non-potable use is a drought-proof solution to water shortage issues.

## Operational/Maintenance Concerns

The use of recycled water for irrigation purposes by big users such as parks and industrial buildings can cause drops in pressure. On the other hand, small users such as residential buildings minimize pressure drops in the system by turning their systems on and off at varying times. When a large number of big users utilize a recycled water system, the resulting pressure drops in the system may negatively affect the availability of water for all users. In many cases, upgrading from the existing “tree distribution” to a grid distribution will mitigate the pressure drops. However, with a large number of small users, the pressure changes don’t affect other users nearly as much, as smaller users can control when they turn their irrigation systems on and off. Some locations such as San Diego and Las Vegas have adopted a mandatory outdoor watering schedule requiring residents and commercial customers to limit outdoor watering to designated days and times, as determined by the City (Las Vegas Valley Water District website. 2014).

For the last ten years, South Bay Water Recycling has been capturing about 10 million gallons per day of wastewater that would normally be lost to the Bay (approximately total 100 million gallons per day outfall). They intend to increase capacity as demand increases. Currently their capacity is greater than the need. This recycled water will be available to communities purchasing water from South Bay Water Recycling (such as the City) and will become a sustainable water supply for future generations (City of San Jose website. 2014).

# Conclusion

Irrigation and cooling tower customers who currently use the potable water system within the City vary in their consumption volume. These customers are potential users of recycled water and can easily be required to connect to an expanded recycled water distribution system. The potential loop installations will help to service additional customers, for example, three laundries could be using recycled water as could a number of parks and schools with playgrounds (see Figure A2 in the Appendix). Those customers with the highest consumption rate per hundred cubic feet will be connected to the future loops and extensions. South Bay Water Recycling is adding purple pipe in northern San Jose, very near to Milpitas, prompting the suggestion of adding a recycled

water turnout for reliability.

These potential changes require proper piping, pumping and storage infrastructure be added to the current recycled water system. The implementation plan below incorporates the life-cycle and cost information previously presented.

**Task 2: Recycled Water, Implementation Plan**

**Possible Implementation Schedule:**

1. Contact potential recycled water customers from the list provided to add recycled water lines, as feasible (May, 2015)
2. Prepare new Ordinance. (June 2015)
3. City approves Ordinance. (July 2015)
4. Begin project plans for installing recycled water lines to additional customers (July, 2015)
5. TASP construction (July 2014 - June 2015)
6. Segment 1 engineering (Jan. - June 2015)
7. Segment 1 construction funding application (July 2015 - Mar. 2016)
8. Segments 2-5, tank/pump, loops planning funding application (July 2015 - Mar. 2016)
9. Ordinance enacted. (Aug. 2015)
10. Segment 1 construction (Apr. 2016 - Sept. 2016)
11. Hire a consulting engineer to design installation of all segments: (April 2016)
12. Segments 2-5, tank/pump, loops engineering (Apr. 2016 - Sept. 2016)
13. Finalize project plans for Industrial/Cooling Towers, City Potable Irrigation lines and other Potable Irrigation connections to the recycled water system. (July. 2016)
14. Open construction contracts for bid. (Mar. 2017)
15. Finalize bid documents. (May 2017)
16. Segments 2-5, tank/pump, loops construction funding application (Oct. 2016 - June 2017)
17. Segments 2-5, tank/pump, loops construction (July 2017 - Mar. 2019)
18. Permit Paperwork. (Mar. 2019)

**Costs:**

Implementation of all loops (95,000 feet) identified as ideal additions to the recycled water system would cost $36,707,000.

**Benefit:**

Recycled water system expansion would save nearly 1 million gallons per day (or 271,692 hundred cubic feet/year) of potable water during peak use periods. Mandatory connections would increase that amount by an unforeseen number based on other possible connections such as unquantified cooling tower consumption.

**Life Cycle:**

The lifespan of pipe for a recycled water system is approximately 75 years.
This lifespan depends on a number of factors including global warming, traffic, leaks (hydrogen sulphide),

- C900 purple PVC (poly-vinyl chloride) - plastic pipe
- Concrete (as well as asbestos-cement)
- Cast Iron

*(according to Waterworld.com: Aging pipe proves expensive for municipalities).*

| |
|---|
| **Prioritization by life-cycle:**<br>The completion of loops is the priority. Therefore the California loop, which will service a large subset of industrial potable water users, should go in first, and the Dixon City Loop Completion project second. |
| **Ease of Implementation:**<br>Planning and construction of recycled water mains is a simple and common event involving the execution of a single construction contract following an engineering phase. |

# List of References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- City of Milpitas, Public Works - Staff and records. 2014.
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- Windsor website. Web access: 2014.

# APPENDIX

**Figure A1: City Utilities Staff Proposed Recycled Water Pipeline Extensions**

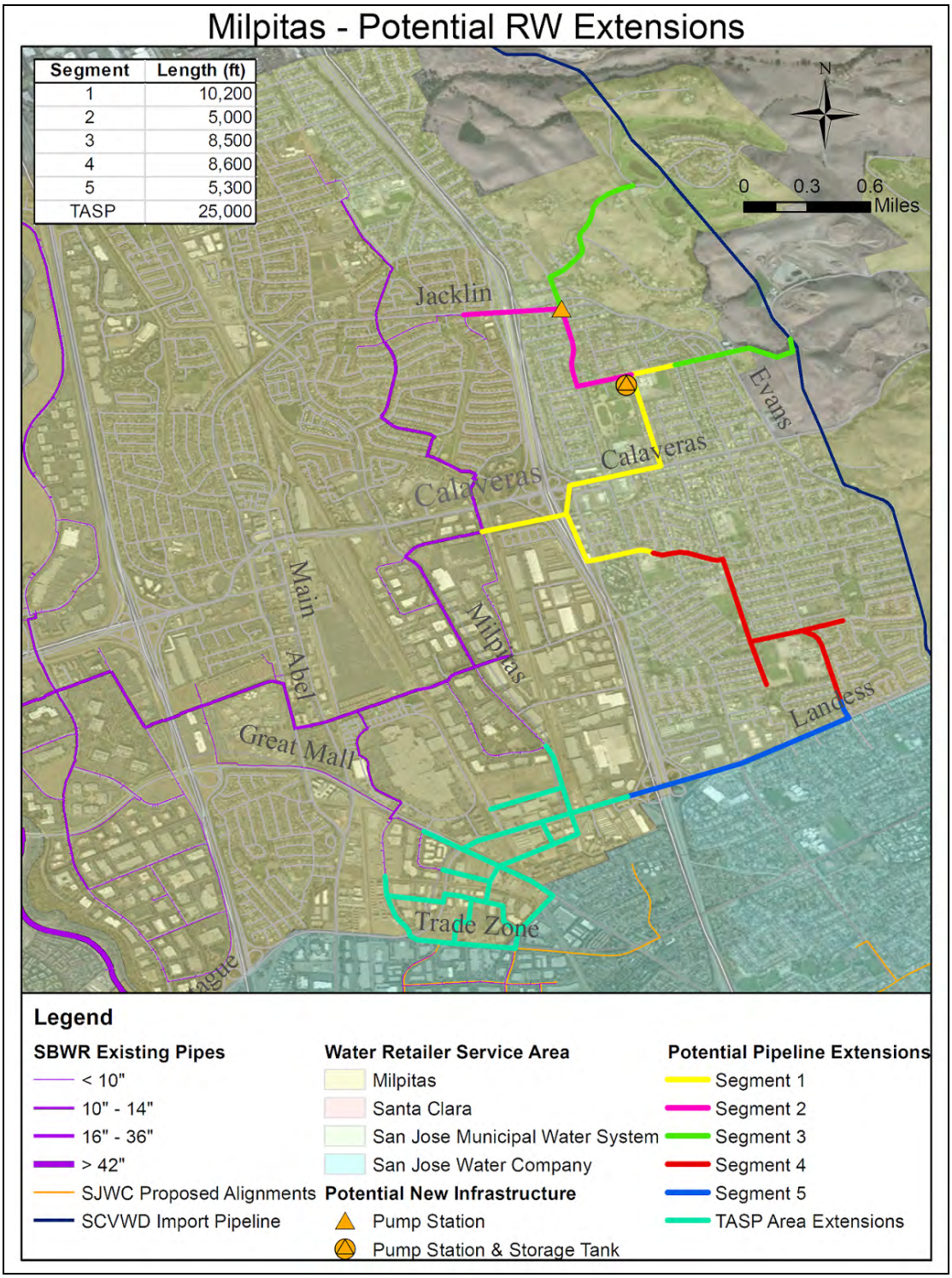


**Figure A2: City Parks and Schools List**

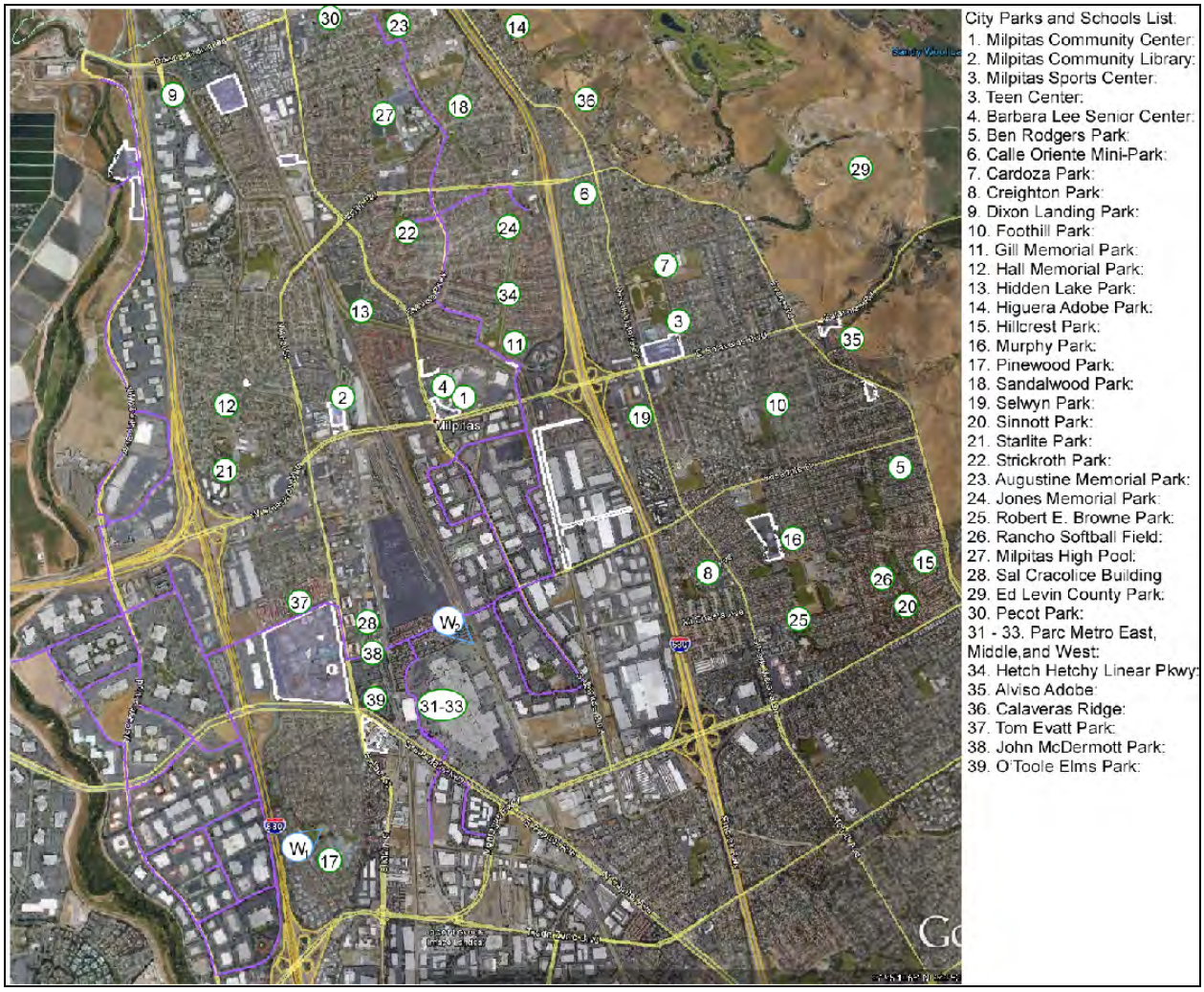
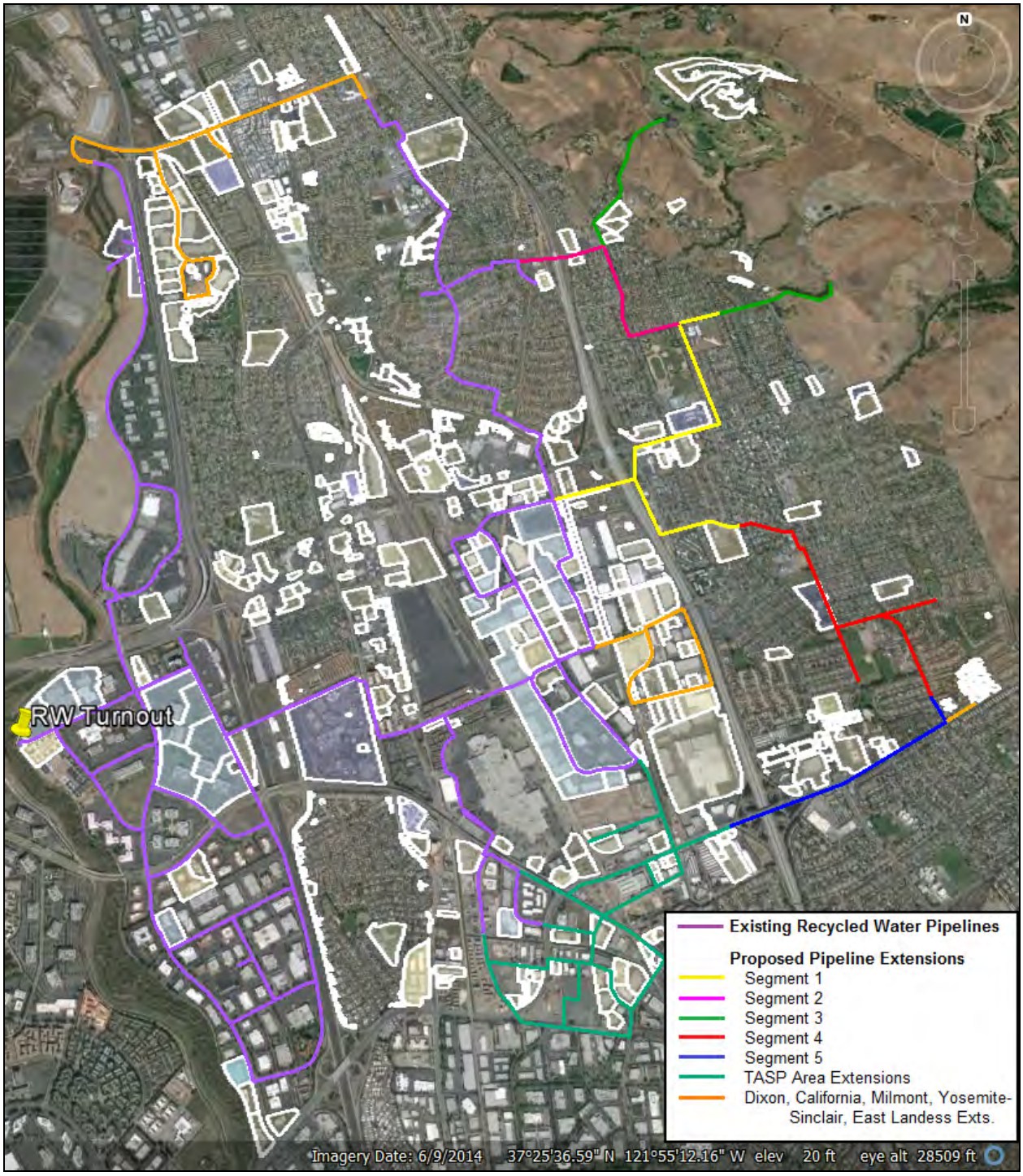


**Figure A3: Proposed Recycled Water System Changes**



# MEMORANDUM

**Date:** 27 March, 2015
**To:** Steven Machida, Milpitas City Engineer
**From:** Water Solutions, Inc. - Consultant
**Subject:** **Task 3: Surface Water Detention**

## Summary

The purpose of this memorandum is to describe the various strategies the City of Milpitas can employ to capture stormwater for treatment, and construction water uses and for potable use, as well as the implementation requirements for each. The memorandum covers regulatory requirements, site locations, implementation and operational considerations for surface water retention ponds, detention facilities and for percolation ponds used for groundwater replenishment.

*Retention ponds* maintain a pool of water throughout the year, capturing stormwater runoff following storms. In general, surface water retention refers to water held in ponds, lagoons, reservoirs, lakes and other constructed or natural water features for the purpose of storing water. Because the water travels over asphalt, soils, concrete and other surfaces before reaching the retention area, contamination is an issue.

*Detention ponds* maintain water for a short period of time, holding water temporarily before it enters a stream.

*Percolation ponds* are surface water ponds with a porous or permeable bottom layer that allows water to “percolate” or seep through the soils to underlying aquifers. Percolation ponds should be constructed in a location that allows water to flow underground easily and be captured in a confined aquifer that prevents the water from flowing elsewhere. The storage potential for any given site depends on the size of the aquifer, basin and/or percolation layers, and can be significant if appropriate geological conditions are present. A substantial geotechnical investigation would be required to identify feasible sites if this option was used.

On the western side of the City, water drains into 13 storm pump stations used to pump

water into creeks. Whether stormwater is collected in ponds or pump stations, bioswales or vegetative-lined canals should be used to promote natural water treatment prior to pumping the water or before it enters a pond or lagoon. The City currently operates four stormwater retention basins (lagoons) that could be used for construction or other non-potable purposes with a minimal investment in infrastructure: Hidden Lake Lagoon, Hall Park Lagoon, the lagoon at Glenmoor Circle area and a retention basin off Quince Lane.

Each of these locations will be examined for the potential to augment non-potable water usage throughout the City, as well as the necessary infrastructure required for safe and reliable distribution of non-potable water. The options investigated in this report for stormwater storage and use are as follows:

- stormwater retention ponds
- surface percolation ponds
- stormwater detention facilities (for stormwater treatment)
- non-potable fill-stations from existing surface water
- storage tanks (to store stormwater, *see* Task 7: Additional Storage)
- tertiary-treated water for recycled water use
- groundwater injection of tertiary treated water
- bioswales, constructed wetlands and vegetative-lined channels to reduce stormwater pollution, which, in addition, provide recreational opportunities and wildlife habitat.

Use of stormwater for non-potable purposes such as construction water is an inexpensive and easily accomplished proposition. However, the benefit of such an effort is unpredictable due to uncertainties and fluctuations in the use of construction water, which is not a regular occurrence.

The detention of storm water for potable use is land intensive and highly regulated. The establishment of water rights and the subsequent construction of retention (or percolation) ponds is an expensive and time consuming process, potentially costing more than $35 million dollars over time. Nevertheless, this approach could be beneficial if recharge credits were given by the Santa Clara Valley Water District. This, however, requires close coordination with the Santa Clara Valley Water District and is a legal effort that must be thoroughly vetted prior to planning any new percolation pond facility.

This is a complicated process that Water Solutions, Inc. does not recommend at this time, but we do recommend that the City should be aware of groundwater recharge opportunities.

# Data

The information in this memo was gathered from the California Code of Regulations, Titles 17 and 22, and the City Public Utilities staff and records. Other sources include the State Water Resources Control Board website, United States Environmental Protection Agency online publications, California Department of Fish and Wildlife, Santa Clara Valley Water District website, the City of Milpitas staff and publications about water storage. Additional information was obtained from representatives of several water districts, including Darin Taylor of the Santa Clara Valley Water District.

# Methodology

The information in this section is presented under the following headings:

A. Discuss percolation and groundwater relation: hydrological recharge
B. Prepare design concepts for hydrological recharge
C. Prepare concept size of recharge area and preliminary water quality of retention basin, including the creek sources
D. Describe oversight and regulatory requirements (such as Fish and Wildlife, Regional Water Quality Control Board, Santa Clara Valley Water District, etc.) for surface water detention facility, including allowable usage capacity
E. Discuss ownership, participation/partner aspect
F. Optional: Prepare implementation guidelines based on available sources such as Groundwater Recharge Programs of Alameda County Water District and Santa Clara Valley Water District
G. Optional: Determine available area, water quality and creek source of potential sites based on historical data
H. Provide potential lists of sites, estimated reductions of consumptions

Legal and financial considerations will be addressed at the end of “Methodology” below.

There will be a final *Task 3 Implementation Plan Table* at the end of this memorandum. This will define an implementation schedule, compare cost and benefit, life cycle of plan and ease of implementation. Feasibility will be discussed in Task 9.

## A. Discuss percolation and groundwater relation: hydrological recharge

*Hydrological recharge* (also referred to as *groundwater recharge*, *deep drainage* and *deep percolation*) is a process wherein water moves downward from the surface of the ground to an aquifer, or area of groundwater storage. This process usually occurs in the vadose zone below plant roots and is often expressed as a flux to the water table.

Groundwater enters aquifers through the earth and is derived from stormwater, surface water or snowmelt percolation.

*Artificial recharge* can be used to augment hydrologic recharge, and includes adding collected stormwater, recycled water, surface water or other water sources to the groundwater. Recharge through the use of surface percolation, that is, the filtering of water through porous earth, is the most common form of artificial recharge. However, injection wells can also be used to augment recharge in areas with inadequate surface water percolation sites. The benefit of injection is the ability to tap into deeper aquifers; however, stringent treatment and permitting standards must be met.

Factors that affect groundwater recharge include:

- porosity of the soil or geologic feature
- area of water infiltration
- volume of the aquifer
- above-aquifer soils/clay layers (also known as *aquitards*) and the porosity of adjacent features

Typically, surface infiltration or percolation into an unconfined aquifer is used to augment groundwater supplies. In this scenario, surface water in ponds or retention basins is allowed to percolate naturally through the ground (or ponds that are engineered so this can happen) to reach suitable shallow, or unconfined aquifers. Water is then pumped from adjoining wells, as needed. This process can be enhanced by using rock beds and porous layers to feed water supplies directly to groundwater storage or recharge.

Groundwater recharge can also be accomplished through the use of injection wells. The choice of site locations for injection wells or percolation sites should be based on available aquifers, surrounding geology and other factors like city master plans, etc. Due to the complexity of groundwater percolation and local geology, a professional geologist with suitable experience should be consulted to assess possible site locations and provide geotechnical support. The four factors to consider when determining suitable locations for hydrological recharge sites are:

- local vegetation
- soil types
- elevation slopes
- type of geology present

Groundwater relation refers to the movement of groundwater through adjoining layers of soils, rocks, clay and other geologic formations and the effects of such movement. The ground acts like a giant sponge when it rains, and water is pulled into the earth by gravity, following cracks and porous routes through the soil. Geological formations can influence the path that water takes, and can even provide “pockets” where water is stored for long periods of time. These pockets, called aquifers, can store large volumes

of water by means of cracks in rocks, porous soil layers, confining layers of bedrock or other mechanisms. In general, groundwater relation will provide additional treatment of the water through filtration and microbial attenuation; however, local minerals, water constituents and salts can also be added, increasing the level of dissolved solids in groundwater. Also, some soils contain heavy metals, organic residuals, alkaloids and/or radioactive elements, which can also affect groundwater.

## B. Prepare design concepts for hydrological recharge

Hydrological recharge occurs every time there is a rain event and water is conveyed through soils and geological formations. Due to the emergence of large areas of concrete, asphalt and other impervious surfaces within the last century, less water is now able to percolate through the soil in the San Francisco Bay Area. Also, due to continual groundwater pumping, the groundwater level is dropping, causing land subsidence (the sinking of the soil). Subsidence should be monitored and steps taken to prevent the loss of available water storing potential (i.e., loss of underlying aquifers), as well as property damage and loss of land. Groundwater management attempts to restore groundwater to historic levels to protect groundwater supplies for future use. This objective can be achieved by surface percolation ponds, which is the recommended approach, or by injection wells.

### Surface Percolation Ponds or Injection Wells

During a significant rain event in Milpitas, the creek flow in a northwestern direction towards San Francisco Bay increases. As well, a significant portion of the water percolates through the soil and underlying geological formations and is conveyed as groundwater. Stormwater catchment could be used to increase the amount of water available for hydrological recharge.

Hydrological recharge could be accomplished by surface water percolation or by the use of injection wells tapping into appropriate geological formations/aquifers. The resulting augmented groundwater supply would:

- manage groundwater levels
- provide additional water storage capacity
- prevent salt-water intrusion
- prevent land-subsidence

For injection wells, tertiary recycled water or the equivalent would be needed for the injection water in accordance with Title 22, Division 4, Chapter 3, Articles 5.1 and 5.2 of the California Code of Regulations. However, as long as the well was located the proper distance away from the withdrawing wells, this water could be used at a later date for potable water supplies, irrigation, or emergency supplies. Note that this approach represents an advanced practice, called Indirect Potable Reuse, that would require public support and involve significant permitting requirements.

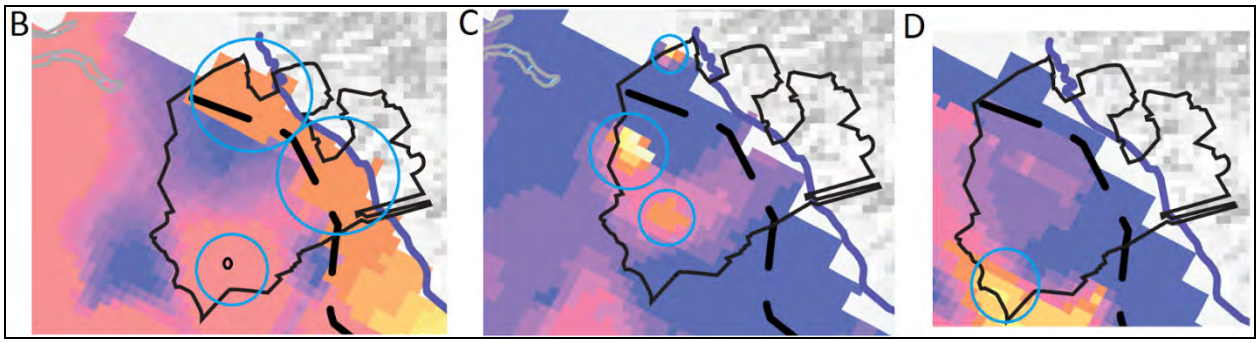
The method of water banking utilized by Semitropic and Kern Water Banking Districts in Kern County, California, involves both injection wells and percolation ponds to store water in subsurface aquifers. Collection wells are then strategically located to withdraw water, as needed. While this can be an effective method for storing water for drier months, the geologic sites appropriate for this process are limited, and wheeling the water has become problematic due to recent the State Water Project restrictions (Semitropic and Water Association of Kern County websites).

Ideally, surface water collection ponds are situated atop a confined layer of porous soil with a large water storage potential. The pond or bored holes are excavated and lined with porous rocks, sand or gravel to allow water to easily seep into the underlying aquifer. Water losses are mitigated by locating the collection ponds in an area with confined rock or clay layers and non-porous surrounding materials. Water is collected by stormwater catchments such as storm drains, stormwater collection basins and streams.

The aquifers in the Milpitas area include a shallow, low quality, low-storage-potential aquifer and a deeper, much more voluminous aquifer. To facilitate effective access to the deeper water and to then recharge it, surface percolation must be conducted in the unconfined area to the east of the City, where both aquifers are exposed via porous soil.

The storage potential for surface percolation ponds is quite large and depends on the size of underlying aquifers. Figure 1 depicts the water storage multiplier for layers B, C and D for groundwater in Milpitas. Lighter colors indicate a greater specific storage multiplier and areas with the greatest specific storage areas are circled in light-blue.

**Figure 1: Groundwater Storage Potential: Layers B, C, D**




The Pinewood well is the small black circle in Layer B and is in a relatively good location for water storage via injection. Note that deep unconfined aquifers are the best choice for percolation ponds. The greatest storage potential for shallow aquifers appears to be near the northeastern section of Milpitas and near the area between Berryessa Creek and the foothills of Milpitas to the east, as shown in Layer B of Figure 1. The deeper layers of C and D may not be ideal for selection purposes because specific storage multiplier values are low near the unconfined, ideal percolation areas shown circled in

Layer B. However, the decision to use percolation ponds and determining the best site locations will require additional geotechnical site investigation.

One promising site that should be investigated for surface percolation ponds is the retention basin off Quince Lane and the surrounding area. This site appears to be adequate for shallow water storage, is near creek tributaries and is already operated by the City of Milpitas. The first steps in implementing surface percolation would be to perform geotechnical site investigations, to contact regulatory and governing agencies (State Water Resources Control Board, Santa Clara Valley Water District, Fish & Wildlife, etc.) and to determine design parameters.

### Water Credits for Creek Recharge

Recharge from creeks would be undertaken predominantly over unconfined aquifers within Milpitas. One option would be to apply to the Santa Clara Valley Water District for a waiver from Section 26 of the Santa Clara Valley Water District *District Act* to give water credits for augmenting the natural recharge with water obtained from creeks, streams and runoff. Additional criteria or conditions may be required regarding recharge locations, quantity of water and/or water quality.

### Options for Augmented Surface Water Detention Facilities and Percolation Ponds

The major creeks in the area that could be used to draw additional surface water during a storm event include:

- Coyote Creek
- Berryessa Creek
- Penitencia Creek
- Arroyos de los Coches Creek
- Calera Creek
- Piedmont Creek

Water rights to these creeks are mostly held by Santa Clara Valley Water District, and acquiring rights for new uses could be problematic (see Task 5: Water Acquisition). Currently, water is pumped into creeks using any or all of the 13 pump stations (Figure 2). Figure 3 shows the location of major creeks throughout Milpitas and Figure 4 shows surface water features.

**Figure 2: Milpitas Detention Basin and Pump Station Locations**

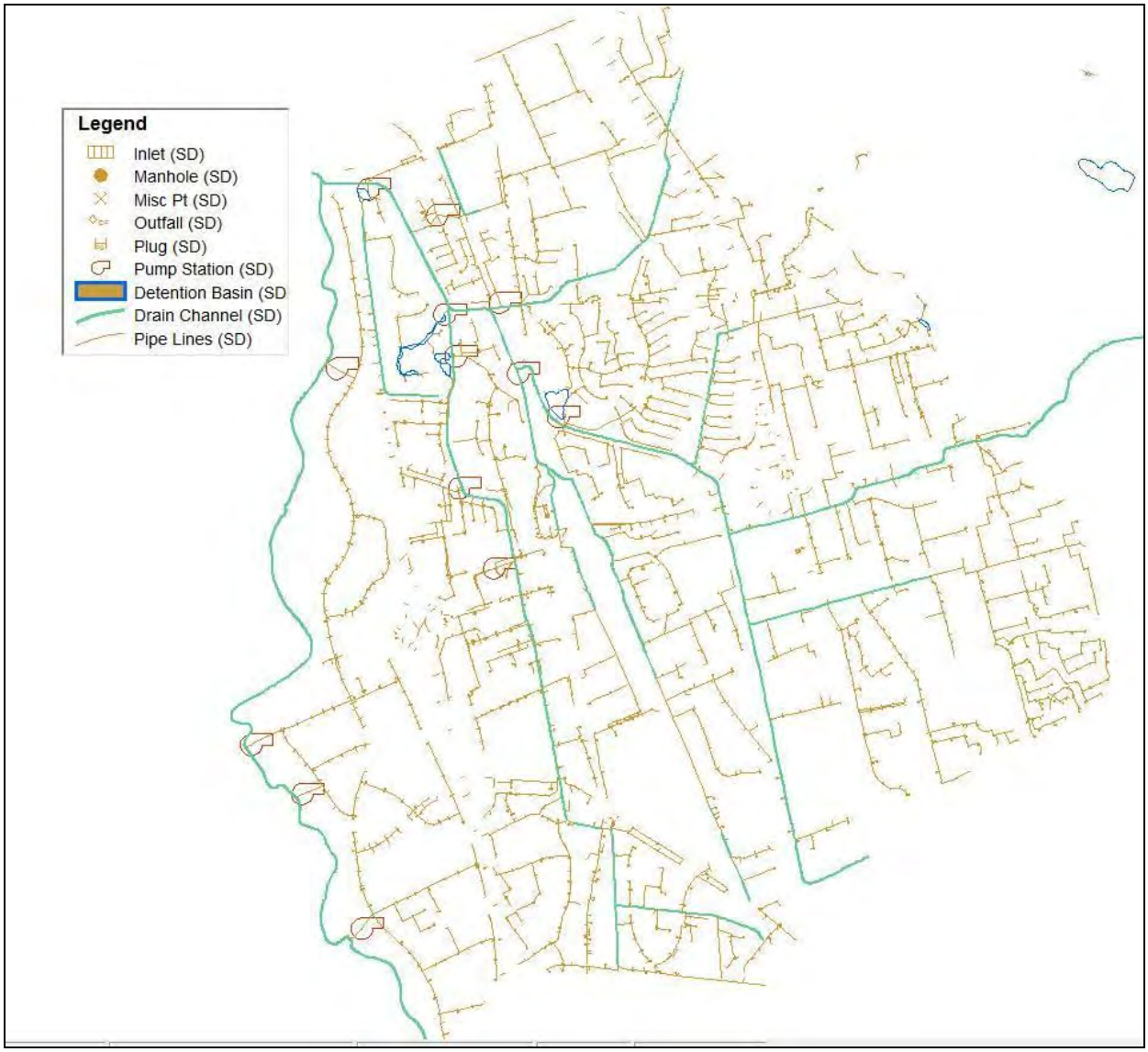


**Figure 3: Major Creeks and Tributaries in the Milpitas Area**

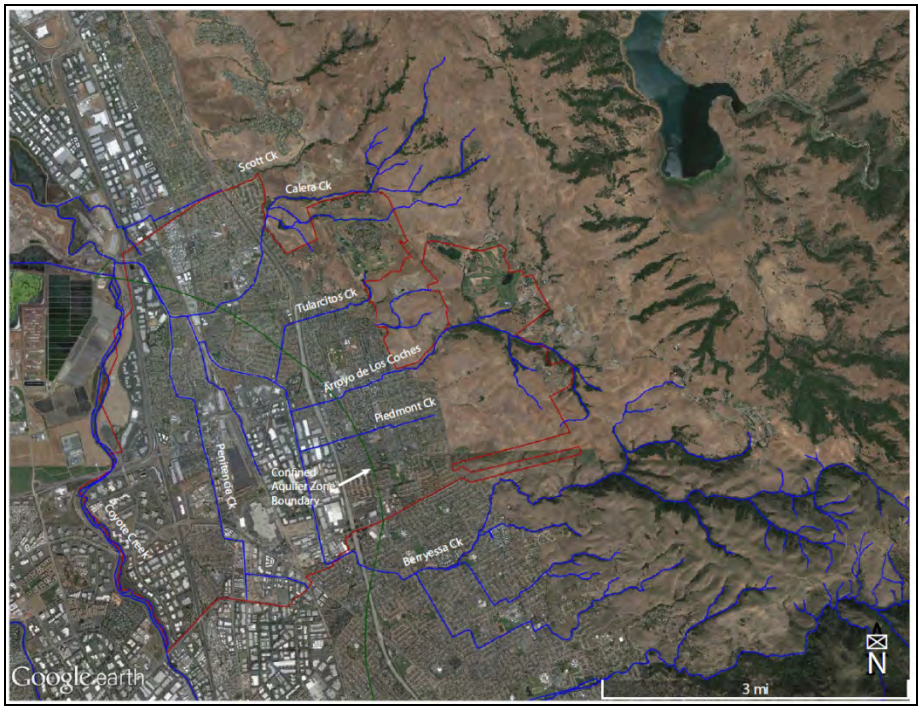
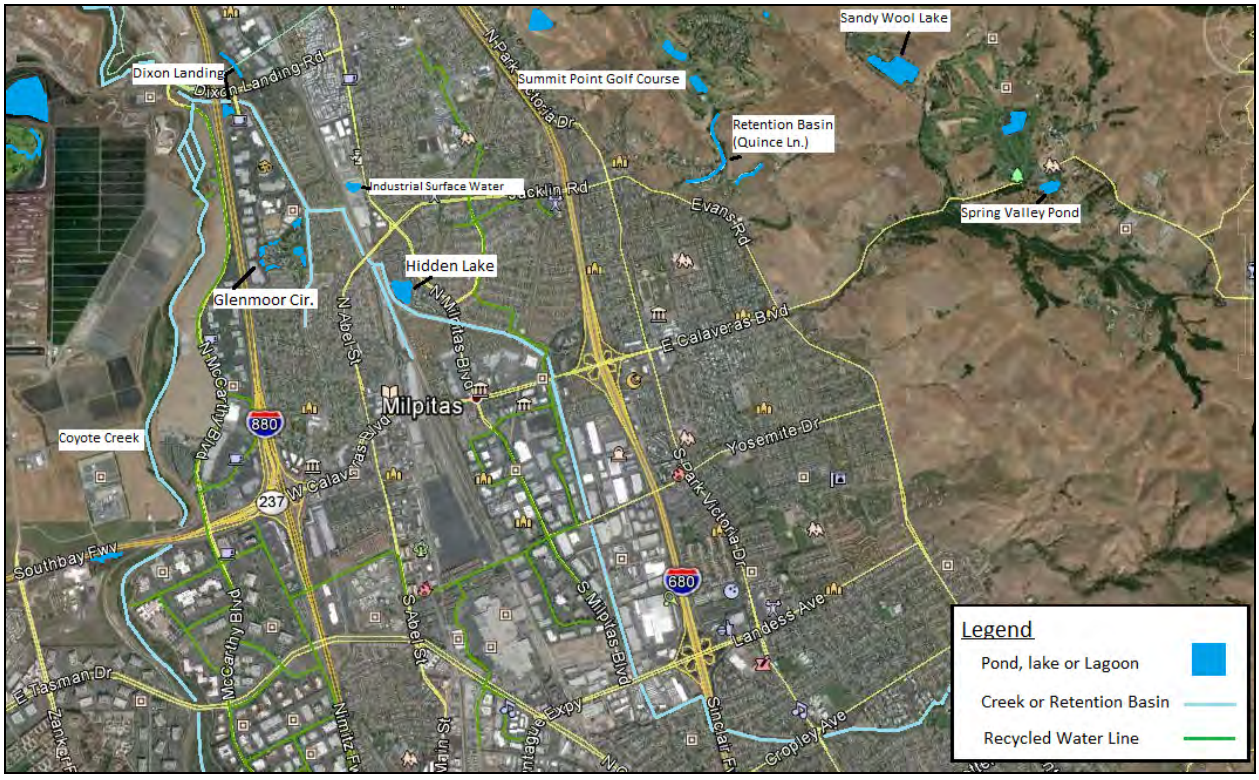



**Figure 4: Milpitas Surface Water Features**




These water features could provide water for the following options:

- potable use after surface water treatment,
- construction non-potable uses,
- stream recharge,
- and, storage volume for percolation ponds during storm events.

However, percolation ponds would be needed nearby to deliver the water to an adequate aquifer. Unfortunately, the shallow ground storage potential near many of the surface water ponds in Milpitas appears to be inadequate. The exceptions are Sandy Wool Lake, which could be expanded to provide water to nearby golf courses, surface percolation ponds at Quince Lane or newly planned percolation ponds. These locations provide unconfined access to the deeper aquifer that underlies the Santa Clara Valley.

Additional surface water ponds and lagoons could be constructed to provide stormwater capture and treatment. Also, existing ponds could be modified to provide additional water treatment and/or storage for recycled or construction purposes. These ponds should include vegetative-lined canals, bioswales and constructed wetlands. Examples of possible locations for expanded and new surface retentions lagoons include:

- Hidden Lake Park,
- Hall Park Lagoon,
- Spring Valley Pond,
- Sandy Wool Lake,
- local golf courses.

The natural evaporative loss for the region is approximately one meter, or three feet, of water per year. As a result, surface water impoundments like Sandy Wool Lake are best designed to be steep sided so that evaporative losses don't create excessive areas of exposed lake bed surface. Unfortunately, a deep water storage design often conflicts with the aesthetics and land use plans of an area. It takes a clever design for the storage facility to be both effective and compatible with parks and other viewsheds.

### Hydrological Recharge by Use of Injection Wells

Injection wells are used for a variety of purposes, including:

- preventing saltwater intrusion
- managing groundwater supplies
- storing water for future use

In this scenario, stormwater is collected, treated and distributed to underground aquifers by means of abandoned wells or dry wells or by newly constructed wells designed specifically for this purpose of injection, which is the best option for medium to large scale projects. The design and construction of injection wells is highly specialized and much more complicated than that of withdrawal wells.

Figure 5A shows the relative horizontal conductivity of groundwater flow at various

depths (layers B, C and D). The locations exhibiting potential increased conductivity are circled; areas that are darker blue represent increased hydraulic conductivity.

**Figure 5A: Milpitas Groundwater Horizontal Hydraulic Conductivity**

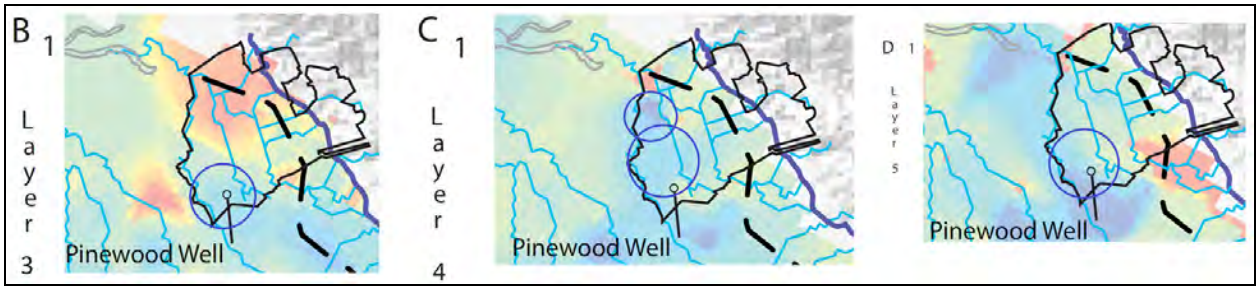
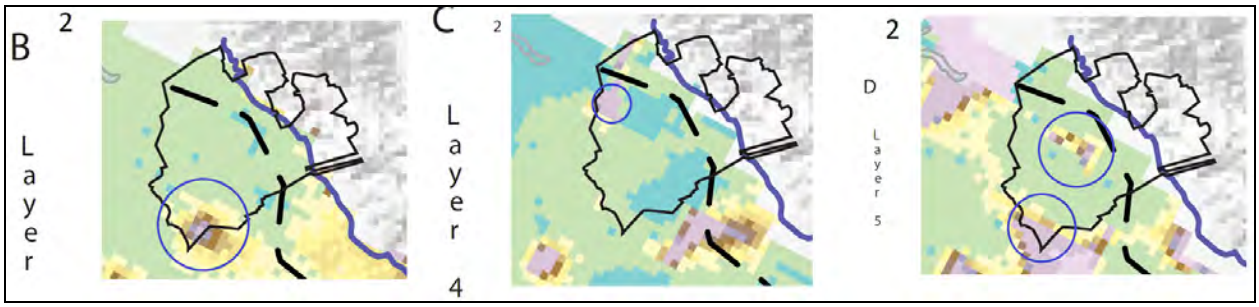



Figure 5B shows the vertical conductivity profiles for various depths. Based on the figures provided to sub-consultant Jim Ulrick by the U.S. Geological Survey (Ulrick, 2014), there appears to be increased horizontal conductivity near the southwestern edge of the City. Also, the vertical conductivity appears to increase along the southern section, in the northwest and also near the center of Milpitas. However, there is no clear indication of a location for an injection well. The decision to use injection wells and determining the best site locations will require additional geotechnical site investigation.

**Figure 5B: Milpitas Groundwater Vertical Hydraulic Conductivity**




Stringent water quality standards must be met for injection into groundwater supplies due to the potential for contamination. The cost of meeting and maintaining such standards should be accommodated in the budget for an injection project. The benefit of injection wells is the additional treatment gained as the water moves through geological formations. In contrast, surface water tends to accumulate biologically active pathogens, turbidity and other factors that negatively impact water quality. The governing bodies for injection wells are the United States Environmental Protection Agency and the State of California Water Resources Control Board Drinking Water division.

Injection wells could be used to achieve any or all of the following:

- augment the groundwater supply of the City
- provide options for stormwater and recycled water use
- restore groundwater levels to historic levels

More investigation would be required for:

- site location selection
- exact permitting requirements
- design proposals
- treatment options

### Stormwater Storage Tanks

Above ground or below ground storage tanks, to capture and reuse stormwater, could be constructed near any of the locations shown. Underground or above ground storage tanks could be used to store water for construction uses, groundwater augmentation prior to treatment, habitat restoration and/or to minimize flooding. The benefits of tanks are the low to medium footprint, protection from contaminants and capability to store water without losses. However, tanks are generally costly and require expensive pumps, a collection and distribution system and periodic maintenance.

## C. Prepare concept size of recharge area and preliminary water quality of retention basin, including the creek sources

### Concept Size of Recharge Area

The theoretical amount of water that can be retained in a reservoir from a rain event is based on the following factors:

- drainage area (the amount of land receiving rainfall flowing to a common point)
- rainfall rate
- infiltration losses

The average rainfall for Milpitas during a typical year is 15". With an area of 13.64 sq. miles, the City thus receives a maximum stormwater quantity of about 10,900 acre-feet per year. However, the amount that could be collected would be much less due to percolation through the soil and uncollected stream run-off.

If one assumes an imperviousness factor of 0.50 (which indicates that approximately half of the area is covered with impervious materials such as asphalt or concrete), the amount of collectable stormwater becomes approximately 5,000 acre-feet per year. This is not using the Graphical Storage Method, which, although it is the standard method, it is a complex approach to calculating stormwater detention basin sizing. The approximate maximum size for a stormwater detention basin may be estimated as follows using the number of storms: Assuming the 5,000 acre-feet falls on the City's impervious areas predominantly during the winter storm season, which generally consists of 5-20 storms,

the maximum size needed for a stormwater detention basin can be assumed to be 1,000 acre-feet. This is equivalent to 435,600 hundred cubic feet per year, or 0.89 million gallons per day of available water. This detention storage is temporary.

### Instream Recharge

Instream recharge is used by Santa Clara Valley Water District and is the acceptable method of surface recharge. This scenario is effectively accomplished by damming the natural creek flow and constructing a detention basin for additional recharge. Berryessa Creek seems to be a natural location for further in-stream recharge, as it is currently unobstructed.

### Milpitas Creek Sources

The major creeks throughout Milpitas are as follows:

- Coyote Creek: Coyote Creek has the largest drainage area with a total of 319 square miles (U.S. Geological Survey); however, two dams are built further up along Coyote Creek (Coyote Creek Reservoir and Anderson Lake) and operated by Santa Clara Valley Water District.
- Berryessa Creek: Berryessa Creek exhibits large flows during the winter months and is susceptible to flooding on occasion with potential to damage property. Tributaries of Berryessa Creek include Penitencia Creek, Arroyo de los Coches, Calera Creek, and Piedmont Creek. Together they provide a drainage area of about 24 square miles that eventually merges with Berryessa Creek and then Coyote Creek.
- Penitencia Creek (tributary of Berryessa Creek)
- Arroyos de los Coches Creek (tributary of Berryessa Creek)
- Calera Creek (tributary of Berryessa Creek)
- Piedmont Creek (tributary of Berryessa Creek)

### Quince Lane Retention Basin

There is a retention basin off Quince Lane (see Site G, Figure 6) that could also be investigated for surface water and groundwater storage potential.

**Figure 6: Potential Surface Water Retention Locations in the Milpitas Area**

## Existing Detention Basins

The City currently operates four stormwater detention basins, namely*:*

- Hidden Lake Lagoon
- Hall Park Lagoon
- Lagoon at Glenmoor Circle area
- Retention basin off Quince Lane

Hidden Lake Lagoon is currently a hardened basin with no vegetation or wildlife inhabiting the location. The pond level is maintained by a series of subterranean drainage pipes draining water from adjacent neighborhoods into the creeks.
We identified the following two options for Hidden Lake Lagoon:

- Option 1: Install a side cut sidewalk and pad for a lift station to pull in the water; this could be a permanent fill station for construction water.
- Option 2: Install a single phase, 100 amp/ 230 volt power system to control the water level, running on a regular basis. Option 2 is an easy solution as the City already owns the pump. If it is chosen, the City is advised to test the pump to determine whether it works. The City should take samples of Hidden Lake Lagoon water for pH and total dissolved solids testing.

Additional surface water features in Milpitas that could be developed or used as a non-potable water source include:

1. Hall Park Lagoon off Abbott Ave
2. Glenmoor Circle area lagoon; ownership unknown
3. Quince Lane/Evans Road retention basin; ownership unknown
4. Private Retention basins have similar ownership/control problems:
    - Capitol Ave
    - Great Mall on the north end

Other potential sites included in this study are:

- Sandy Wool Lake
- Spring Valley Pond

Surface water storage methods that could be implemented by the City include the following:

- Surface retention ponds
- Percolation ponds
- Artificial wetlands
- Constructed reservoirs
- Storage tanks

It seems logical to further investigate surface water retention by means of stormwater retention ponds, reservoirs or lagoons as a source of construction or recycled water. Also, a surface percolation pond (possibly achieved through augmenting the retention pond at Quince Lane) can be used in a sustainable manner to store stormwater and manage groundwater supplies.

However, well water and hydrological recharge from the shallow aquifer appears to offer low production capacity, only “100 gpm here and there” rather than thousands of gallons per minute (Ulrick, 2014). Also, there are water quality concerns within the shallow aquifer, as recharge is accomplished mostly through natural percolation of untreated stormwater.

### Future Investigation

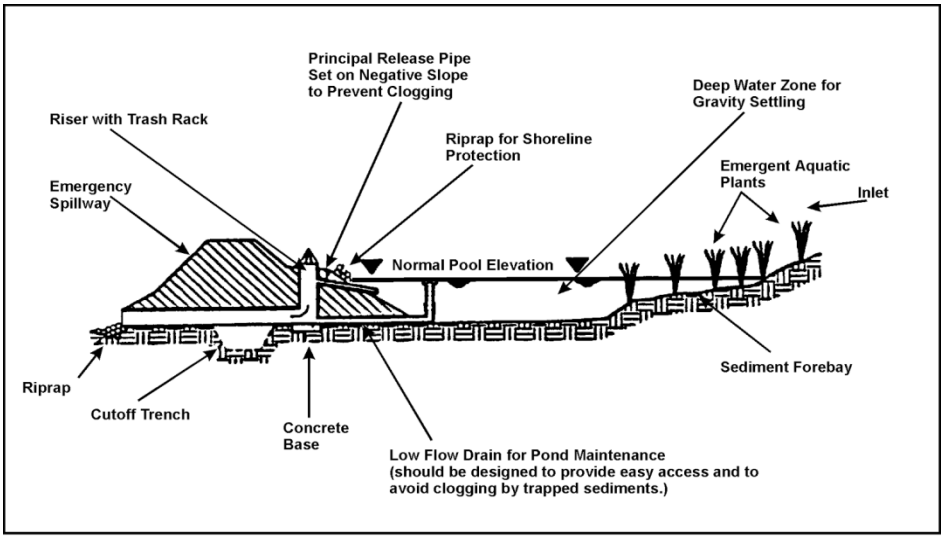
Future investigation should include the following:

- site location mapping
- stormwater quality and conveyance analysis
- source mapping
- geotechnical investigation (especially for percolation ponds or injection wells)

The ideal topographic conditions for a reservoir are a narrow gorge in which a dam may be built at minimum expense (Figure 7), and an expanding valley immediately above the gorge which will afford large storage per unit of surface area. The geology of the site frequently dictates the type of dam to be constructed. An earthen dam may be suitable in

a valley with deep, impervious soil. However, because potential locations for a reservoir are limited for the City of Milpitas, this option may not be feasible.

**Figure 7: Typical Reservoir Design** (Environmental Protection Agency Stormwater Management)




Source: Reference 2

Retention ponds are easily constructed; however, excavation costs can be high and the footprint is large. Retention ponds (or lagoons) should be located near the confluence of major creeks or stormwater basins and constructed with embanked sides to efficiently capture and store water. The bottom of each pond should be made of a non-pervious material or lining. Surface water features, such as aerating fountains, may be needed to minimize the likelihood of biological contaminants or nuisance issues such as recreation.

Detention ponds are more complicated than retention ponds and require concrete barriers, large gravel-lined channels, porous sub-layers and specific vegetation. However, the stormwater water quality is greatly improved, making this system a suitable method for treating stormwater before it is allowed to enter sensitive habitats. The construction cost of a detention basin is proportional to the volume needed to control the runoff from a rainfall event and can be approximated by the following equation:

$$C = 12.4 \times V^{0.760}$$

where "$C$" is the cost in U.S. dollars, and "$V$" is the pond volume in cubic feet needed to control a 10 year storm event.

Also, artificial wetlands could be used to store water, treat water and provide recreational opportunities. These are basically retention ponds with carefully-selected vegetation,

multiple ponds and recirculating units. This method is particularly suitable for removing abundant nitrates and organics, both of which are typically found in moderate to high concentrations in stormwater runoff.

Construction of retention ponds, lagoons or reservoirs requires careful consideration of creek sources, topography and water quality.

Water credits could possibly be acquired from the Santa Clara Valley Water District by trading for groundwater or creek/stream replenishment. With this approach, water access entitlements are either traded or sold, depending on the legal status of the water rights. Water trading is a voluntary exchange and can be used to benefit environmental systems such as streams and creeks by improving instream water quality. (See Task 5: Water Rights Acquisition for additional information regarding water credits and trading.)

Surface water could also be used to irrigate Spring Valley golf course and Summit Point golf course, and to provide water for nearby surface water features or augment water-sensitive habitats. However, City water infrastructure cannot be built in the surrounding hillside due to the urban growth boundary established by the enactment of Measure Z in 1998 (Measure Z: Santa Clara County website).

### Water Quality Concerns

The Regional Water Quality Control Board performed a nonpoint source pollution study in Santa Clara County, finding that contaminant loads are directly proportional to stormwater runoff. Water quality varied among open space, commercial and residential, and heavy industry areas. However, the results documented the presence of cadmium, chromium, copper, lead, nickel, and zinc in most of these areas (Silicon Valley Rapid Transit Corridor FInal EIR. p4.18-5. 2003).

The use of surface water can have both detrimental and positive effects on aquatic wildlife. Promoting projects that improve water quality and habitat development should be a consideration. Stormwater runoff should be directed towards bioswales and other forms of natural filtration before entering surface retention ponds. Ideally, bioswales would be located in major creek tributaries, as well as between pumping and the surface retention feature.

The annual report from the City to the State Water Quality Control Board shows that the percentage of stormwater that has even a moderately low level of dissolved oxygen is small. As well, an apparently very small amount of trash is found in these waters (City of Milpitas, p10-1-10-4), and there is very little presence of hydrocarbons, odor, color, or turbidity (Santa Clara Valley Urban Runoff Pollution Prevention Program. All. 2013). In all, the water appears to be fairly clean compared with typical stormwater.

## D. Describe oversight and regulatory requirements (such as Fish and Wildlife, Regional Water Quality Control Board, Santa Clara Valley Water District, etc.) for surface water detention facility, including allowable usage capacity

### Overview of Regulatory Agencies

Regulations regarding stormwater, groundwater and surface water treatment are stringent in California. The following is a list of the governing agencies which are involved with applications relating to surface water construction projects and surface water use:

State Water Resource Control Board

- The exercise of some water rights requires a permit or license from the State Water Resources Control Board.
- The processing of an application includes the following steps: acceptance of the application, environmental review, public notice, protest resolution and permit issuance.

United States Environmental Protection Agency

- Regulations regarding the use of surface water for water storage applications are set by the Environmental Protection Agency under the Surface Water Treatment Rule and National Pollution Discharge Elimination System and define minimum creek level requirements. National Pollution Discharge Elimination System Stormwater permits must be obtained for applications using surface water ("Stormwater Permit Program" NPDES website: 2014).

California Department of Fish and Wildlife

- Wildlife impact mitigation measures will be required by the California Department of Fish and Wildlife in accordance with sections of the California Water Code regarding surface water collection, stream withdrawals, environmental easements, etc. The California Department of Fish and Wildlife has jurisdiction over the conservation, protection and management of fish, wildlife, native plants and habitats necessary for sustainable populations of fish and wildlife species. When appropriating new sources of water or construction near riparian habitats, the State Water Resources Control Board must consult with the California Department of Fish and Wildlife on the amounts of water needed for fish and wildlife and for impact mitigations measures.

Water Rights Acquisition

- Water rights must be obtained for the use of water in stormwater runoff, lakes, creeks or waterways. Steps for acquiring these rights vary according to location,

historic water usage, precedence and other factors. Many of the water rights in the Milpitas area are likely under the jurisdiction of the Santa Clara Valley Water District.

### Stormwater Regulation

In California, stormwater management and use is regulated by the Regional Water Quality Control Board through the authority of the Federal *Clean Water Act*. The regulation of stormwater is aimed at minimizing the discharge of pollutants through a complicated permitting process. The type of permit and the permit requirements are dependent on the source of potential contamination in the stormwater discharge (e.g., municipal, construction, industrial).

Stormwater is runoff from rain or snowmelt that runs off surfaces such as rooftops, paved streets, highways and parking lots and can carry pollutants such as oil, pesticides, herbicides, sediment, trash, bacteria and metals.

- The Regional Water Quality Control Board and the United States Environmental Protection Agency regulate the runoff and treatment of stormwater in industrial, municipal and residential areas of California.
- The authority of State Water Resources Control Board and Regional Water Quality Control Board for stormwater regulation comes from the *Clean Water Act* which puts the framework for regulating stormwater discharges under the National Pollutant Discharge Elimination System Permit system.
- Cities and other jurisdictions that operate large, medium and small stormwater systems, as well as specific industrial activity sites including constructions sites, must apply for stormwater permits. The State Water Resources Control Board provides policy and regulatory oversight, on behalf of the federal government.
- Municipal Stormwater Permitting Program regulates stormwater discharges from municipal separate storm sewer systems (MS4s). Large and small municipal sewer system operators must comply with permits that regulate stormwater entering their systems under a two phase system. Phase 1 regulates stormwater permits for medium municipalities (serving between 100,000 and 250,000 people) and large municipalities (serving 250,000 people). The Phase I MS4 permits require the discharger to develop and implement a Stormwater Management Plan/Program with the goal of reducing the discharge of pollutants to the maximum extent practicable. The management programs specify what best management practices will be used to address certain program areas. The program areas include the following:
    - public education and outreach
    - illicit discharge detection and elimination
    - construction and post-construction
    - good housekeeping for municipal operations.

  In general, medium and large municipalities are also required to conduct

monitoring. Phase 2 regulates smaller municipalities, including non-traditional small operations, such as military bases, public campuses, and prison and hospital complexes.

### Treatment Required for Potable Water Distribution

The Surface Water Treatment Rule was promulgated June 29, 1989, and specifies several different compliance dates depending on a variety of circumstances. Most surface water systems that are designated by the state as groundwater under the influence of surface water must provide both disinfection and filtration treatment in order to meet requirements for distribution. A recovery well placed near a recharge area is considered to be providing groundwater under the influence of surface water. Examples of monitoring criteria are turbidity, disinfection residuals, and coliform counts.

According to California Water Code §64653, all surface water must be treated by one of the following mechanisms:

- conventional filtration treatment
- direct filtration treatment
- diatomaceous earth filtration
- slow sand filtration
- membrane filtration

After filtration, all of these filters are required to have achieved:

- at least 99 percent *Giardia lamblia* cyst removal
- 90 percent virus removal
- 99 percent *Cryptosporidium* oocyst removal
- turbidity of 1 nephelometric turbidity unit or less (for reference, the turbidity of stormwater can be as high as 20,000 nephelometric turbidity unit).

Also according to Water Code §64654, all surface water must be treated with continuous disinfection to inactivate biological pathogens. Specifically, “water delivered to the distribution system shall not contain a disinfectant residual of less than 0.2 milligrams per liter for more than four hours in any 24 hour period.” Disinfection is also required to have a contact time sufficient to inactivate all biological contaminants. This objective is generally accomplished through the use of a specially designed tank, or an especially long run of transmission pipe before the first service connection.

### Treatment Required for Indirect Potable Reuse *(aquifer injection)*

In the newly published recycled water regulations of 18 June, 2014, Article 5.2 (“Indirect Potable Reuse: Groundwater Replenishment – Subsurface Application”) places requirements on Groundwater Replenishment Reuse Projects. California Code of Regulations, Section 60320.208 requires the following:

- At least 12-log enteric virus reduction
- 10-log *Giardia* cyst reduction

- 10-log *Cryptosporidium* oocyst reduction to be applied to recycled water used for recharge, prior to recovery via a groundwater well.

To achieve this massive log reduction, the State has allowed that "for each month retained underground...the recycled...recharge water will be credited with 1-log virus reduction." This natural treatment may be augmented by the following:

- Conventional surface water treatment, using settling and filtration is considered by the government to be capable of providing 3.5-log removal of *Giardia lamblia*.
- Direct filtration (without settling), diatomaceous earth filtration and slow sand filtration are credited with 2-log removal of *Giardia lamblia*.

Depending on the method of disinfection, further log reduction credits may be given for pathogen inactivation.

### Treatment Required for Construction or Recycled Water

Collected stormwater and surface water must meet National Pollutant Discharge Elimination System standards before discharge into any streams, creeks or waterways. Treatment to recycled water standards, as well as periodic monitoring, must be completed before distribution to the recycled water supplies, as well as distribution for construction purposes. Methods for treatment should be based on all available water quality data and reports and should treat all water quality constituents of concern.

### Regulatory Challenges

Water right agreements typically associate the ownership of rights with either surface water or groundwater. The acquisition of these rights is complicated, and is achieved through a set of rules and regulation that depend on the following factors:

- source of the water
- type/classification of the water
- timing of appropriation
- beneficial uses.

A ten-year period should be allowed for the approval process necessary for implementing new retention basins. There is the potential for significant restrictions from several regulatory agencies that may well see the newly created (or expanded) stormwater retention system as endangering habitat. They may therefore establish significant restrictions regarding withdrawals or municipal use. The process could include restrictions on:

- dredging (which would result in loss of volume)
- mandatory minimum water levels (which might preclude the City's use of the water) and, in the worst case, require that the City actually maintains water in the basin by adding water

## E. Discuss ownership, participation/partner aspect

A surface water detention facility constructed in Milpitas could be owned exclusively by the City of Milpitas. However, acquiring water rights may be an issue and may require large expenditures and/or additional mitigation measures for procurement. Rights could be bought or traded.

### Water Rights Acquisition

Historically, municipalities have considered stormwater as a runoff material to be managed to reduce flooding of city streets and homes. Many early cities used a combined stormwater and sewer system, which posed significant negative environmental implications from dumping untreated effluent during storm events. As the United States Environmental Protection Agency works to require these systems in the State to upgrade, rules on stormwater have focused on reducing damaging discharges. The use of stormwater for beneficial use is an uncharted regulatory landscape. The City of Milpitas may have an opportunity to be a national leader.

### Ownership and Partnerships

Inclusion of Santa Clara Valley Water District and other relevant agencies in the planning of surface water use, stormwater collection and surface percolation ponds is highly recommended. In addition to sharing costs and operational considerations, these agencies can help secure permitting requirements and water rights. Also, partnerships with surrounding cities (such as Newark) should be investigated with a view to using stormwater runoff for environmental remediation efforts and habitat restoration near the confluence of the San Francisco Bay near Dixon Landing.

## F. Optional: Prepare implementation guidelines based on available sources such as Groundwater Recharge Programs of Alameda County Water District and Santa Clara Valley Water District

(optional; not researched)

## G. Optional: Determine available area, water quality and creek source of potential sites based on historical data

(optional; not researched)

## H. Provide potential lists of sites, estimated reductions of consumptions

The most cost-effective locations for obtaining water to augment surface water uses would be the existing surface water retention basins throughout Milpitas, which are Hidden Lake Lagoon, Hall Park Lagoon, the Lagoon at Glenmoor Circle area and Retention basin off Quince Lane. Figure 6 shows the location of prominent creeks throughout Milpitas, with the potential sites for surface water retention augmentation circled in light blue (based on creek confluences with adjacent land availability potential). Note that the size of circle does not represent quantity of water.

In order of increasing potential collection volumes, the sites accumulating the largest stormwater drainage volumes are as follows:

A: Estuary confluence at Dixon Landing
C: Near Hall Memorial Park
F: Tularcitos and Berryessa Creek
K: Berryessa Creek
B: Calera Creek
H: Near Calaveras Road.

Figures 8A – 8E show close-up aerials for these potential sites for surface water retention or detention facilities, with the exception of Site F, which appears to have limited land availability nearby. Note that the actual availability of land must be determined for each site of interest.

**Figure 8A - Site A: Confluence at Dixon Landing**

- large land availability
- significant quantity of water potential
- existing surface water (seasonal)
- potentially sensitive wetland

**Figure 8B: Site C: Near Hall Memorial Park**

Note: Hidden Park Lake is located just south of Site C area and is currently a major surface water feature for the city.

**Figure 8C - Site K: Berryessa Creek**

- large drainage area
- limited land availability (within San Jose)
- additional locations down creek may be available in Milpitas
- Eventually leads to Sites C and A (see *Figure 7: Potential Surface Water Locations*)

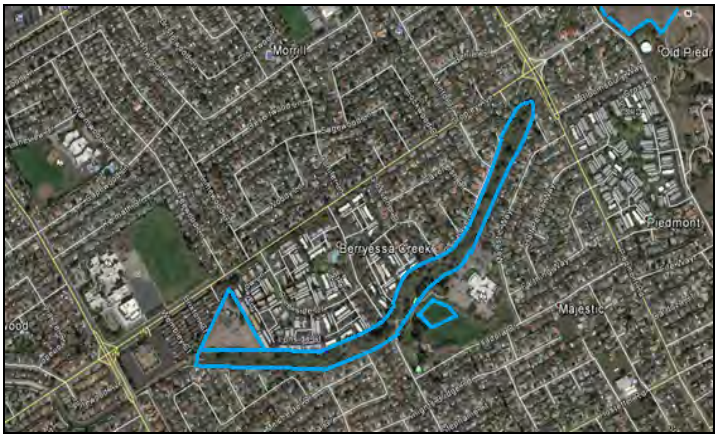


**Figure 8D - Site B: Calera Creek**

- Existing surface pond circled and fed by Calera creek.
- This creek eventually leads to *Sites C and A.*
- Land availability *may be restricted due* to limitations f*rom Measure Z which* prohibits City development in the surrounding foothills.

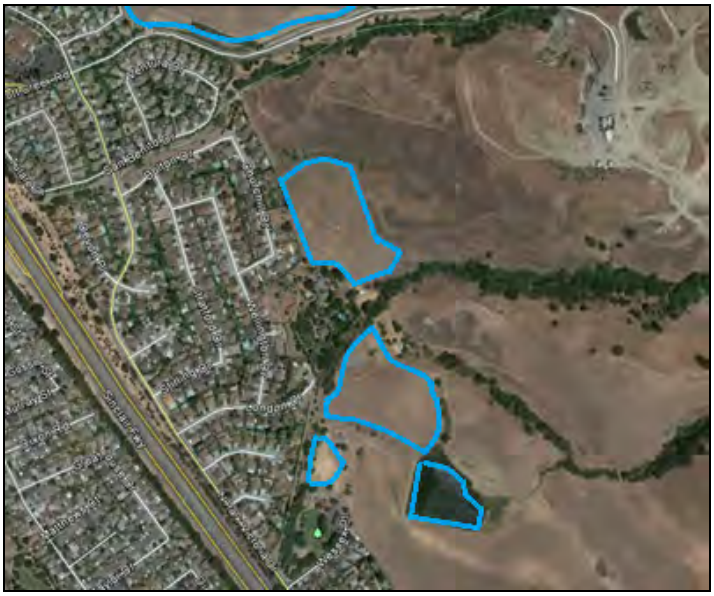
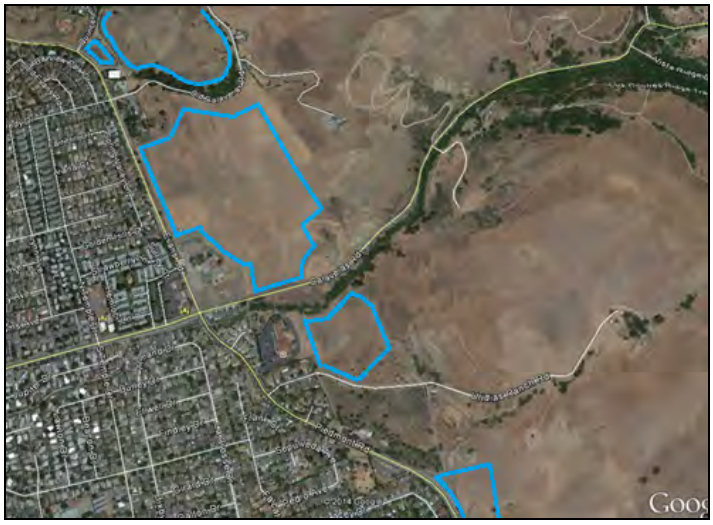


**Figure 8E - Site H: Near Calaveras Road**

The major creek here is Arroyo de los Coches. This creek eventually leads to Sites A, C and F.



## Legal

The major legal challenges with regard to surface water detention are the acquisition of water rights to the creeks with which to recharge the deep groundwater aquifer, and the regulatory compliance efforts required to treat stormwater for use. These needs were

discussed earlier in this document.

## Finances

The first step in establishing a retention basin would be acquiring water rights to Berryessa Creek. As discussed in Task 5: Water Rights, this could cost as much as $2 million.

$$1,000\ acre\ feet = 43,560,000\ cubic\ feet;$$

$$C = 12.4 \times V^{0.760} = 12.4 \times 43,560,000^{0.760} = \$7.93\ million$$

As set out earlier, the initial cost of a detention basin is characterized by the equation C = 12.4 $V^{0.760}$, where "C" is the cost in U.S. dollars, and "V" is the approximate volume of the basin in cubic feet needed to control a 10 year storm event (Rutgers). According to Rutgers, the cost is estimated at $7.93 million for design, construction and permitting for a single retention basin. We expect that since the Rutgers figure is not a South Bay Area number, this estimate is low, and thus we doubled the amount and used $8 - $16 million in the Implementation Plan.

### Recharge with Groundwater Pumping

If a waiver can be obtained from the Santa Clara Valley Water District for credits due to "dire water needs" for the City, this concept may then be feasible. At the current cost of $747 per acre foot of pumped groundwater from Santa Clara Valley Water District and more from the San Francisco Public Utilities Commission, the project would undoubtedly pay for itself in ten years or less, as these groundwater and treated water purchasing costs will go up, potentially as much as 50% annually, during some years (Taylord, Santa Clara Valley Water District).

If the waiver from Santa Clara Valley Water District for groundwater credits is gained at a rate of 75%, for example, the City would gain $560,250 in credit for every 1,000 acre feet of water recharged into the unconfined aquifer space annually. This would mean that over the 50 year lifecycle of the retention basin, at least $28 million would be saved on fees, as they increase. Concordantly, approximately 325 million gallons of groundwater would be available annually for use from wells such as the Pinewood Well, which produces at approximately 1 million gallons per day.

Approximately 2% annually would be needed for routine maintenance, amounting to $160,000 annually or $8 million over the 50 year lifetime of the project. If the cost to build is $8 million and the cost to maintain is $8 million ($16 million total costs), and the savings produced is $28 million, then this cost represents a gain of $12 million. The

project is especially feasible, however, because these numbers assume that the groundwater extraction fee of $747 will increase. Also, it is possible that groundwater will not be legally available if the Santa Clara Valley Basin becomes overdrawn. Thus, with a recharge and credit solution in place, an investment of the $16 million will increase water source security.

# Results

It is clear that the major hurdles regarding the use of stormwater for the purpose of augmenting water supplies in the City are land availability, access to streambeds with which to recharge groundwaters (i.e. water rights), and the cooperation of the Santa Clara Valley Water District. The District will be needed to both provide their approval with plans to recharge, and also to provide water credit for water recharged into the groundwater basin. If the District is willing to provide these two things, then surface water detention becomes a costly, yet effective way to augment the City's water supplies with groundwater from captured runoff and streamflow.

If this surface water detention is pursued, a serious look at the options for sites will be needed. The best locations for actual recharge of the deep aquifer are to the east of the City, but may be precluded by Measure Z. Other locations within the City may seem viable, but will only recharge the shallow aquifer, even potentially causing groundwater upwelling as the aquifer becomes full. This document outlines some of the possible locations for new or renovated detention basins, but a more thorough planning study should be conducted.

The cost of a single retention basin for the purposes of percolation can be summarised as follows:

$$-\$8\ million,\ capital\ cost\ -\$8\ million,\ maintenance + \$28\ million,\ savings = \$12\ million$$

Over the 50 year lifetime of the retention basin, this amounts to $0.73 per hundred cubic feet of water augmenting the City's supply. This does not including the savings accrued from generating water internally instead of purchasing it, and does not include the costs of acquiring water rights..

$$\$16\ million,\ lifetime\ cost \div (435,600\ hundred\ cubic\ feet\ per\ year \times 50\ years) = \$0.73/hcf$$

# Conclusion

Rehabilitation of the existing infrastructure at Hidden Lake Lagoon and at the other existing surface water ponds to provide more construction water is an extremely easy way for the City to reduce potable water use for non-potable uses.

The construction of an upstream retention basin for the purpose of groundwater recharge is a viable option that is contingent wholly upon the cooperation of the Santa Clara Valley Water District.

Surface percolation ponds would be an effective approach for stormwater catchment, but would require the construction of additional facilities and infrastructure, and involve permitting and operational considerations. From a preliminary perspective, the retention basin off Quince Lane seems like a promising location for this application; however, additional geotechnical investigation is required.

Bioswales and vegetative-lined canals should be constructed for all future stormwater collection and conveyance systems. This step will reduce organics present in the water, as well as provide habitat, improved aesthetics and easier treatment options for using the water at a later date.

The design and construction of injection wells for artificial groundwater recharge is a possible, although aggressive alternative, if the Santa Clara Valley Water District were to allow a waiver for this kind of activity under its *District Act*.

Water Solutions does not recommend action at this time for surface water detention, but do recommend that the City be aware of groundwater recharge opportunities.

**Task 3: Surface Water Detention Implementation Plan (NOT IMPLEMENTED)**

**Implementation Schedule:**

1. Retrofit existing surface water features to allow for construction purposes. Contact State Water Resources Control Board, Santa Clara Valley Water District and follow National Pollution Discharge Elimination System standards or special permitting requirements for non-potable use of stormwater. (March-July 2015)
2. Hire a geologist for geotechnical site investigations to determine appropriate sites for surface water detention and/or percolation ponds. (1 March 2015)
3. Hire a consultant to look for available water rights in this order of preference: senior appropriative water rights; old agricultural appropriative rights; riparian rights near boundaries between neighboring communities (such as Newark) for SF Bay and wetland restoration projects. (1 April 2015)
4. Hire a consultant to prepare an application for water rights, including all supporting documents. (1 May 2015 or later)
5. Hire a consultant to prepare plan designs for additional surface water detention facilities and/or percolation ponds. (1 June 2015 or later)
6. File a fully completed water right application with the Division of Water Rights. (1 June 2015 or later)
7. Pay all required fees. (1 August 2015 or later)
8. Commence environmental review and permitting requirements. (1 September 2015 or later)
9. Finalize environmental review and permitting requirements. (1 December 2016 or later)
10. Finalize plan designs for water detention and/or percolation ponds. (1 January 2016 or later)
11. Finalize contract documents and bid contract for construction. (1 February 2016 or later)
12. Begin construction. (1 June 2016 or later)

**Costs:**

Implementation of a surface water detention or surface percolation ponds would accrue the following costs:

- Construction water fill stations - Approximately $25,000 each
- Water Rights Acquisition Capital Costs - Approximately $2 million for rights to Berryessa Creek.
- Retention Basin Capital Costs - Approximately $8 million to $16 million. The cost of a percolation pond should be comparable to that of a surface retention basin.
- Total capital costs $10,000,000
- Maintenance costs - Approximately $160,000 annually.

Over the 50 year lifetime of a retention basin, these costs amount to $0.73 per hundred cubic feet of water augmenting the City's supply. This becomes $0.83 if you include the cost of acquiring water rights.

**Benefit:**
Additional acquisition of water rights for surface water and percolation ponds would allow the City to reduce the amount of water purchased each year and increase the reliability of the water system. Also, using a surface water capture and reuse program could recharge aquifers (through the use of surface percolation ponds) as well as provide a cost effective source of additional water.

**Lifecycle:**
The lifecycle of surface water detention ponds and percolation ponds is highly dependent on construction design. Typical detention and percolation ponds have a lifetime of 80 to 100 years or more. Annual operation and maintenance is also required.

**Prioritization by lifecycle:**

1. Construct water fill station at 4 existing surface water retention ponds.
2. Investigate the sites outlined in this memorandum for surface water and percolation pond sites.
3. Senior water rights (least likely to be contested) - less time until acquisition
4. Old agricultural water rights (more likely to be available) - longer timeframe

**Ease of Implementation:**

- Implementing surface water for construction water is relatively straight forward, inexpensive and easy to install. This includes connecting a water line to the lake with submersible pump and a connection point with isolation valves.
- Construction of additional surface water and percolation ponds can be complex and requires acquiring available land suitable for the application, excavation, material lining, and extensive geotechnical site investigation.
- Planning for and the acquisition of water rights is a complicated and uncommon event involving the execution of multiple contracts over the course of as many as ten years.

# List of References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- City of Milpitas 2013-2014 Annual Report to the Regional Water Quality Control Board. pp. 10-1-10-4. http://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/stormwater/MRP/2014_AR/Santa_Clara/Milpitas.pdf. Web access: 2014.
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- Taylord, Darin. Santa Clara Valley Water District. Phone call: Sept. 30th 2014.
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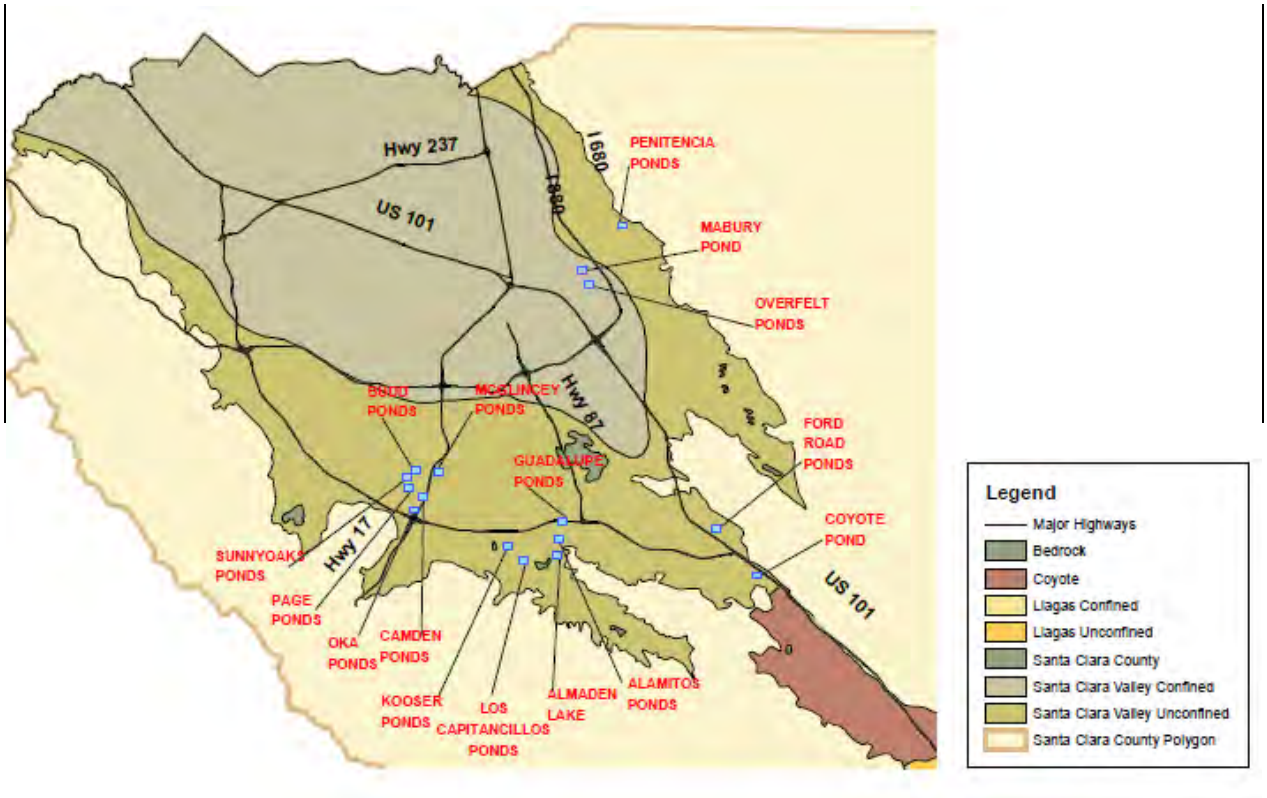
# Appendix

**Figure 9 - Surrounding Surface Water Features (Santa Clara Valley Water District)**



# *Water Solutions Inc.*

## MEMORANDUM

**Date:** 27 March, 2015
**To:** Steven Machida, Milpitas City Engineer
**From:** Water Solutions, Inc. - Consultant
**Subject:** **Task 4: New Groundwater Wells**

## Summary

The south-western section of the City of Milpitas overlays a good groundwater aquifer that is quite productive and its use is recommended. Up to 8.2 million gallons per day of water could be extracted (using a withdrawal rate of 2,000 gallons per minute) with the addition of two new wells and the use of the Curtis and Pinewood wells. Prior to use, a state water quality report must be completed, as well as treatment (if necessary) and disinfection. We would recommend the use of in-pipe blending with San Francisco Public Utilities Commission and Santa Clara Valley Water District supplies, as well as disinfection with in-pipe ozonation.

As with any managed groundwater basin, smaller monitoring wells are required throughout the basin to manage the water level and quality of the production wells. By drilling these lower-cost monitoring wells upfront, the cost of which is less than $20,000 per monitoring well, the City would be able obtain data on the quantity and quality of new production wells, which are approximately $350,000 to $1 million or more when completed, with a very modest financial outlay (Water Solutions, Inc. 2014).

Assuming that new wells would be of similar quality to that of Pinewood well (the primary municipal well for Milpitas emergency water supply), treatment would be minimal. We recommend the city pursue a managed groundwater well extraction program, much like what Alameda County Water District operates to the immediate north. Upon successful implementation of a groundwater well extraction plan, a groundwater percolation strategy involving percolating retention ponds or wetlands (see Task 3 memorandum), should be implemented to supplement and refresh the extracted groundwater well supplies with stormwater, or possibly even treated recycled water, if the basin manager (Santa Clara Valley Water District) approves of such. Of course, this is also contingent upon final

approval from the State Water Resources Control Board.
Note that surface water detention and groundwater recharge are associated and complicated issues as discussed in Task 3. Water Solutions, Inc. does not recommend Task 3 at this time, but we do recommend the the City should be aware of groundwater recharge opportunities.

In addition, the Pinewood Well water is primarily potable and is recommended to augment the water supply for the City of Milpitas. Issues to be resolved include both mineral and odor concerns which will require treatment or in-pipe blending with current water supplies. The addition of a small ozone system will resolve the taste and odor issues. Additionally, the use of a lime softening unit would also improve the quality of the water. It would be wise to plan on future wells being of similar quality to the Pinewood and Curtis wells which, while increasing the well infrastructure costs, allows for better long term operational budgeting. Blending well water with San Francisco Public Utilities Commission and Santa Clara Valley Water District water will dilute the hardness of the Pinewood water and may be an alternative to treatment.

Options for groundwater use:

- leave as an emergency supply
- point of use supply; drill pilot holes to determine the quality and quantity of water at parks, schools and government buildings to irrigate landscape; develop groundwater wells for use, as feasible
- treat well water at Pinewood well to potable standards and add to the drinking water supply
- drill pilot holes in Starlite Park and Hall Memorial Park to determine the feasibility of adding groundwater wells to augment the water supply (based on the United States Geologic Survey data and recommendations contained in this memo)
- drill pilot holes and determine the feasibility of shallow groundwater wells on the south-eastern section of Milpitas and at Quince Lane
- consider coordinating and forming partnerships with Santa Clara Valley Water District regarding the construction of recharge facilities; involving percolation ponds and/or injection wells (see Task 3 memorandum)
- pump groundwater for surface water features; i.e. ponds, artificial wetlands, etc. for public recreation, environmental rehabilitation and water storage

This is a complicated process that Water Solutions, Inc. does not recommend at this time, but we do recommend the the City should be aware of groundwater recharge opportunities.

# Data

The information in this memo was gathered from:

- California Code of Regulations, Title 22
- City Public Utilities staff and records
- consulting hydrogeologist James S. Ulrick, Certified Hydrogeologist
- Behzad Ahmadi, Professional Engineer, of the Santa Clara Valley Water District Groundwater Monitoring and Analysis Unit

# Methodology

The specific topics covered in this memorandum include the following:

A. Inspection of existing wells (Pinewood and Curtis) with recommended improvements for operation and regulatory compliance
B. Analyze historical hydrological data to determine groundwater sources (hydrogeological modeling) for potential sites (quality and quantity of water)
C. Identify necessary infrastructure for well operation (piping, pumps, motors, etc.)
D. Discuss the idea of adding well and pipe system to irrigate City parks and schools
E. Provide preliminary operational and maintenance considerations
F. Options: Perform groundwater modeling for sustainable production potential
G. Identify preliminary list of regulatory compliance requirement submittals
H. Provide potential lists of sites, operational/physical parameters, estimated reductions of consumptions

Legal and Financial considerations will be addressed at the end of Methodology.

There will be a final *Task 4 Implementation Plan Table* at the end of this memorandum. This will provide potential lists of sites, operational/physical parameters, estimated reductions of consumptions, and related implementation plan and summarized in feasibility section below.

## A. Inspection of existing wells (Pinewood and Curtis) with recommended improvements for operation and regulatory compliance

### Pinewood Well

The Pinewood Well was inspected by Water Solutions, Inc., on June 11, 2014. This inspection was followed by a report to the City entitled “Pinewood Well Review,” dated the

same day.

This well is not in use at this time. It has been constructed to very high standards and is located in a proven, high yield aquifer. While there are some issues such as the non-operational diesel drive, there is little to prevent the well from being put into operation while the City upgrades the facility to improve ease of operation and reliability. The high mineral content is likely the only issue requiring a significant expenditure; however, the yield of 2.9 million gallons per day, at 2,000 gallons per minute, will quickly pay for any practical investments in treatment and disinfection required for it's use (Ulrick).

Blending the well water with other water sources will dilute the concentrations of hardness and reduce taste and odor issues. As a result, immediate utilization of the well can be achieved. This well is already permitted and tested, which is a significant asset. The well water quality appears to be similar to that of current City standards (slightly more dissolved minerals and a hint of a sulphurous odor). The use of in-pipe ozonation will eliminate any odor issues and dissolved minerals can be reduced easily by in-pipe blending, or with a water-softening system.

Due to the artesian qualities of the well, electrical costs to pump the water can be assumed to be low. This is because artesian water is underground and under pressure. Electric motors draw sufficient power to accommodate whatever load is applied to the shaft. This means that an electric pump will pump more if the artesian pressure drops and less if it increases.

*HydroScience Report*

The following data was taken from the 2014 HydroScience Pinewood Well Blending technical memorandum. See *Appendix* for an excerpt from the *2014 HydroScience Pinewood Well Blending Study*:

*"Pinewood Well meets all State and Federal regulations for public drinking water. However, the hardness level is greater than three times that of Santa Clara Valley Water District and over five times more than San Francisco Public Utilities Commission. The City used the Pinewood Well once and experienced a high volume of complaints from area residents due to hardness, taste, and odor.*

Table 1: Hardness of City Water Supplies

| Year | Pinewood Well (mg/L) | SFPUC (mg/L) | SCVWD (mg/L) |
|---|---|---|---|
| 2013 | 340 | 53 | 96 |
| 2012 | N/A | 62 | 105 |
| 2011 | N/A | 57 | 88 |
| 2010 | 340 | - | - |
| **Average** | **340** | **57** | **96** |

***"Recommendation***

*It is recommended that the City perform a hydraulic analysis of each option [of the 2014 HydroScience Pinewood Well Blending Report] to:*

- *assess the area that will be impacted*
- *direction of flow*
- *pressure requirements*
- *confirm flows based on demand*

*Analysis should be performed using the steady state model as well as the extended simulation period if available for the following criteria:*

- *Max Day Demands*
- *Min Day Demands*
- *Peak Hour Demands*
- *Max Day with Fire Flow"*

*Additional Recommendations*

The Pinewood Well has water hardness of about 340 milligrams per litre; total hardness should be reduced to 120-150 milligrams per litre. However, to match the existing hardness of the water at the Pinewood Well with that of the City of Milpitas, the target hardness would need to be 57-96 milligrams per litre hardness. In-pipe blending, blending tanks, simple granular-activated carbon, lime softening and/or ozonation were compared for hardness and odor treatment potential, based on the findings of the 2014 HydroScience - Pinewood Well Blending report.

*In-pipe blending* would require the least investment cost to add Pinewood Well water to the potable water supply. The addition of a small booster pump (5 horsepower) and construction and connection to additional water mains would be required for operability**.**

Using *mixing tanks* to blend the well water with the potable water supply would require, in addition, a blending tank, tank housing (or below ground excavation) and an additional pump to increase the pressure to the water main from the tank (in addition to the submersible pump). Also, ozonation could be mixed in the blending tanks or, more simply, in-pipe.

An *ozonation* and/or a *lime softening* system could be included inline with the Pinewood

Well before blending (in-pipe or via blending tank) with San Francisco Public Utilities Commission supplies to help eliminate any possible odors, remove water hardness or trace biological concerns. Ozonation is excellent at resolving taste and odor issues, while lime-softening is used to reduce water hardness. Ozonation and/or lime softening should be combined with one or more of the following in-pipe blending location options (see Figure 1: Location Maps 1, 2 and 3 for possible conveyance routes):

**Option A:** *Pinewood Well Reserved for Emergency Supply*
This option would maintain the existing conditions at Pinewood Well; water would only be drawn during times of emergency. No major changes to the existing infrastructure would be required.

**Option B:** *In-Pipe Blending for Additional Water Supply*
In-pipe blending is a practical means of mixing groundwater obtained from Pinewood Well with existing water supplies. Infrastructure required would include a new water main, a small 5-horsepower pump and treatment systems. See *Scenario 1* for the simplest in-pipe blending option. However, more diffuse mixing could be achieved using the blending routes shown in *Scenario 2 & 3.* Either of these options would blend into two pipes to disperse the water between two residential streets, rather than the one pipe as shown in *Scenario 1*. Possible blending routes include the following (Figures 1-3 below):

**Figure 1: Scenario 1** - Water drawn from Greenwood Way & Lonetree Court; to be blended with Pinewood Well water and distributed to Evergreen Way/Green Tree Way. This would require approximately 200 feet of additional water mains (Note: Evergreen Way & Green Tree Way share the same water main):

**Figure 2: Scenario 2 -** In-pipe blending from Starlite Dr. to Evergreen Way/Green Tree Way and Greenwood/Lonetree Ct (would require about 890 feet of additional water mains):

**Figure 3: Scenario 3** - In-pipe blending from Moonlight Cir. to Evergreen Way and Greenwood/Lonetree Ct. (would require about 730 feet of additional water mains).

**Option C:** *In-pipe Blending with Ozonation*
In-pipe blending using the routes shown above can be combined with ozonation to achieve lower odor and taste issues present in the groundwater. A concentrator and side stream injection would be required.

**Option D**: *Blending with Ozone in a Contact Tank*
In addition to the equipment required by Option C, the following would be required for Option D: A non-pressurized contact tank would require additional pumps to raise the pressure to that of the water mains, or a pressurized contact tank (expensive). The size of the contact tank would be approximately 4250 gallons.

**Option E:** *Lime Softening*
Lime softening raises the pH of water to precipitate hardness ions (polyvalent cations such as Mg2+ and Ca2+) prior to blending or distribution directly into the water system. Hardness can be reduced to 50-85 milligrams per liter using lime softening and could then be added directly to the water supply or blended using one of the above options. A lime softening system would be required, as well as periodic disposal (or a flush system to the waste water line) of precipitated calcium carbonate and magnesium hydroxide.

*Conclusion - Combination of Available Options*
A variety of options are available to improve the quality of water and eliminate trace

odors and minerals. It is required by the City to maintain the quality of the existing water, therefore a combination of the following is recommended:

- lime softening
- ozonation and/or
- in-pipe blending to eliminate the trace presence of odors and minerals.

These would be great solutions to treat well water, in order to increase the water supply by blending with water of similar quality and consistency as existing supplies.

Finally, Water Solutions, Inc. has chosen a variation on the Hydroscience blending report plan. In-pipe blending could be accomplished by any of the options shown in *Figures 1-3* (above). In-pipe blending could be used by itself, without ozonation or other treatment. However, one configuration would be to draw water from Live Oak Ln. to blend with Pinewood Well, treat with ozonation and distribute between the three neighboring streets (Moonlight Cir., Evergreen Way and Greenwood Ct.). Keep in mind, the well water at Pinewood Well is some of the best in the county and does not require treatment.

## Curtis Well

Curtis Well was also reviewed in conjunction with the review of the Pinewood Well. However, this well is not currently operational. Reviewing the water quality and lower production of this well, a treatment system will need to be installed prior to this well being brought on line. The Historical capacity of the Curtis Well is approximately 750,000 gallons per day, although current measurements suggest the capacity is much less. The modelled specific capacity of this source is 45 gallons per minute per foot; however, the measured specific capacity of this well is only 1 gallons per minute per foot, resulting in a approximated continuous yield of 500 gallons per minute or 720,000 gallons per day (Ulrick, 2014). There is currently a cased well at the site, but additional infrastructure is required for operation, including:

- well pad
- submersible pump
- downhole piping
- submersible electrical cables
- pump house
- chlorine injection
- treatment filters and other components

*Recommended Improvements*

Curtis Well could be used for potable water, recycled water, construction or retrofitted to be a reliable emergency supply. However, a number of steps are required to achieve optimal operation and regulatory satisfaction.

- First, an “Initial Sample Bacteriological Test” should be performed as per the

guidance provided in the back page of the book entitled “2014 Guide to California Drinking Water Regulations” provided to the City by Water Solutions, Inc.

- Second, the well should be run at 500 gallons per minute to study the blending water quality of the distribution system.
- Third, Title 22 compliance should be verified.
- Fourth, an Initial Drawdown Test pumping of the Curtis Well should be performed as per the protocol set out by the Drinking Water Program (State Water Resources Control Board website, 2014).

In addition, the State Drinking Water Program must be notified of the City’s intentions, and the City’s Water Permit listing must be verified. Water Solutions, Inc. did not review the State water system permit to confirm that the Curtis Well is currently listed. This must be done. In the event the well is not on the city water permit, several months may be required, prior to operation, to amend the City water system permit. As part of this permit process, the Drinking Water Program will review the complete Title 22 water quality analyses and provide a report to the City.

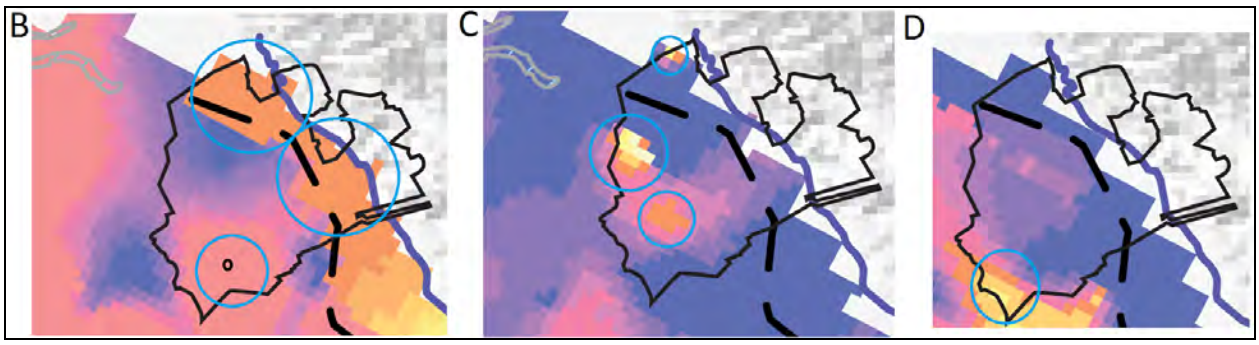
## B. Analyze historical hydrological data to determine groundwater sources (hydrogeological modeling) for potential sites (quality and quantity of water)

### New Groundwater Wells

The greatest potential for new groundwater wells appears to be in the south-western corner of the city (based on United States Geologic Survey hydrological and depth data, see Figure 4) and near the mid-western areas of Milpitas. Also, lower-yielding shallow wells or percolation ponds may be feasible on the eastern portion of Milpitas (see *Task 3: Surface Water*); however, contamination issues as well as low yields could be an issue in this area.

The following figures were taken from the United States Geological Survey - Possible locations for new well sites are circled in light-blue:

**Figure 4 - Specific Storage Capacity at Three Depth Levels**



Possible locations for wells to be drilled are outlined in the following sections. Up to 2.9 million gallons per day of water could be extracted (using a flow rate of 2,000 gallons per minute times 1,440 minutes per day yields 2.9 million gallons per day). However, careful hydrological modeling and pilot holes should be drilled to determine sustainable withdrawal rates and to monitor the groundwater basin. Also, a recharge program should be implemented by use of percolation ponds or injection wells to increase the amount of water into aquifers during storm events.

Forming a partnership with the Santa Clara Valley Water District regarding the construction of recharge facilities will be essential for the success of a project of this type - The recharged groundwater will likely become the rights of Santa Clara Valley Water District and costs for pumping will be required. Also, the Santa Clara Valley Water District currently operates the San Tomas injection well; results are available for a study regarding the recharge water quality project 2008-2009. Eventual partnership between neighboring San Francisco Bay Area water agencies to explore groundwater recharge, with highly-treated water, possibly including 10-log treated wastewater is also recommended (99.99999999% removal of water constituents).

*Historical Hydrological Data*

A sound understanding of the Santa Clara Valley groundwater basin is needed if the City wishes to drill more groundwater wells. The basin is unconsolidated alluvium resulting from a number of creeks running into the area from the foothills to the east. The eastern portion of the basin is unconfined, and does not contain an aquitard, meaning that contamination can spread from the surface into the groundwater. However, the western part of the City overlies a confined aquitard-protected area with water of good quality and yields that extends for 800 feet below the aquitard clay layer.

There are upper and lower aquifers in the Santa Clara Valley basin. Santa Clara Valley Water District can not access the lower aquifer with recharge water due to a clay aquitard. They are able to recharge into the upper aquifer at a shallow level. Because they can’t reach the lower aquifer the pressure is higher in the shallower aquifer, and lower as one drills deeper. Needless to say, this is unfortunate as it may result in a shallower water table and hence flooding, and no recharge is actually occurring into the deeper, potable water aquifer. Nonetheless, the yield as indicated by the horizontal hydraulic conductivity simulations, is highest in the southeastern corner of the City at a depth of 600 to 800 feet below ground surface.

Interestingly, the water quality of existing wells drilled by the City is among the worst and the best in the basin. The Curtis Well is heavily laden with constituents such as iron and manganese and has the lowest specific capacity (ability to hold water) of those tested. These findings indicate there may be problems with the construction of the well. In contrast, the Pinewood Well is an example of some of the best water quality available in

the basin (Ulrick, 2014). As with any managed groundwater basin, smaller monitoring wells are required throughout the basin to manage the water level and quality of the production wells. By drilling these lower costs wells upfront, the City would be able obtain data on the quantity and quality of new production wells, with a very modest financial outlay.

*Determination of Groundwater Sources*

There are several considerations when selecting groundwater sources; water quality and the withdrawal rates. These constituents should be identified prior to constructing the production well systems. Pilot holes should be drilled to provide estimates for the quality and quantity of water that can be reasonably withdrawn; the location to be determined from available groundwater data.

The lighter colors (in Figure 4) indicate a greater specific storage multiplier for groundwater in Milpitas. The areas with the greatest specific storage are circled in light-blue for clarity; the small dot on Layer B is the location of Pinewood Well; a fairly good location, based on United States Geological Survey data (See Figure 4). Note that wells of greater depth tend to have the greatest storage capacity towards the South to the mid-West corners of the city. The various layers (i.e. B, C & D) indicate the depth and specific layer that was studied. Pilot wells should be constructed in the areas with the greatest groundwater storage potential; likely in the Southern section of the city. There is also a potential for small, shallow wells on the south-eastern section of Milpitas - See Layer B.

## C. Identify necessary infrastructure for well operation (piping, pumps, motors, etc.)

The infrastructure required for a municipal well includes the following:

- a submersible pump
- a submersible electrical cable
- well casing
- a flexible or rigid downhole pipe
- centralizers
- a well pad
- electrical controls
- a treatment/electrical cabinet or housing

Additional components include:

- a well screen
- check-valves
- a variable frequency drive
- rectifiers
- an annular seal

- a well vent
- an air relief valve
- a flow sleeve
- a bypass valve and a
- distribution line connection

Treatment and chlorine injection (prophylactic or residual chlorine) should be added before the water is added to the water supply. A full Title 22 report, also known as State Water Quality Testing, should be conducted to determine site-specific water treatment methods.

Water Solutions, Inc. would recommend the use of a vertical turbine submersible pump with “Mandal’s Wellman” flexible downhole piping. Centralizers should be used to keep the downhole piping in place, and check valves must be installed at the wellhead or between the pump and down-hole piping. A flow sleeve must be used to cool the motor while it is running. Variable frequency drives provide a “soft start” to the pump and a dry-run sensor is needed to protect the motors. These controls can be incorporated into the pump controls and ideally are located in a pump house or convenient electrical control box.

If convenient, power should be connected directly to PG&E for ease of maintenance and dependable operation. However, a diesel engine, solar panels or hydrogen fuel cell could be used for remote areas. Water treatment could be undertaken with one of the following, depending on the water quality:

- screens
- sedimentation chamber
- green manganese sand filters
- ozone disinfection
- UV disinfection
- microfiltration or reverse osmosis

## D. Discuss the idea of adding well and pipe system to irrigate City parks and schools

Irrigating city parks and school landscaping with water from existing wells could save money, provide additional potable water that would otherwise be used for irrigation and decrease the amount of purchased water. Wells should be installed as close as possible to the parks, schools or government buildings whose lawns are to be irrigated. One drawback would be the availability of shallow wells, thus driving up the costs by requiring deeper wells (500+ feet in many instances). However, careful geotechnical investigation, as well as the installation of pilot wells at potential sites (see below, *H. Potential List of Well Sites***)** to help determine the ideal placement and feasibility installing shallow wells.

There are, however, several alternatives to irrigating City parks and schools with well water:

- treat the well water to drinking water standards and blend it into the current San Francisco Public Utilities Commission and Santa Clara Valley Water District water supplies before distribution
- connect existing wells directly to recycled water lines to be used for non-potable use (including irrigating lawns, landscapes, fields, etc.)
- drill additional wells site-specifically for large parks and schools, as feasible; treating the well water to drinking water or recycled water standards will provide more options for use

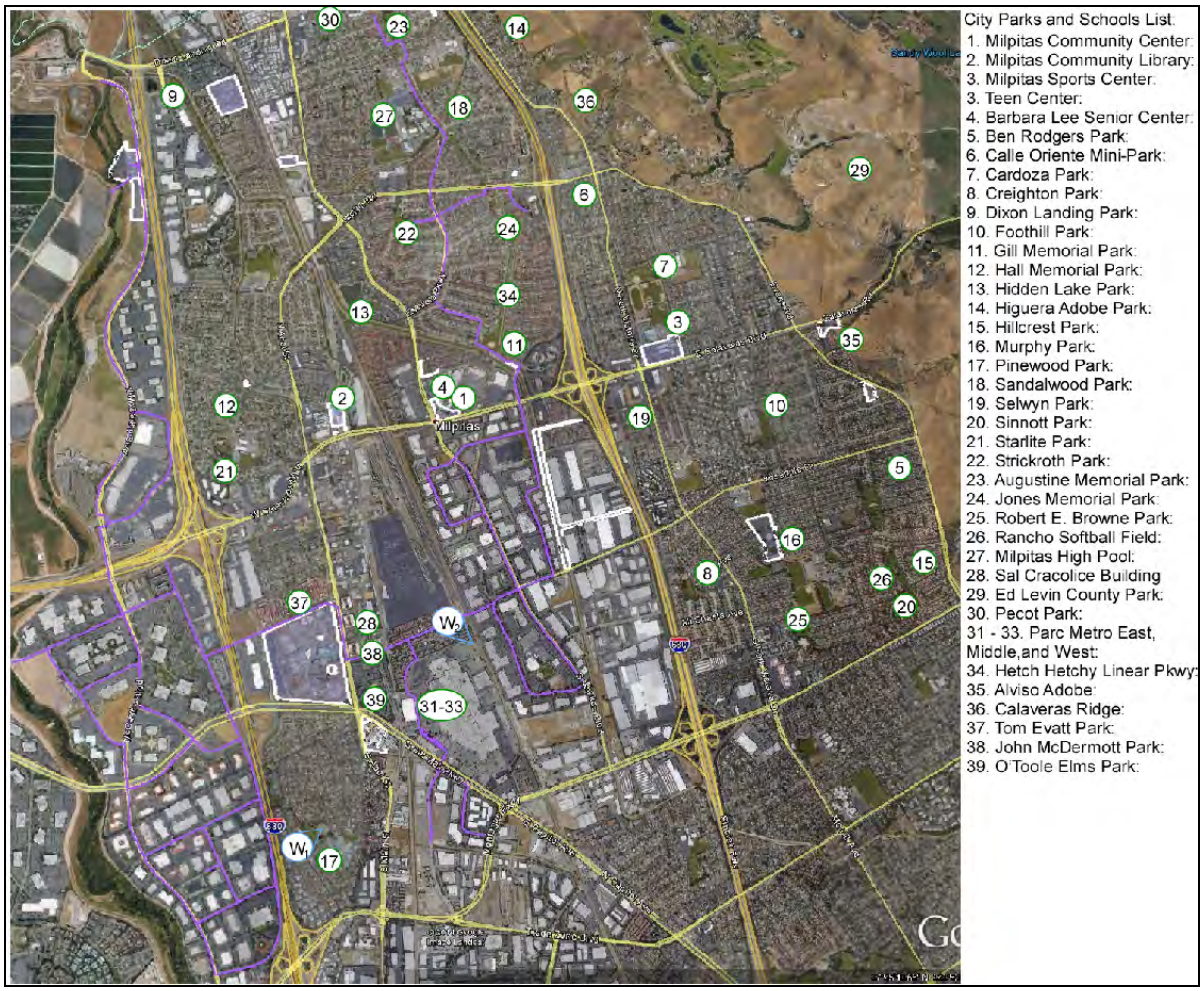
The following figure (Figure 3: *City Wells with Recycled Water Lines)* shows the location of many of the parks, schools and community centers throughout Milpitas, as well as the location of recycled water lines.

Presently, the recycled water system does not reach all of the City parks and schools. The addition of recycled water piping could provide the opportunity to irrigate many of the parks and school lawns with well water, without additional treatment (based on the results of Pinewood Well water quality report). A map of the major parks and schools, as well as existing recycled water piping is shown above (see *Figure 3 - City Wells with Recycled Water Lines*). Some of the park irrigation systems could be connected to the current recycled water system with the addition of relatively short recycled water pipe runs. However, most of the parks and schools are a considerable distance from recycled water piping. Longer recycled water mains would be required and Highway 680 would need to be crossed in order to connect to all of the parks.

The cost of laying water mains is approximately $179 per linear foot (Coastside County Water District website, 2014). However, the existing potable water distribution system is already in place and would require very little modification. By treating water from the existing and new wells to achieve potable water drinking standards, this water could be used for nearly any use. Additional changes to the infrastructure would be minimal for treated well water; thus, the greatest cost for a well would be the design and construction of a treatment system and connections to existing water lines.

Drilling new wells at parks and schools is also feasible - Additional wells located at parks and schools could be constructed to augment the water supply, irrigate fields and provide surface water retention at parks. A list of potential sites is provided below and can be used to drill pilot wells. Pilot wells will help to determine water depths and sustainable withdrawal rates, as well as to help map and monitor the Cities groundwater supplies.

**Figure 5: City Wells with Recycled Water Lines**




Pinewood Well could easily be blended into the City's water supply and Curtis Well could be added following cleaning of the well, as well as the addition of the infrastructure mentioned above. In addition to the 2014 Pinewood Well Blending Study, a driller's report is also available for Pinewood Well from when the well was drilled in 1978. Water Solutions, Inc. recommends blending with in-pipe ozonation and/or lime softening to augment the existing water supply.

## E. Provide preliminary operational and maintenance considerations

Regular well maintenance and proper well management for recharging groundwater would be required if new groundwater wells were to be constructed. Planning should include the cost of these ongoing activities, as well as the initial investment for the well, submersible pump, energy costs, treatment, and connection.

An up-front investment in a series of pilot wells should be installed throughout the city at Starlite Park, Hall Memorial Park, Quince Lane and as appropriate. This should be done

to determine groundwater levels, sustainable withdrawal rates and to determine suitable sites for percolation ponds or injection wells. Collaboration with the Santa Clara Valley Water District should be pursued for partnerships involving recharge facilities for ease of implementation, draft water right agreements and dependable operation.

The *Treatment Operator Certification Level 1 (T1) license* is required for basic treatment procedures for water distribution systems. In order to proceed with disinfection treatment on the utilized wells, a source for chemicals such as sodium hypochlorite or calcium hypochlorite will be needed. The City must also implement a Water Quality Monitoring Plan to assess wells on a regular basis and ensure that operating wells are up to standard.

## F. Option: Perform groundwater modeling for sustainable production potential

*(not undertaken at this time)*

## G. Identify preliminary list of regulatory compliance requirement submittals

Permitting of municipal wells is a relatively simple process:

1. An appropriate site must be found, away from wastewater and other wells.
2. The site must be approved by the State Water Resources Control Board - Drinking Water Program
3. The County will review the site and issue a drilling permit for $400
4. Santa Clara Valley Water District, as the steward of the groundwater basin, will issue the well permit.
5. Once permission is given by the Santa Clara Valley Water District, a Permit Amendment Application must be submitted to the State Water Resources Control Board-Drinking Water Program. This Permit Amendment Application must be accompanied by a Technical, Managerial and Financial Assessment and a Permit Technical Report. State Water Resources Control Board fees for domestic (i.e. municipal) water supply permitting are variable, but sometimes range into tens of thousands of dollars.

**The Permit Technical Report incorporates the following items:**

*General Water System Information*

The proposed number of service connections, the type of service connections anticipated, period of use, consolidation evaluation and a map of facilities

*Source Water Information*

Description of source, water rights, water quantity, assessment of vulnerability to contamination and a source water quality analysis.

*Treatment and Design Information*

Description and layout, design capacities, well construction, treatment chemicals and disinfection facilities.

*Distribution System Information*

Location of water mains, pumping stations and storage tanks; distribution pressure.

*Operational Plans*

Water Quality Monitoring Plan, Water System Operations Plan, Disaster/Emergency Response Plan

*California Environmental Quality Act* Satisfaction

Preparing these requirements is challenging and time-consuming - State Water Resources Control Board-Drinking Water Program recommends the hiring of a consulting engineer to assist in preparing permitting application documents and coordinating permitting activities. This engineer will not only help the City with its immediate application needs, but could be hired in conjunction with additional City Engineering services.

## H. Provide potential lists of sites, operational/physical parameters, estimated reductions of consumptions

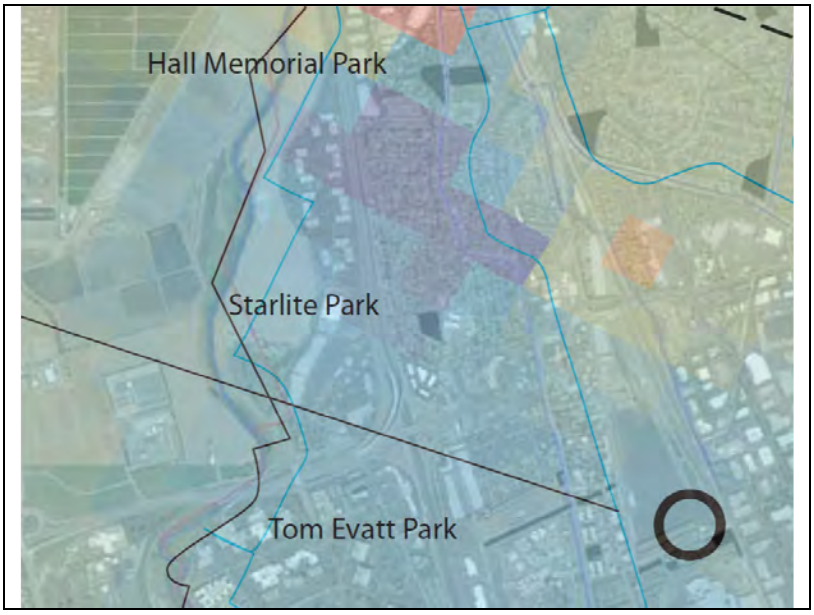
Pinewood Well is the most obvious choice for augmenting the potable water supply with groundwater or supplementing the recycled water supply. Although in a less productive area, Curtis Well would also be an acceptable choice. The addition of wells in the Southern and mid-section portions of the City, as outlined below, is also highly feasible.

Figure 4 indicates the specific storage multiplier throughout Milpitas. Yellow to red colors indicate increasing hydraulic storage (light-blue circled areas). Also, the modeled depth increases from the shallowest layer, to the deepest layer, as shown in *"B" Figure 4 - Specific Storage Capacity,* above.

Two potential sites for new wells at existing City Parks are, in order of preference, Starlite Park and Hall Memorial Park. These sites would avail themselves of the considerable groundwater presence at 400-600 feet depth as shown superimposed on United States Geologic Survey Model Layer 4 (Ulrick, 2014) in Figure 6, below.

The addition of low-yield shallow ground wells, injection wells or percolation ponds on the south-eastern side of Milpitas should also be investigated by use of pilot wells or additional geotechnical investigation.

**Figure 6: United States Geologic Survey Model Layer 4**




## Operational/Physical Parameters

A *Water System Operations Plan* must be implemented to ensure wells are operating properly and efficiently. It is recommended that wells be checked on a monthly basis and a logbook record of levels kept for future references. Well monitoring datasheets are also available and could be used. The specific yield of a well is the gallons per minute of pump flow per feet of drawdown gallons per minute per foot. The drawdown is the distance between the static water level and the pumping water level. Changes in the specific yield of a well can be affected by drought, changes to the storage capacity of the aquifer, damage to the well, natural variance, water use by other wells and over pumping.

A *Disaster/Emergency Response Plan* must also be adopted by the City in case any of the wells being utilized for drinking purposes are damaged, exposed to contaminants, or shut down. As well as affecting water quality, damage to a well can also change the specific yield.

## Estimated Reduction in Water Usage

Additional high-yielding wells such as Pinewood Well could dramatically increase the amount of available water for the City of Milpitas. The total amount of water that could be added to the water supply depends on sustainable withdrawal rates and can be as much as 2.5 million gallons per day per well; however, additional investigation is needed to determine a more-precise value. Regardless, the amount of water purchased by the City of Milpitas could be dramatically reduced by increasing available water from well water. With the additional of new wells, estimates for additional water usage would be at least 2.5 million gallons per day, especially if a sustainable percolation or injection plan is

adopted.

## Legality

If groundwater is identified as an existing or anticipated source of water, the Urban Water Management Plan must include specific information about groundwater supply and management (Water Code § 10631b).

Unlike surface water, groundwater use is not regulated by the State Water Resources Control Board, and a *water rights* permit from the State Water Resources Control Board is not required for beneficial groundwater use. However, the *Santa Clara Valley Water District* was created by an act of the California Legislature, and operates as a State of California Special District, with jurisdiction throughout Santa Clara County. It manages the groundwater and charges a fee for its use. Also, drilling permits must be acquired from Santa Clara Valley Water District, as well as submitting a Permit Amendment Application to the State Water Resource Control Board. The Board, as well as the Santa Clara Valley Water District, should be contacted for special permitting requirements, for any possible recommendations.

Groundwater used as part of a municipal water supply system is considered an *appropriative right*, as compared to an *overlying groundwater right* (*City of Pasadena v. City of Alhambra,* 33 Cal. 2d 908, 927 (1949)). An appropriative groundwater right is established by the extraction of the groundwater and application to beneficial use.

In times of shortage or overdraft of an aquifer, the water available for extraction (i.e., the "safe yield") is allocated among competing water right holders according to certain priorities. The overlying groundwater right holders collectively have first call on the available water. If surplus water is available, the remaining water within the safe yield of the aquifer may be extracted by appropriative right holders based on the respective dates on which they began pumping water from the aquifer (i.e., the first in time, is the first in right). If the City initiated a new well it would likely be the lowest-priority water right holder. *This scenario becomes problematic only if there is a concern about exceeding the safe yield of the basin and creating potential shortages.*

On September 16, 2014 the Governor of California signed into law new groundwater legislation (*Sustainable Groundwater Management Act*, AB 1739, SB 1168, SB 1319) that establishes a new structure for managing the State's groundwater. The Act provides a framework for improved management of groundwater supplies by local authorities, and includes provisions for establishing agencies to deal with groundwater sustainability and adopting sustainable groundwater plans. Implementation of the Sustainable Groundwater Management Act should be tracked to determine its potential benefit for Milpitas.

Numerous agencies must be coordinated to achieve the installation of new groundwater wells in Milpitas. Milpitas is in the Santa Clara Valley. The State Water Resources Control Board is not active in the permitting process, but generally oversees the management of all the state's counties and water districts. Santa Clara Valley Water District manages the actual permitting process for groundwater use.

The requirement of Groundwater Management Planning was instituted in 2013 by *Assembly Bill 359* with the intent of "...monitoring and management of groundwater levels within the groundwater basin" (Legislative Counsel's Digest, 2011). This Bill adopts principles of sustainability that heretofore were not considered within water law. Both the Groundwater Management Plan (Santa Clara Valley Water District, 2012) and the Urban Water Management Plan (Milpitas, 2010) address the issue of new groundwater wells in the City; however, they do not state explicitly that this option is being pursued.

## Finances

The Capital Improvement Plan program consists of annually prepared five year plans, and provides for both significant and minor changes to the City water system. The 2013-14 Capital Budget provides $2.4 million for Water Projects, at 12.7% of the total budget of $18.9 million. This allocation is far less than what will be needed for development of the Curtis and Pinewood wells alone. The drilling and completion of a new well could cost an additional $350,000, and with treatment and a substantial pump station, this cost would climb towards $3 million per well (Reynolds, 2014).

As well, there are recurring, non-capital costs. Operation and maintenance of a municipal water supply well, while not trivial, is not expensive, requiring only the energy to run the well and non-present staff, who are presumably already hired. If the Pinewood well, or new production wells could pump 3.5 million gallons per day or 2,400 gallons per minute, then at a calculated 250 horsepower or 186 kilowatts, utility costs could be as much as $1,428 per day of continuous operation, *or $0.11 per hundred cubic feet* (PG&E). Even at partial yet regular operation, these costs amount to hundred of thousands of dollars per year. The rate of 3.5 million gallons per day can not be sustained 24/7/365. The hydrogeological survey states that only 2.9 million gallons per day are possible, over time. The rate of 1 million gallons per day is a conservative withdrawal rate and is used for operations cost estimates for continuous use, however, 2.5 million gallons per day is a more likely production goal than 1 million gallons per day. Note that production well withdrawal should be married to an aggressive surface water retention and detention program to substantiate the withdrawal rate from the aquifer.

$3.5\ million\ gallons\ per\ day \times 1337\ hcf/mg = 4680\ hundred\ cubic\ feet\ per\ day$,
$4680\ hcf/day \times 30\ days/mon = 140{,}400\ hundred\ cubic\ feet/month$,
$186\ kW \times \$0.112/kwh \times 720\ h/mon = \$15{,}000/month\ electricity\ costs$ *($180k/yr),*
$\$15{,}000/mon \div 140{,}400\ hcf/mon = \$0.11/hundred\ cubic\ feet$

On top of these costs are the fees for groundwater extraction. The Santa Clara Valley Water District was created by an act of the California Legislature, and operates as a state of California Special District, with jurisdiction throughout Santa Clara County. It manages the groundwater and charges a fee for its use. Santa Clara Valley Water District has not imposed rationing, but has set a water use reduction "target" of 20% less than the 2013 usage. The Santa Clara Valley Water District groundwater withdrawal fee for 2014-15 is $747 per acre foot. This means that at most, the City will be paying 65.5% of its water rate charges from customers to cover groundwater extraction fees to Santa Clara Valley Water District alone ($747 per acre foot or $1.71 per hundred cubic feet, versus Milpitas' minimum water rate of $2.62 per hundred cubic feet). This amount increases approximately 11.4% per year according to the Santa Clara Valley Water District Protection and Augmentation of Water Supplies report for 2013/14. If electricity costs $0.11 per hundred cubic feet and the groundwater fee is $1.71 per hundred cubic feet, the total cost for pumping groundwater from a well is *$1.82 per hundred cubic feet*.

$$\$0.11/hcf,\ elec. + \$1.71/hcf,\ fee - \$2.62/hcf\ low\ residential\ rate\ =\ \$0.80\ hcf\ net\ (gain)$$

Therefore, when compared with the cost of wholesale purchased water, this approach appears to be a good investment. Currently the City is purchasing treated Hetch-Hetchy water from the San Francisco Public Utilities Commission at a rate of $2.93 per hundred cubic feet or $1,276.31 per acre foot. This high rate results in a loss to the City of $0.31 per hundred cubic feet for water that is sold at the low-use (conservation) residential rate of $2.62. Although it is desirable to reward customers who conserve water, it is unwise to employ a pricing system that induces a net loss. Further, *this purchase rate is likely to rise annually by 17% on average, making this an increasingly costly and therefore unsustainable investment in the long term* (Javelosa-Rio). The City of Milpitas has recently hired a consultant to analyze its water rates structure.

$$\$2.93/hcf\ San\ Francisco\ Public\ Utilities\ Commission\ rate - \$2.62/hcf\ low\ residential\ rate\ = \\ =\ \$0.31/hundred\ cubic\ feet\ net\ (loss)$$

In addition to treated water from the San Francisco Public Utilities Commission, the City also buys wholesale treated water from the Santa Clara Valley Water District at a rate of $1.97 per hundred cubic feet and which, as indicated above, is expected to increase at a rate of 9.3% annually. This too is an expensive option; however, at the residential rate of $2.62 per hundred cubic feet, it does allow the City to achieve a net revenue.

If the City were to propose a new rates-increase structure to cover these fee increases, there might well be political opposition. Average rate increases for 2014 were 5.2%, although the five-year average is 8.25%. This pattern compares unfavorably with the

period of 1996 to 2012, when water rates increased at an average rate of 4.9% annually. Nonetheless, given growing public awareness of the intensifying problems relating to drinking water supplies, it is possible that rate increases of up to 15% annually might be possible, and may even be advisable.

| Milpitas Minimum Water fee | Santa Clara Valley Water District Groundwater fees | Santa Clara Valley Water District Wholesale Treated water | San Francisco Public Utilities Commission |
|---|---|---|---|
| $2.62/hcf | $1.71/hcf<br>$0.11/hcf PG&E costs<br>$1.82/hcf<br><br>$0.80/hcf GAIN<br><br>+11.4% annual increase | $1.97/hcf<br><br><br><br>$0.65/hcf GAIN<br><br>+ 9.3% annual increase | $2.93/hcf<br><br><br><br>$0.31/hcf LOSS<br><br>+17% annual increase |

# Results

There is a good case for developing existing well sources into sources for construction water (non-potable). Such a project would be very limited in scope, and also inexpensive. However, uses for construction water are limited. The production of potable water is an infinitely valuable commodity. Therefore, it seems more cost-effective, over project and infrastructure lifetimes, to develop existing feasible *potable* sources such as the Pinewood Well (the Curtis Well is not yet a feasible potable water source; it will require treatment).

In addition to the Pinewood Well, new production wells can be drilled, but they are expensive ($3 million each). The hydrogeologist's examination of the geological structure beneath the City has resulted in a fairly good picture of where new wells should be installed if any significant available water is to be had from them. In order of preference, the following have potential to be good sites for new wells:

1. Starlite Park
2. Hall Memorial Park

There is a great argument, financially, for the City to construct and operate its own potable water supply wells. Although they might cost $3 million to construct, the cost and

fees of running a well are small when compared to the costs for purchasing treated water.

If a well were to be run at 1 million gallons per day or 3.07 acre-feet per day or 1337 hundred cubic feet per day, at an Operations and Maintenance cost of $0.11 per hundred cubic feet per day and a fee of $747 per acre foot (or $1.71 per hundred cubic feet), then the annual cost of O&M would be $890,731 including fees, and the available volume of water would be 488,005 hundred cubic feet per year. Over 40 year this amounts to $35.6 million for O&M costs with fees:

$$((3.07 \times \$747) + (1337 \times \$0.11)) \times 365\ days \times 40\ years = \$35,600,000\ O\&M\ and\ fees$$

Moreover, producing 1 million gallons (a conservative production estimate) per day from the City's own well(s) frees the City from purchasing water from Santa Clara Valley Water District or San Francisco Public Utilities Commission. This results in a $38.0 million in savings over forty years, from not buying water at $847 acre feet minimum cost:

$$3.07\ af/d \times \$847/af \times 365\ days \times 40\ years = \$38.0\ million\ in\ saved\ purchased\ water\ fees$$

If one subtracts the cost of well Operations and Maintenance from the cost of purchased water, that's $2.39 million in savings, roughly the cost of putting in a new well. So, the well pays for itself, provided treated water costs escalate faster than energy costs, and water source security is obtained:

$$\$38.0\ million\ in\ purchased\ water\ fees - \$35.6\ well\ operation\ O\&M\ and\ fees$$

$$= \$2.39\ million\ in\ savings\ over\ 40\ years$$

Furthermore, if a 1 million gallon per day well were to be run 365 days per year for 40 years, this would result in O&M costs of only $2 million, and there would be no groundwater fees to be paid to Santa Clara Valley Water District or San Francisco Public Utilities Commission:

$$1337\ hcf/day \times \$0.11\ O\&M/hcf \times 365\ days \times 40\ years = \$2\ million\ O\&M\ costs\ over\ 40\ years$$

Therefore, it would be beneficial to somehow do away with the groundwater withdrawal fee imposed on well pumpers by the Santa Clara Valley Water District. One possibility for this is the idea of a *recharge credit* agreement between the City and the District. A recharge credit is like a rebate for the water the City would produce with groundwater drawn from a well, earned by recharging the aquifer with a percolation/injection system

(See *Task 3: Surface Water Detention* for costs).

The Santa Clara Valley Water District groundwater withdrawal fee could potentially be done away with if an agreement with the District were to be gained. Full recharge credit is possible,
though not assured. Therefore, if a 75% (for example) credit for recharge (see *Task 3: Surface Water Retention*) were to be given by Santa Clara Valley Water District, this would yield $560,000 every year for 1,000 acre feet of recharge water.

$$1{,}000\ af/y\ \times \$747 \times 75\%\ = \$560{,}000\ per\ 1000\ af/year\ recharge\ credits$$

If suddenly, the annual cost of operations were only $292,000 (versus $890,731 O&M + fees above), this would result in a **lifetime (40 year) cost of $13.2 million**, far less than the **$35.57 million in O&M and fees** incurred by pumping a well without recharge.

$$\$890{,}731 - \$560{,}000 = \$330{,}000\ annual\ cost\ of\ running\ a\ well$$
$$\$330{,}000 \times 40\ years = \$13.2\ mil,\ lifetime\ cost\ of\ running\ a\ well$$

$$\$35.6\ mil,\ well\ operation\ O\&M\ and\ fees - \$13.2\ mil,\ well\ operation\ O\&M\ and\ 25\%\ fees$$

$$= \$22.4\ million\ in\ savings\ over\ 40\ years$$

Most telling of all however, is the amount of money saved by not purchasing wholesale water and instead pumping well water that is awarded 75% recharge credits.

$$\$38.0\ mil,\ in\ purchased\ water\ fees\ - \$13.2\ mil,\ well\ operation\ O\&M\ and\ 25\%\ fees$$

$$= \$24.8\ million\ in\ savings\ over\ 40\ years$$

All of these numbers are highly conservative in light of the fact that fees for both groundwater extraction and treated potable water will increase at a rate of at least 10% annually hereafter. Therefore, in terms of both water security and life-cycle cost-benefit, new groundwater wells are a good option for the City.

Lastly, we can show that:

$$1337\ hcf/day \times 365\ days \times 40\ years\ = 19.5\ million\ hundred\ cubic\ feet\ produced\ over\ 40\ years$$

Just pumping groundwater:

$3 *mil, capital cost of installing well and treatment* + $13.2 *mil, lifetime cost of running a well*

= $16.2 *million, lifetime cost over* 40 *years*

$16.2 *million, lifetime cost* ÷ 19.5*million hundred cubic feet produced* = $0.83 *per hcf*

With recharge credits:

$3 *mil, capital cost of installing well and treat.* + $35.6 *mil, lifetime cost of running well + fees*

= $38.6 *million, lifetime cost over* 40 *years*

$38.6 *million, lifetime cost* ÷ 19.5 *million hundred cubic feet produced* = $1.98 *per hcf*

# Conclusion

The City currently relies on a recycled water system for some irrigation purposes. The addition of new groundwater wells is advantageous because they not only provide for an increase in the water available for irrigation systems but also, with proper treatment, could increase the available supply of potable water. In addition, the reliance on importing outside sources of water would be reduced. The addition of Pinewood well would yield up to 2.5 million gallons per day and, following a comprehensive recharge program, additional capacity could be achieved by drilling new wells.

Starlite Park is an ideal place for the City to drill a well. In addition, any location in the western portion of the City that can be acquired for the purposes of well drilling would be appropriate. The following table lists a number of locations that are City owned parks and thus are possible locations for potential well sites. If each of these sites had a well pumping approximately 2.5 million gallons per day, potential reductions from wholesale distributors could be as much as 14 million gallons per day.

| **Potential Well Sites in Western Milpitas** |
|---|
| Starlite Park, Milpitas, CA 95035 |
| Hall Memorial Park, Milpitas, CA 95035 |

Of course, 2.5 million gallons per day is a lot to ask of any water source. However, if

yields of the Pinewood Well are considered indicative of yields of the lower groundwater aquifer in the southwestern corner of the City, this figure may be considered reasonable.

Each well would be providing water at contaminant levels lower than the maximum allowed and thus it is likely that no treatment would be necessary. If taste or odor problems arise, they can be abated by the use of simple, granular, activated carbon filters or by the addition of potassium permanganate as an oxidizer at a fraction of the cost of secondary contaminant treatment.

**Task 4: New Groundwater Wells, Implementation Plan**

**Possible Implementation Schedule:**

1. Engineering funding application for treatment at Curtis, blending at Pinewood and 2 new wells (April 2015 - Dec. 2015)
2. Engineering of on-site blending treatment vs Gibraltar treatment (Jan. 2016 - June 2016)
    a. Hire a consultant to implement the "Blending Study" at Pinewood Well to dilute hardness concentration. (Apr. 2016)
3. Engineering of Curtis well treatment for hardness (Mn) (Jan. 2016 - June 2016)
4. Engineering of site selection, test bore and construction of Well #1 (Jan. 2016 - June 2016)
5. Engineering of site selection, test bore and construction of Well #2 (Jan. 2016 - June 2016)
    a. Hire a well driller to drill pilot holes at each of the proposed specific sites. (Apr. 2016)
    b. Consult with a hydrogeologist to establish a more detailed evaluation of hydrogeologic conditions, together with water quality and access to the water distribution system, of specific sites based on pilot holes. (Apr. 2016)
    c. Hire an engineering consultant to design treatment and improvements for the Curtis Well. (June 2016)
    d. Hire an engineering consultant to design improvements for the Pinewood well, dependent upon results of blending study. (June 2016)
    e. Establish sites for new wells based on consultants conclusions and results of data from pilot wells. Obtain approvals and drilling permits. (June 2016)
6. Construction application for treatment at Curtis, blending of Curtis & Pinewood and 2 new wells (July 2016 - Mar 2017)
7. Construction for treatment at Curtis and 2 new wells (Apr. 2017 - Sept. 2017)
    a. Begin drilling new wells to a depth of 800 feet. (July 2017)
    b. Hire an engineering consultant to design improvements for the new wells, dependent upon results of water quality analyses and pump testing. (July 2017)
    c. Put contracts out to bid for construction of Curtis well treatment and improvements for all new/existing wells. (August 2017)
    d. Begin construction of Curtis well treatment and improvements for all new/existing wells. (September 2017)
    e. Complete construction of all treatment and well improvements. (December 2017)
8. Construct on-site or Gibraltar blending treatment and install of Pinewood generator and control (Apr. 2017 - Sept. 2017)
9. Permitting for Gibraltar, Curtis and 2 new wells (Oct. 2017 - Mar. 2018)
    a. Submit Permit Amendment Application to State Regional Water Control Board-Drinking Water Program. (January 2018)
    b. Complete permitting process and begin supplying water. (Mar. 2018)

**Costs:**

- Installation of additional wells (each producing an approximated 2.5 million gallons per day) will cost $350,000 each, at a rate of $74.80 per hundred cubic feet of daily production.
- Treatment at the Curtis Well should consist of ozonation with filtration and backwash, at a cost not to exceed $250,000 or $363 per hundred cubic feet of daily production, due to it's low capacity.
- Connection of any well to the distribution system could have a variable cost from a trivial amount up to $3 million dollars depending upon the pump station design.

**Benefit:**

The completion of existing wells or addition of new groundwater wells to the City potable water distribution system could result in a considerable decrease of imported water. If two new wells were constructed in addition to the Pinewood and Curtis wells, potentially 8.2 million gallons could be reduced from imported water purchases daily. However, it is most reasonable to assume 1 million gallons per day ($1337\ hcf/day \times 365\ days = 488{,}005\ hcf/yr$) from a single source for the purpose of cost optimization.

**Life Cycle:**

The life cycle of any well installation is approximately 40 years.

**Prioritization by life-cycle:**

1. Pinewood Well (this well is a high yield, clean well)
2. New wells (if properly constructed in appropriate areas, these wells should be high yield and clean too)
3. Curtis Well (this well is a low yield producer and has quality issues)

**Ease of Implementation:**

Planning and construction of new groundwater wells is a common and uncomplicated task. The implementation plan is long and involves many steps, but through careful planning the use of wells can be a very feasible water augmentation strategy.

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# Appendices

## *Appendix A1: 2014 HydroScience Pinewood Well Blending technical memorandum*

*"Pinewood Well meets all State and Federal regulations for public drinking water. However, the hardness level is greater than three times that of Santa Clara Valley Water District and over five times more than San Francisco Public Utilities Commission. The City used the Pinewood Well once and experienced a high volume of complaints from area residents due to hardness, taste, and odor.*

*Pinewood Well is located within Pressure Zone 1SF (see Figure 3). Customers within this zone receive potable water from San Francisco Public Utilities Commission under normal conditions. Delivery pressure in this area ranges from between 70 to 75 pounds per square inch (psi). In order to activate the well, maintenance staff manually turns the well on. The City does not currently have Supervisory Control and Data Acquisition (SCADA) to operate the well remotely. However, there is a Programmable Logic Controller (PLC) that could be used to facilitate basic automation control. Once activated, groundwater travels through a 12-in water main before it tees off into two eight-in water mains. Groundwater from Pinewood Well has the ability to serve not only Zone 1SF, but it can deliver water to Zone 1SC as well. Zones 1SF and 1SC are connected by zone valves located on Live Oak Court, Cedar Way, and at the intersection of Main Street and Able Street (see Figure 4). The pressure in Zone 1SC is slightly higher than Zone 1SF at the intertie points by about 5 to 10 psi. There are pressure regulating valves that allow San Francisco Public Utilities Commission water to automatically move to Zone 1SC if there is a pressure drop in Zone 1SC. Customers within Zone 1SC receive purchased water from Santa Clara Valley Water District. Customers in Zone 1SC to the west of Zone 1SF are primarily commercial and industrial customers; whereas, those to the east of Zone 1SF consist of a mix of commercial and high density residential customers.*

*Distribution and Blending Options*
*Option 1: Delivery of Groundwater to Zone 1SC Using Existing Pipelines*
*A flow control valve would be installed on the 12-in main leaving the well just prior to the tee connection to Lonetree Ct. and Greenwood Way Another flow control valve would be installed between the tee and the isolation valve on Lonetree Way in order to blend groundwater with San Francisco Public Utilities Commission supply. The City would be able to adjust the flows by adjusting the pilot on the flow control valves. The flow control valves would fix the flows coming out of Pinewood Well and the San Francisco Public Utilities Commission supply coming from Lonetree Ct. regardless of pressure. In addition, it would prevent reversal of flow. The flow would be forced to move towards Greenwood Way as shown in Figure 5. The well pump would have to have a discharge pressure slightly greater than Zone 1SC. This option would affect 20 parcels within Zone 1SF including Pinewood Park. These customers would receive the blended water before it goes to Zone 1SC at a slightly greater pressure.*

*If the City chose to blend Pinewood Well with Santa Clara Valley Water District supply, then the valve on Lonetree Ct. would be closed as well as the closed valves shown on Figure 5. Again, the well pump would have to be set at a higher discharge pressure than Zone 1SC. The 20 parcels would receive 100% groundwater at 340 mg/L of hardness and blending would occur after the pressure regulating*

*valve located at the end of Live Oak Ct. The pressure regulating valve may be able to regulate flow, so no additional infrastructure would be needed. This would have to be verified with O&M staff.*

*Option 1a: Delivery of Groundwater to Zone 1SC with New Transmission Main*
*This option would call for installation of a dedicated 12-in transmission main that would parallel the existing main shown in Figure 5a from the west side of the tee till it reached the 14-in main located on Live Oak Court. A new 6-in main would be installed and service connections would be transferred from the 14-in main to the new 6-in main for customers on Live Oak Court. The new 6-in main would connect to the existing main on Starlite Drive before the isolation valve. This would allow the existing 14-in main to be used as a transmission main. Flow control valves would have to be installed on each source of supply line. The estimated cost for this option is XXX.*
*San Francisco Public Utilities Commission water would blend with groundwater at a new connection point near the tee. The*
*blended water would then flow through the new transmission main and bypass all Zone 1SF customers. The water would then flow to Zone 1SC customers on the west side of Zone 1SF. These customers are primarily industrial and commercial. If Pinewood Well is blended with Santa Clara Valley Water District water, the flow control valve feeding San Francisco Public Utilities Commission supply would be in the closed position to prevent San Francisco Public Utilities Commission water from mixing with groundwater. This would allow 100% of the groundwater to travel through the transmission main, bypassing the 20*
*parcels and blend with Santa Clara Valley Water District supply at the pressure regulating valve located at the end of Live Oak Ct.*

*Option 2: Delivery of Groundwater to Isolated Service Area in Zone 1SF This option is illustrated in Figure 6. San Francisco Public Utilities Commission water from the east would be blended with groundwater and flow westward into the southern portion of Zone 1SF. Valves would need to be closed to prevent the blended supply from mixing with the San Francisco Public Utilities Commission supply coming from Lonetree Court. This would only require installation of two flow control valves. This assumes Pinewood Well has a variable frequency drive (VFD) in order to fluctuate flow based on demand. In addition, either one or both of the pressure regulating valves on Lone Oak Ct. and Montague Exp. would need to be adjusted to allow additional water to flow into the isolated area in the event demand exceed the well output. This would affect primarily residential customers who will see an increase of approximately three times the current hardness level. Option 3: Blending Groundwater with San Francisco Public Utilities Commission and/or Santa Clara Valley Water District Supply in Storage Tank prior to Delivery in Distribution System This option is considered not feasible. Since both sources of supply meet Title 22 regulations, there is no need to break head just to blend and repump the water into the distribution system. This alternative would have a high capital cost and annual O&M expense due to additional energy usage and infrastructure. It is believed that adequate blending can be achieved using flow control valves as described in Options 1 and 2.*

*Option Summary*
*Based on mass balance analysis, Pinewood Well (340 mg/L hardness) can be blended effectively with San Francisco Public Utilities Commission supply (57 mg/L hardness) to achieve the targeted hardness level of 120 mg/L to 150 mg/L. The flow range for Pinewood Well would be approximately 246 to 825 gpm depending on the size of the distribution main and the level of hardness targeted. Groundwater can be blended with Santa Clara Valley Water District to achieve the target range; however, the amount of groundwater used would be less (110 to 550 gpm) since Santa Clara Valley Water District supply averages 96 mg/L of hardness.*

*The most common treatment method for a flow range of 1,200 gpm is lime softening. Lime softening does not remove all the calcium and magnesium ions that make up the majority of hardness. The treated water would be left with a hardness of about 50 to 85 mg/L. At this level, the water can be delivered directly to Zone 1SF customers since the change in hardness would be minimal. Split treatment is another option if the City wishes to use a greater volume of groundwater. The ratio of the amount of groundwater to treat versus untreated groundwater would be the same as that shown in Table 3 since the treated groundwater would have the same levels of hardness as San Francisco Public Utilities Commission supply.*

*The change in hardness level would not be as noticeable in Zone 1SC as it would be in Zone 1SF. Options 1 and 1a provide a distribution route that would minimize or eliminate impacts to Zone 1SF customers. Option 1 uses the existing distribution pipeline; whereas, 1a provides a new dedicated transmission main. Both options describe blending alternatives in the event the City wishes to blend with San Francisco Public Utilities Commission or Santa Clara Valley Water District supplies. It is believed that blending can be effectively achieved using flow control valves, making blending in a storage tank unnecessary. Blending in a storage tank would require breaking pressure head and repumping back into the distribution system. This would not only add to the capitol costs of the options presented, but it would increase annual O&M expenditure as well due largely to ongoing energy costs needed to repump the blended supply. The most common potential customer impacts include soap scum; difficulty to lather; increase use of detergent and soap; and spots on glassware, dishware, and plumbing fixtures.*

*Table 5 summarizes the key aspects associated with each option.*

*Recommended Improvements*

*Flow profiling is recommended for the Pinewood Well to determine whether sections of the well casing are contributing to contamination or exhibiting clogging. This process will isolate any sections of the well that are clogged or transmitting contaminated or odorous water. The well could then be flushed using methods determined by the chemistry found in the well, and affected sections of the well could be sealed to lower contamination levels.*

**Table 1: Hardness of City Water Supplies**

| Year | Pinewood Well (mg/L) | SFPUC (mg/L) | SCVWD (mg/L) |
|---|---|---|---|
| 2013 | 340 | 53 | 96 |
| 2012 | N/A | 62 | 105 |
| 2011 | N/A | 57 | 88 |
| 2010 | 340 | - | - |
| **Average** | **340** | **57** | **96** |

*Recommendation*

*It is recommended that the City perform a hydraulic analysis of each option to assess the area that will be impacted; direction of flow; pressure requirements; and to confirm flows based on demand. Analysis should be performed using the steady state model as well as the extended simulation period if available for the following criteria:*

- *Max Day Demands*

*• Min Day Demands*
*• Peak Hour Demands*
*• Max Day with Fire Flow*

*Assuming, the results of the hydraulic modeling effort indicates there is no fatal flaw and depending on the urgency and the amount of supplemental groundwater needed, it is recommended that the City start with Option 1. Santa Clara Valley Water District Blend and notify affected customers prior to implementation. This option does not require additional infrastructure; therefore, it can be implemented immediately once customer notification has been satisfied. Customer outreach will help mitigate customer complaints. This option will have the greatest impact on 20 parcels; however, the largest user of the 20 parcels will come from the City's Pinewood Park (6,000 gallons per day for irrigation). Hardness does not impact irrigation users as much as residential users. Many customers irrigate in the late evenings or early mornings. The City may choose to operate the well only during this time frame to reduce the impact to consumers who use water for bathing and cleaning. If this strategy is used, the City could incorporate the schedule into outreach material.*

*The next phase of this approach is to begin installation of two flow control valves as per Option 1. San Francisco Public Utilities Commission Blend. It is estimated that design and construction of the two flow control valves would take approximately six months or less. The flow control valves should be strategically located so that the City can install a dedicated transmission main in the future as per Option 1a or the City may choose to bypass this option and proceed directly with Option 1a. Either way, this would increase the flow of groundwater and decrease the hardness to the 20 parcels in Zone 1SF. Customers in Zone 1SC will not see a significant change in hardness since the target level will stay the same. Since San Francisco Public Utilities Commission supply is fluoridated, customers in Zone 1SC will receive suboptimal fluoridation. Customers in Zone 1SC should be notified of this change.*

*If the City chooses to bypass Option 1. San Francisco Public Utilities Commission Blend and proceed directly with Option 1a. San Francisco Public Utilities Commission Blend using a dedicated 12-in transmission main, then the implementation time will increase from less than 6 months to approximately 6 to 18 months to allow adequate time for design and construction. This option would bypass the 20 parcels and provide the City with the greatest flexibility. The transmission main can be used to blend groundwater with San Francisco Public Utilities Commission or Santa Clara Valley Water District supplies without impacting customers in Zone 1SF. In addition, sending blended groundwater to Zone 1SC will help the City better address the 20% reduction request from Santa Clara Valley Water District.*

*San Francisco Public Utilities Commission is only requesting a 10% reduction and the City of Milpitas has an Individual Supply Guarantee of 9.23 mgd with an interim supply allocation of 8.96 mgd. The average annual San Francisco Public Utilities Commission demand has been approximately 6 mgd. Thus, there appears to be more reliability in San Francisco Public Utilities Commission water supply at this time versus Santa Clara Valley Water District. Therefore, Option 2 is not recommended at this time. A storage tank and treatment system are also not recommended due to higher capital and O&M costs."*

**Appendix A2 - Aquifer Map**

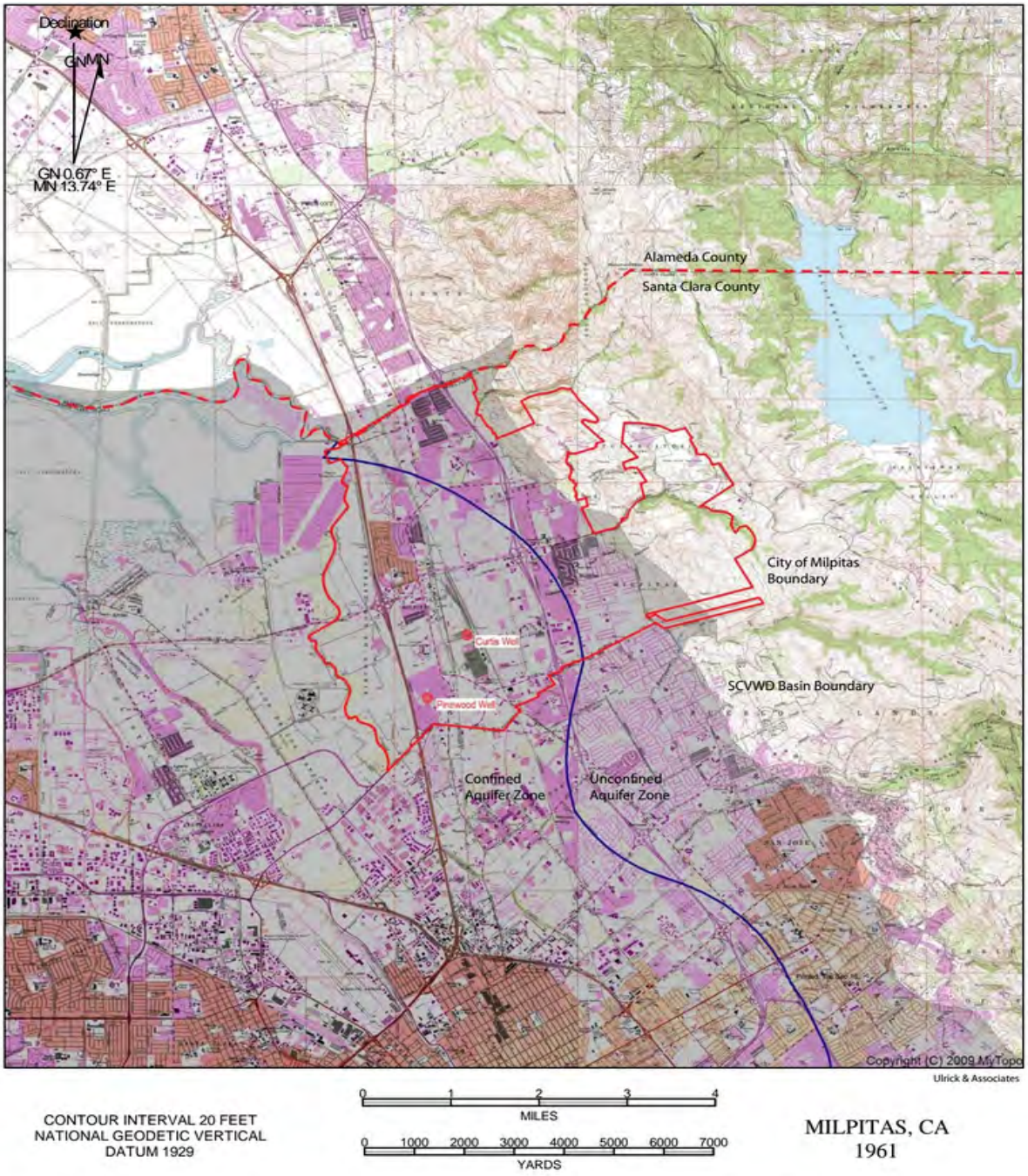


Figure 1. Topographic map showing SCVWD groundwater basin charge zone, confined aquifer boundary, City of Milpitas boundary, and Curtis and Pinewood wells.

***Appendix A3 - From Correspondences with Ulrick & Associates:***

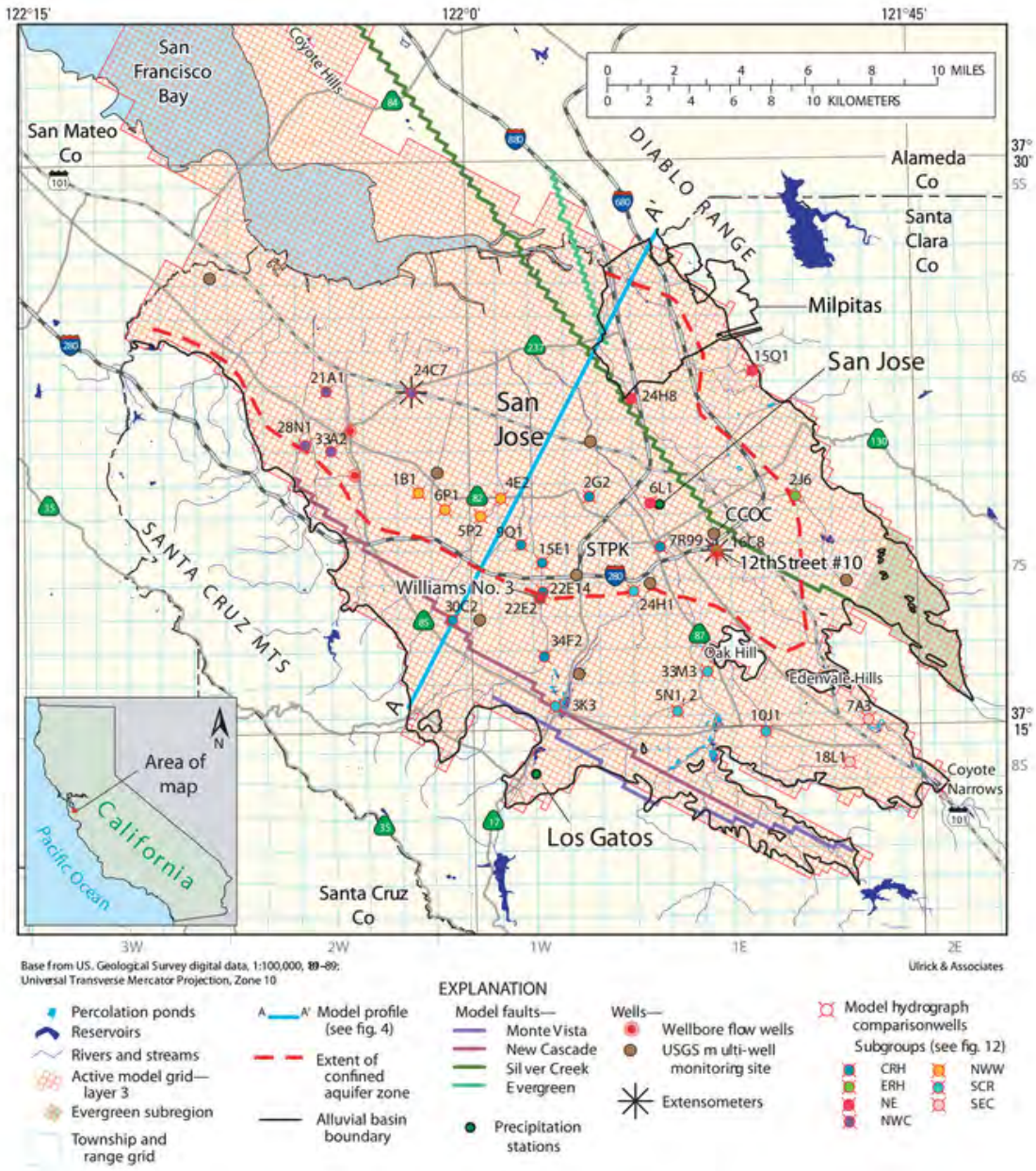


Figure 2. USGS Groundwater flow model area, model grid, selected water-level and compaction sites, confined aquifer boundary, City of Milpitas boundary, and geologic cross-section line A-A'.

Source: Hanson and Faunt, 2004

***Appendix A4 - From Correspondences with Ulrick & Associates:***

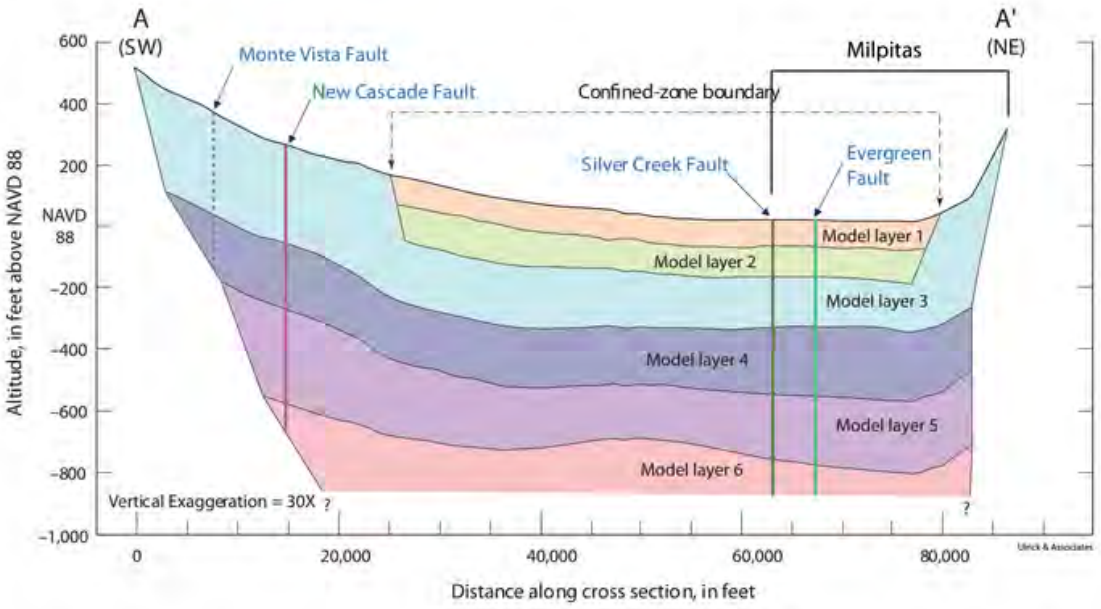


Figure 3. Cross-section A-A' showing groundwater flow model layers, geologic features, confined zone boundary, and City of Milpitas limits. See Figure 2 for location of section.

Source: Hanson and Faunt, 2004

XC is cross section A-A', location shown on Figure 1. The primary water-bearing depth intervals are

- Layer 3 (150 to 300 feet deep)
- Layer 4 (300 to 500 feet deep)
- Layer 5 (500 to 800 feet deep) is a possibility
- Layer 2 is a low conductivity aquitard (clayey layer)

The Silver Creek and Evergreen faults are shown to be outside of the city boundary. The east end of the cross section is the Hayward Fault.

Layers 3, 4, and 5 are shown in plan view. The main area of interest is horizontal hydraulic conductivity shown in the upper left corner of each figure. In general, conductivity (K) increases to the south and west within the limits of the city.

- Layer 3 K = 1 to 114 ft/day
- Layer 4 K = 1 to 60 ft/day
- Layer 5 K = 1 to 40 ft/day

The Pinewood Well K = 100 to 200 ft/day in layers 3 and 4. It is located near the southwest corner of the city. Generally, favorable sites for a well are in the south and west parts of the city and 150 to 500 feet deep."

# *Water Solutions Inc.*

## MEMORANDUM

**Date:** 27 March, 2015
**To:** Steven Machida, Milpitas City Engineer
**From:** Water Solutions, Inc. - Consultant
**Subject:** **Task 5: Surface Water Rights Acquisition**

## Summary

The City of Milpitas (City) currently holds no “water rights”. Water rights, as applied to *surface water*, is a complicated topic with a number of legal implications. Unless these rights are asserted by a property owner, despite being entitled to an owner, they can be “lost” and thereafter “found” by another party, who may then claim them. It is these lost rights that the City should be looking for, if it decides to embark on a quest for water rights. To identify potential rights, the City should undertake a systematic search to identify any unclaimed water in the Milpitas area.

Acquiring, through legal acquisition, “lost” water rights could cost $2 million or more, and could take up to ten years. Purchase or lease of water rights could be done less expensively and over a shorter period of time.

Appropriative water rights are rights held by persons who do not hold the property appurtenant to the body of water, and it is these appropriative rights (which are more junior than riparian rights) that are commonly bought and sold. The purchase or lease of rights is a painstaking and legally costly endeavor, and should an environmental concern arise, a time consuming one too.

“Wheeling” refers to the process of moving water from one region to another using pipes owned by another entity. For example, to use water from East Bay Municipal Water District, the City would wheel through the City of Hayward and Alameda County Water District. Wheeling is less costly than installing a dedicated pipe, but it still has cost issues.

Surface water throughout Milpitas should be checked for available water rights (See technical memorandum, Task 3: Surface Water). If available, these rights could be purchased and the water used for construction water, recycled water or potable water.

However, a surface-water treatment plant could cost as much as $75 million at the outset, and incur a significant cost annually in operations and maintenance, including salaries for well-trained operators. Once the water is treated, it must be directed to its consumers, which would also incur significant costs. Water wheeling could be an effective tool to provide surface water to the City, should the available water be some distance away.

However, during this time of drought and unparalleled need, it is unlikely that the City would find a surface water seller, even though only 10 million gallons (or 30.5 acre-feet) of water is needed daily.

Water Solutions, Inc. has discovered the possibility of purchasing unused treated water allotment and our recommendation is to pursue this option.

# Data

If water is taken from a lake, river, stream, creek or from underground supplies for a beneficial use, the California Water Code requires ownership of a water right. A water right is a legal entitlement authorizing water to be diverted from a specified source and put to beneficial, non-wasteful use. Water rights are property rights, but their holders do not own the water itself. Instead, they possess the right to use it. The various types of water rights are discussed below.

California law distinguishes between surface water and groundwater. Here, we are discussing the acquisition of surface water. Acquisition can be through:

- riparian water rights (held by an entity whose property is appurtenant to that source)
- appropriative water rights (rights to divert water from a surface water source for use on non-riparian land)
- prescriptive water rights (acquired through the adverse possession of someone else's water right; granted by court)

Generally, due to the limits and specific requirements for ownership of riparian and prescriptive water rights, municipal surface water supplies are derived from appropriative rights. Since 1914, the date of the *Water Commission Act,* surface water rights have been administered by the State Water Resources Control Board, and approval is required before using surface water. An appropriative water right that was acquired before 1914 (pre-1914 water right) does not require a water right permit unless water use has increased since the acquisition date.

The City currently has wholesale purchasing contracts for treated water (San Francisco Public Utilities Commission and Santa Clara Valley Water District Water Supply Agreements), which should not be confused with water rights. The agreement with the San Francisco Public Utilities Commission, for example, states only that the City is

guaranteed a minimum delivery of 5.341 million gallons per day of treated water from San Francisco Public Utilities Commission (Water Supply Agreement, 2009). Otherwise, the blanket agreement only goes on to stipulate the financial burdens of the wholesale customers and of the Commission itself.

Similarly, the agreement with Santa Clara Valley Water District only stipulates that the District will provide a supply to the City based upon the prospective delivery schedule, which is updated annually. The District is agreeing to deliver peak demand quantities lower than those that existing standard peaking factors would require; however, the agreement for this supply of water is available until 2054. This is, once again, a "Water Supply Agreement," not a lease or transfer of water rights. The agreement between South Bay Water Recycling and the City is similar, operating under a prospective deliveries schedule. Once more, this arrangement does not represent water rights – only contractual rights to supplied water.

# Methodology

The information in this memo was gathered from:

- California Code of Regulations
- California Water Code
- The City of Milpitas Public Utilities, staff and records
- Leroy Jones, Distribution Manager for Placer County Water Agency
- San Francisco Public Utilities Commission
- Nathan A. Metcalf, Senior Counsel at Hanson-Bridgett LLP, attorneys at law

The subtasks and specific questions addressed in this memorandum include the following:

A. Discuss water right methods, including banking/transfers, idea of new development being required to obtain its equivalent water rights, etc.
B. Provide examples of various water rights
C. Discuss expansion of inter-tie connections with adjacent water suppliers for temporary short-term conditions
D. Identify most practical water right method, and related implementation plan and summarize in feasibility section

Legal and financial considerations will be addressed at the end of "Methodology" below.

There will be a final Task 5 Implementation Plan Table at the end of this memorandum. This will define an implementation schedule, compare cost and benefit, life cycle of plan and ease of implementation.

## A. Discuss water right methods, including banking/transfers, idea of new development being required to obtain its equivalent water rights, etc.

Generally, surface water may be acquired by:

- new appropriation
- purchase or change in an existing water right
- water transfers and contractual agreements
- water wheeling

For certain purposes, a water right is treated as a real property right, which may be sold and/or transferred. Water rights in certain watersheds are subject to adjudication by the court or curtailment by the State Water Resources Control Board.

**New Appropriation**

Where an unappropriated water is available, a new water right may be established by filing an *Application to Appropriate Water* with the California State Water Resources Control Board. Appropriation is a complicated, multi-staged process with layers of environmental review and regulatory oversight. The following analysis provides a general overview of the process.

*Stage 1 - Application*

For the application stage, an applicant must:

- file a fully completed water right application with the State Water Resources Control Board - Division of Water Rights
- pay all required fees
- provide a Water Availability Analysis – information to allow the State Water Resources Control Board to determine if there is unappropriated water available for the project
- make a No Injury Determination – show that the proposed project would not deprive anyone who has a higher priority water right of the use of water under that right
- annalize the Public Trust Doctrine – show that the proposed project will not harm public trust resources (such as fish, recreation, and navigation uses)
- show that the proposed project is in the public interest

*Stage 2 - State Water Resources Control Board and California Environmental Quality Act Review*

In granting an application, the State Water Resources Control Board must consider the impacts of the project on water quality and the environment, under the *California Environmental Quality Act*. In addition to a *California Environmental Quality Act* review, water projects often include other environmental reviews and permitting requirements,

including:

- 1600 Certification – *Streambed Alteration Agreement* from California Department of Fish and Wildlife
- Fish bypass flows – California Department of Fish and Wildlife
- *Clean Water Act* 404 Permit – U.S. Army Corps of Engineers (to protect from the effects of construction activity in waterways)
- *Clean Water Act* 401 Certification – Regional Water Quality Control Board (diversion project will not violate California water quality standards)
- *Endangered Species Act* Issues:
    - *California Endangered Species Ac*t (if the project has the potential to harm a State-protected species)
    - U.S. Fish and Wildlife Service under the federal *Endangered Species Act* (if the project has the potential to harm a federally-protected species)
    - National Marine Fisheries Service under the federal *Endangered Species Act* (if the project has the potential to harm a federally protected anadromous species).

*Stage 3 - State Water Resources Control Board Division of Water Rights Approval Period and Public Review*

The State Water Resources Control Board Division of Water Rights advises that it may take three to four years to obtain a permit. However, there are a number of obstacles which could complicate, and therefore prolong the permitting process. In addition to a potential challenge, applications must be publicly noticed, and any interested person may file a written protest against approval of the petition claiming that approval of the petition would:

1. Interfere with prior water rights
2. Have an adverse environmental impact
3. Not best serve the public interest or public trust.
4. Be contrary to law
5. Not be within the jurisdiction of the State Water Resources Control Board

If unresolved, such a protest could end up in an administrative hearing before the State Water Resources Control Board, with a potential appeal to Superior Court.

*Stage 4 - State Water Resources Control Board Issues Permit*

If the State Water Resources Control Board approves the application, a water right permit is issued, which will contain specific permit conditions. The permit allows development of the water supply project and the taking and use of the water.

*Stage 5 - State Water Resources Control Board Issues Water Rights License*

After the project is fully developed and the water put to use, the State Water Resources Control Board will determine how much water is being beneficially used and will issue a water right license. The water right license is a vested right that confirms the actual use of water.

**Purchase and Change of an Existing Water Right**

In addition to filing for a new surface water appropriation, water rights can be purchased with a change in ownership and use. However, any change in the purpose of use, place of use, or point of diversion, requires the filing of a Petition for Change and State Water Resources Control Board approval. The Petition for Change process is similar to an application for a new appropriation, and the State Water Resources Control Board must make a finding that there is no injury to other water users and the change is not counter to the State's public trust obligations. A Petition for Change also requires a *California Environmental Quality Act* review, environmental permits and authorization (as described above), as well as being subject to a protest by any interested party.

Pre-1914, “senior” water right holders are not required to petition the State Water Resources Control Board to change the place of use under their right to transfer water. However, pre-1914 water rights are subject to the no injury rule and public trust analysis, and a complaint may be brought by a party injured by the change.

Proposals to move water out of a watershed are governed by specific area-of-origin laws, which seek to reassure users of water in the geographic area where such water originates, that their water supply needs will be protected from any impacts of exporting water out of the area of origin. Further, a municipal water supplier who enters into another watershed for the purpose of taking, diverting or transporting water for use by the municipality may be liable for damage caused to any property, business, trade, profession, or occupation by the diverting or transporting of water from that watershed (Water Code § 1245.)

**Water Transfers and Contractual Agreements**

A water transfer results in a reallocation of water among water users, providing flexible water allocation and use. The City’s Urban Water Management Plan requires a description of the opportunities for exchanges or transfers of water (Water Code §10631(d)). There are a number of types of water transfers, which are generally grouped into short and long-term transfers. A short-term transfer is any transfer of one-year or less; a long-term transfer is any transfer longer than one year.

Transfers may be surface water transfers or groundwater transfers.

For surface water transfers, two types of surface water supplies may be transferred:

- first is a supply where the entity holding the water right will transfer that supply or a portion of that supply.
- second is a supply where an entity contracts for the water supply but does not hold the underlying water right and wishes to transfer that supply or a portion thereof (middleman).

For groundwater transfers, there are three types, namely:

- use of groundwater in lieu of surface water
- transfer of banked groundwater
- direct transfer of groundwater

The most common types of water transfer are:

- crop Idling (leaving idle land that otherwise would have been planted in order to transfer the water thus conserved)
- groundwater Substitution (pumping groundwater for use in the seller's service area and transferring the surface water that the seller otherwise would have diverted)
- reservoir Reoperation (releasing surplus storage for transfer)

The California State Water Resources Control Board - Division of Water Rights manages the Water Transfers Program. The State Water Resources Control and the U.S. Bureau of Reclamation have developed procedures to assist in the processing of water transfers proposed by local or private entities. Under the Water Supply Agreement with the San Francisco Public Utilities Commission, priority will be given for the use of facilities to accommodate transfers by wholesale customers.

A water transfer must not:

- Injure other legal users of water
- Unreasonably impact fish, wildlife or other instream resources
- Not unreasonably impact the economy of the area from which the water is developed. Transfers that move water across the Sacramento/San Joaquin Delta (Delta) are difficult to complete due to operating restrictions in the Delta related to water exports and water transfers based on:
    - Water Right Decisions and Orders issued by the State Water Resources Control Board
    - Water quality objectives
    - Endangered/threatened species issues.

These restrictions are comprehensive and complicated.

**Water Wheeling**

As mentioned above, the wheeling of water is a process wherein one entity is delivered water via the transmission and distribution mains of another entity, in order to supply the customers of the first entity. For example, if a county owns water that is allocated to certain customers, but does not have any mains reaching those customers, it may be possible for the county to "wheel water" through a community water system that lies between the supply and the customers, even if that community water system is not owned by the county.

The City of Roseville is a part of Placer County, in California. Placer County has customers throughout the county. However, Roseville is its own water supplier. The county and the city have worked out an agreement where the customers of the county that are on the far side of Roseville receive water delivered from the county via the Roseville distribution system (Jones, 2014).

This is an uncommon arrangement, but it has been ongoing continuously since 2004. Milpitas could set up a similar agreement with any of six or seven nearby water systems that may have available water to sell to the City. Of course, this arrangement would be contingent on the willingness of the wheeling water systems to pass this purchased water through their systems to Milpitas.

This is not an inexpensive proposition. A preliminary estimate places the cost of wheeling water somewhere between that of new recycled water lines and desalination. These costs would include:

- legal fees
- permitting costs for a Water Supply Permit Amendment
- wheeling fees
- actual cost of purchasing the water

## B. Provide examples of various water rights

*Riparian water rights* are rights to water in a surface water source that are held by the entity whose property is appurtenant to that source. A riparian water right is a right to use the natural flow of water on riparian land. Riparian land is land that touches a lake, river, stream, or creek. A riparian water right holder may consume a fixed percentage of water flow directly from a surface water source. For example, a farmer would be able to water his fields using a pump and an intake directly in the source water; however, that farmer would not be allowed to dam the source or otherwise impede its flow. A riparian right is limited by reasonable beneficial use.

*Appropriative water rights* are rights to divert water from a surface water source for use on non-riparian land. Many of these rights date back to the days of the California Gold Rush and, as such, are difficult to establish. As discussed above, after 1914, the date of the *Water Commission Act,* appropriative rights are administered by the State Water Resources Control Board, and approval is required before using the water. An appropriative water right that was acquired before 1914 (pre-1914 or “vested” water right) does not require a water right permit unless water use has increased. Priority of use depends on seniority of the water right: “first in time is first in right”. Therefore older rights are more senior than younger ones, and take precedence.

*A prescriptive right* is a right acquired through the adverse possession of someone else's water right, that is, a right obtained through the uncontested use of a water right held by another entity for a period of five years or more. Prescriptive rights are difficult to obtain and can only be granted by a court.

*Reserved water rights* are very rare. They refer to those waters set aside by the federal government when it reserves land for the public domain. Federally reserved water rights are important because they can take precedence over individual water rights that are filed at a later date. For example, Pueblo rights are historical rights from the times of the Spanish and Mexican governments in California. These rights are not lost if they are not used, and are superior to riparian and appropriative rights. Only Los Angeles and San Diego retain these rights presently.

## C. Discuss expansion of inter-tie connections with adjacent water suppliers for temporary short-term conditions

In addition to its connections with Santa Clara Valley Water District and San Francisco Public Utilities Commision, the City has interties with Alameda County Water District to the north and San Jose Water Company to the south. Additional interties would allow the City to purchase additional water from Alameda County Water District and San Jose Water Company. San Jose Water Company, a private company, sources its water as follows: 40% is groundwater, 10% is surface water from the Santa Cruz mountains, and the remainder is purchased from Santa Clara Valley Water District.

According to Section 81460 of the Water Code, Alameda County Water District is allotted 15,709 hundred cubic feet or 11.8 millions of gallons per day from the San Francisco Public Utilities Commission. Alameda County Water District uses 8.96 millions of gallons per day (or 76%) of this water for 20% of its total demand of 43.5 millions of gallons per day. In contrast, Redwood City, for example, is allotted 15,753 hundred cubic feet or 11.8 millions of gallons per day from the San Francisco Public Utilities Commission. Alameda County Water District uses 9.06 millions of gallons per day (or 77%) of this water for 93.7% of its total 9.67 millions of gallons per day demand. These figures show that Alameda County Water District is comparatively water-rich in comparison with other Bay Area water districts.

If a short-term or emergency supply were needed, the Alameda County Water District interties, both of which are 8-inches in diameter, could each suffice to supply the City with approximately 2.3 millions of gallons per day per day, thus providing 4.6 millions of gallons per day, which is nearly half of Milpitas' average demand of 10.12 millions of gallons per day. If more interties were constructed and connected, it would be possible to purchase an even higher volumetric flow rate from Alameda County Water District,

should the need arise. In fact, discussions with Alameda County Water District management have revealed that the district is indeed interested in selling its additional capacity to the City. Alameda County Water District is interested in recouping lost revenue due to conservation by its consumers.

## D. Identify most practical water right method, and related implementation plan and summarize in feasibility section

The best option, from a legal standpoint, for the City to obtain water through an acquisition will depend on the geographic, environmental, and political setting of the water right in question. The City would have the most control over the water if local water was available and the City could acquire it as either unappropriated water (water available for appropriative right) or as pre-1914 (vested) water rights available for purchase (e.g., old agricultural rights).

The preliminary water sources reviewed should be determined from the technical memorandum provided, see *Task 3 - Surface Water Detention* as well as *Task 4 - New Groundwater Wells*. A list of the major surface water features throughout Milpitas are labeled, as well as possible groundwater extraction locations.

The possibility of a new appropriation would depend on whether unappropriated water is available at the source. Further, any coastal stream or source that may impact a coastal stream could have endangered species issues (e.g., red legged frog, steelhead trout, etc.), which would impact the available water by requiring the dedication of water for environmental resources (e.g., mandatory fish flows). In addition, environmental interests might protest/challenge a new appropriation if there is potential for environmental impacts. Purchase of original longstanding water rights is advantageous; original longstanding water rights will have no contestant ownership issues, minimizing any potential claim of injury to an existing water rights owner. Nevertheless, any environmental issues associated with the required change could lead to a protest or *California Environmental Quality Act* challenge.

Purchasing a water right outside the watershed poses additional complications:

1. First, environmental and civil protections for the area of origin must be considered.
2. Second, the ability to use the water depends on contractual agreements to move the water to the service area. Particularly troubling is moving water out of, or through, the Delta. Transfer of a water right requires a willing seller and also requires contractual agreements to move the water.
3. Finally, water transfers are regulated by the State Water Resources Control Board and are subject to protest/challenge, as well as generally requiring *California Environmental Quality Act* review.

## Legality

As described above, acquiring water rights is a complex and complicated, multi-staged process with layers of environmental review and regulatory oversight. The legal issues involved in any specific acquisition project can be influenced by the:

- type of water right involved
- nature of the project
- physical and environmental setting
- prevailing political views

Before initiating a water acquisition project, issues relating to permitting and regulatory compliance should be fully analyzed and potential legal challenges should be identified.

## Finances

The legal costs of pursuing a water right depend on the particulars of the situation, the permits required, the extent of the environmental review, and the political setting (i.e., are protests likely to be filed). Cost estimates for acquiring a water right are as follows and amount to approximately $1.7 million (Metcalf, 2014):

- research for available water rights: $3,000,000
- legal fees: $65,000 – $500,000+
- government permitting fees: $2,150+
- Consultant fees: ~$100,000
    - water Availability Analysis
    - no Injury Determination
    - analyze the Public Trust Doctrine
    - show that the proposed project is in the public interest
- appeal of Water Board's Decision (possible): $50,000 – $200,000
- *California Environmental Quality Act* Consulting fees (possible): $30,000+
- government *California Environmental Quality Act* fees (possible): $6,500+
- Endangered Species Act - Habitat Conservation Plan: $300,000+
- Resolution of Protest, legal fees (possible): $200,000 – $600,000+
- actual cost of purchase water rights, per acre-foot $40 – $250

Additional costs associated with water rights acquisition relate to treatment and transport. Surface water treatment of 10 million gallons per day could be accomplished with a package plant system costing potentially $75 million or more. This means the total capital cost of surface water acquisition and treatment is $76,700,000.

$$10\ million\ gallons/day = 10{,}337\ hundred\ cubic\ feet/day$$
$$10{,}337\ hcf/day \times 365\ days = 4{,}880{,}050\ hcf/yr$$

Operations and maintenance costs could be significant. The City of Fresno estimates an annual cost of $2.9 million for four operators at a 30 million of gallons per day surface water treatment plant (Fresno 2008). Maintaining a staff of surface water treatment operators for 24 hours a day is not inexpensive, as surface water treatment requires a T-3 level operator. Therefore the total capital cost for Operations and Maintenance of a 10 million gallon per day plant is approximately $1 million annually.

$$(\$76,700,000 + (\$1\ million \times 50)) \div (4,880,050\ hundred\ cubic\ feet\ saved\ per\ year \times 50\ years) = \ldots$$
$$\ldots = \$0.52\ per\ hundred\ cubic\ feet$$

Transport of treated water would require right-of-way acquisition and many millions of dollars of City-owned pipeline extending from the treatment plant to the City distribution system. Alternately, water could be "wheeled" through water districts that lie in between the treatment plant and the City distribution system. The cost of wheeling water is undetermined, but is likely much less than building a transmission main; however, this approach requires the cooperation of neighboring water utilities.

Of course, the option of acquiring water rights depends on the availability of nearby water, see technical memorandum *Task 3 - Surface Water Retention*. However, it cannot simply be assumed that water rights will be readily available, as needed, and planning is required.

# Results

It seems clear that the potential availability to possess water rights, while limited, is very powerful. If a water right can be found that could be held by the City, the City should make all possible efforts towards acquiring that right.

The costs and complexities of acquiring water rights are significant. However, the potential for payoff is quite great if recharge credit can be gained from the Santa Clara Valley Water District (see *Task 3: Surface Water Detention*), or if the necessary water quantity and investment funds are available for the construction of a Surface Water Treatment Plant.

# Conclusion

If acquiring new water rights is determined to be a cost effective alternative for the City, the first step is searching for available rights in the area. A hydrogeologic assessment of

local stream flows – historic, present and future – would be next. The costs and complexities of transport of water from distant sources are great enough to disinterest most communities from pursuing this avenue of water augmentation.

The best water rights to pursue would be old, unused agricultural rights or existing, senior rights. Compared to other options, these rights would bring fewer possibilities of protests based on environmental concerns.

Once an acceptable appropriative right has been identified as suitable for purchase, the treatment and transport of the water to Milpitas must then be considered. The cost of treatment is potentially high, but the cost of transporting raw water to a treatment plant in Milpitas is potentially much higher. To effectively treat 10 million gallons per day, which is the City's average demand, a small surface water treatment plant would need to be constructed, ideally, on City-owned land near the water source. If these are not immediately appurtenant to the City, this water could then be piped to a local community and "wheeled" to Milpitas through other water districts' distribution systems. This approach would probably involve training and maintaining a surface water treatment personnel group (an outside contractor), although treatment could potentially be conducted in-house by trained water treatment plant operators, or even contracted out to another community for operations.

Alternately, and perhaps a better option, would be the construction of a relatively inexpensive wetlands-style series of retention ponds in the unconfined aquifer zone east of the City in the hills. This could provide a percolating groundwater recharge facility that could prove to be beneficial to the City, which is looking for its own sources of water, but which also needs the cooperation of the Santa Clara Valley Water District (See *Task 3: Surface Water Detention*).

In summary, surface water rights acquisition is a very complicated option for water augmentation, involving many parties and other potential elements. This option is also expensive. Its is likely to cost $2 million dollars at the least, and potentially much, much more. Last, the time required to acquire water rights, construct treatment and establish transmission to the City could be 10 years or more.

## Task 5: Water Rights Acquisition, Implementation Plan (NOT IMPLEMENTED)

**Implementation Schedule:**

1. *Obtain water rights for the use of surface water for construction purposes, see Task 3: Surface Water Detention for additional information, including implementation plan (July 2015)*
2. *Hire a consultant to look for available water rights in this order of preference: Senior appropriative water rights; Old agricultural appropriative rights (1 Jan. 2016)*
2. *Hire a consultant to prepare application for water rights, including all supporting documents (1 May 2016).*
3. *File a fully completed water right application with the Division of Water Right (1 June 2016)*
4. *Pay all required fees (1 August 2016)*
5. *Commence environmental review and permitting requirements (1 September 2016)*
6. *Finalize environmental review and permitting requirements (1 December 2018)*
7. *Open talks with other agencies for treatment and "wheeling water" (1 June 2015)*
8. *Finalize contract documents for surface water detention and/or surface water detention (1 September 2015).*

**Costs:**

Implementation of a surface water rights acquisition program could cost $1,700,000 or more in addition to the annual costs. Transmission of raw water would cost many millions of dollars for pipeline or canal, so water would need to be treated with a surface water treatment plant costing at least $75 million, and then transmitted via "water wheeling" or pipeline. "Water wheeling" would cost potentially hundreds of thousands of dollars, but would be approachable in annual cost.

- Total capital cost of surface water acquisition and treatment is $76,700,000.
- Total operations and maintenance cost of surface water acquisition and treatment is $1 million annually.

**Benefit:**

- Water rights acquisition would allow the City to be able to cease purchasing water from wholesalers entirely. Annual water transfers via "water wheeling" would be equivalent and would allow the city to avoid treating surface water, while purchasing from other more desirable parties.
- Approximately 10 million gallons per day of treated water (or 4,880,050 hundred cubic feet per year).

**Life Cycle:**

The life cycle of a water rights contract is effectively unlimited, dependent only upon the availability of the water in question and the continued interest of all parties.

**Prioritization by life-cycle:**

| |
|---|
| 1. Senior water rights (least likely to be protested) - less time until acquisition<br>2. Old agricultural water rights (more likely to be available) - longer timeframe |
| **Ease of Implementation:**<br>Planning for and the acquisition of water rights is a complicated and uncommon event involving the execution of multiple contracts over the course of as many as ten years. |

# List of References


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# *Water Solutions Inc.*

## MEMORANDUM

**Date:** 27 March, 2015
**To:** Steven Machida, Milpitas City Engineer
**From:** Water Solutions, Inc. - Consultant
**Subject:** **Task 6: Desalination**

## Summary

The allure of desalination is the ability to create a near-endless supply of water that is resistant to drought. However, the immense costs of brine disposal, operating costs, up-front capital investment and environmental concerns are enough to make desalination the most costly of all the treated waters available. However, desalination is still a viable option for a long-term augmentation method or for a back-up supply; especially with collaboration amongst neighboring agencies. Also, a system with a properly designed pretreatment system, as well as treating brackish groundwater (as compared to San Francisco Bay waters), can drastically reduce operating costs.

The infrastructure and the operating costs required to run a desalination facility are significant. The reverse osmosis membranes and facility infrastructure tend to have a short service life. Also, the high disposal costs of the brine water (the extra-salty water leaving the reverse osmosis unit), high energy costs, and membrane replacement costs results in a high life cycle cost.

Similarly challenging is the availability of land and intake waters for the construction and operation of a desalination facility. The distance of the City of Milpitas to the actual waters of the Bay presents a challenge, as do the capacity limitations of the upper aquifer, from which brackish water could be drawn. It is therefore important to explore all of the available options when deciding whether to pursue desalination for water augmentation and whether to explore partnership options with regional projects.

The legal hurdles for establishing a desalination facility can also be considerable. There are *seventeen, or more, potential legal implications, each of which may require attention before a desalination plant can begin operation.*

Using brackish groundwater, where available, is a more energy-friendly alternative to seawater desalination and could potentially be a more cost effective approach to augmenting water supplies than seawater desalination. This is due to the reduced energy costs to treat the water, lower disposal costs of brine (the concentrated salt water generated by desalination) and the lower operating pressures required to treat brackish water. Brackish water is classified as approximately 1,000-5,000 parts per million total dissolved solid, while seawater contains upwards of 40,000 parts per million total dissolved solid. Using brackish groundwater sources requiring low-pressure filtration systems (or reduced pressure reverse osmosis), could be a feasible plan to augment available water sources through desalination. By forming partnerships with neighboring communities, sustainable sources of brackish water can be used, energy costs can be reduced and investment costs can be shared.

Forming partnerships with neighboring communities for large, regional desalination plants or locally-run brackish desalination plants is likely the best solution to provide water source reliability and augmentation without the burden of overwhelming investment costs. Due to limited brackish groundwater sources, the City of Milpitas may not be ideally located for a desalination plant or a brackish water treatment plant. However, opportunities for partnerships and interagency cooperation should be encouraged. Coordinating or partnering with Bay Area regional desalination water projects when available should be investigated, as opportunities arise.

# Data

The information for this memo was gathered from water resource literature, journals, peer-reviewed online articles, California desalination case-studies, public records and from Glenn Reynolds (Principal at Water Solutions, Inc.). Additional sources of information were gathered by contacting agencies involved in water desalination, the U.S. Environmental Protection Agency website and attending seminars relevant to this topic. Also, design plan summaries for various desalination projects were compared throughout California for quantity estimates.

# Methodology

The methods used to determine the feasibility and recommendations for desalination in this memoranda include the following: Referencing water resource literature, journals and online articles for relevance to the construction of a desalination facility for Milpitas. Desalination case-studies throughout California were also compared for their relevance and various water agencies were contacted for additional information. Also, design plan

summaries were compared for various desalination projects throughout California for quantity estimates. This data was used to determine the applicability, costs and permitting requirements for desalination and brackish water treatment for the City of Milpitas; as well as the specific topics as follows:

A. Identify preliminary regulatory compliance requirements
B. Describe operational/physical parameters of desalination processing
C. Identify necessary infrastructure for well operation
D. Discuss ownership, participation/partner aspect
E. Identify current regional projects underway
F. Provide operational/physical parameters and estimated reductions of consumptions

Legal and financial considerations will be addressed at the end of "Methodology" below.

There will be a final *Task 6 Implementation Plan Table* at the end of this memorandum. This will define an implementation schedule, compare cost and benefit, life cycle of plan and ease of implementation.

## A. Identify preliminary regulatory compliance requirements

There are two major regulatory/permitting issues to consider when implementing desalination plants. The first involves the development of water sources (brackish or seawater) and the second is related to the management of discharging/disposing of desalination byproducts. Several federal permits are required to comply with environmental legislation relating to these issues, as discussed below.

*The Clean Water Act*
Sections 316(a) and 316(b) of the Clean Water Act authorizes the U.S. Environmental Protection Agency to address issues pertinent to discharging heated water into "receiving waters". This role applies to desalination plants co-located with a power plant ("Permits and Regulatory Requirements," Tamim Younos, Dec. 2005).

- Section 316(a) specifically addresses issues relating to disposing heated water into receiving waters.
- Section 316(b) specifically addresses issues relating to entrainment and impingement of marine life. Any environmental impacts due to implementation of desalination must be mitigated by the plant operator.

Section 402 of the Clean Water Act requires the U.S. Environmental Protection Agency to implement the National Pollution Discharge Elimination System Program. This program regulates the concentrate disposal and brine discharge from desalination plants. The Agency sets limits on an industry-wide, water-quality basis to ensure protection of the

water received. However, the Agency delegates to state governments the authority to issue permits and enforce proper disposal relating to the National Pollution Discharge Elimination System Program.

Through Section 404 of the Clean Water Act, the U.S. Army Corp of Engineers is authorized to issue permits for disposal of desalination discharge into U.S. navigable waters. If a desalination plant being constructed will excavate or fill navigable U.S. waters, the contractor must obtain a permit from the Army Corps of Engineers in order to proceed ("Permits and Regulatory Requirements," Tamim Younos, Dec. 2005).

*The Resource Conservation and Recovery Act*
The Federal Resource Conservation and Recovery Act establishes a system for managing hazardous and nonhazardous solid wastes in an environmentally correct manner. This Act applies to the disposal of desalination discharge (such as brine) into receiving waters, which is also addressed in several other sections of legislation.

*The Porter-Cologne Water Quality Control Act*
The *Porter-Cologne Water Quality Control Act* is considered "the principal legislation for controlling stormwater pollutants in California" (Ocean Water Desalination Program Master Plan, Malcolm Pirnie, Jan. 2013). This Act requires that Water Quality Control Plans be developed for water basins in California. Each plan is considered a blueprint to protect water quality in the various watersheds and identifies specific controls for discharges into these watersheds. Waste Discharge Requirements allow specific controls to be implemented. Desalination projects included in the the Water Quality Control Plan must comply with all rules and regulations in the Act.

*The Endangered Species Act*
The Endangered Species Act provides a program for the conservation of threatened/endangered animals and plants as well as their designated habitats. The U.S. Fish and Wildlife Service maintains the threatened and endangered species list and requires desalination plants to prepare a formal biological opinion if they may negatively impact any species on the list. As an example, the North American Green Sturgeon is federally listed as a threatened species. It resides in the bay which will require an evaluation of the potential impact of a proposed desalination plant.

*Incidental Take Permit*
An Incidental Take Permit is required when a state-listed, threatened or endangered species may be present within the project area. The US Fish and Wildlife Service acts as the lead agency for compliance with the *California Environmental Quality Act*. The Department of Fish and Game is allowed to issue an Incidental Take Permit for state-listed threatened or endangered species if:

1. the take is incidental to otherwise lawful activity
2. the impacts of the authorized take are minimized and fully mitigated

3. the measures required to minimize and mitigate the impacts of the authorization take are roughly proportional in extent to the impact, maintain the applicant's objectives, and are capable of successful implementation
4. adequate funding is provided to implement the minimization and mitigation measures
5. issuance of the permit will not jeopardize the continued existence of a State-listed species."

(Ocean Water Desalination Program Master Plan, Malcolm Pirnie, Jan. 2013).

The permit process is usually initiated within the region where the permitted activity will take place by contacting the appropriate US Fish and Wildlife Service Regional Office. The following information may be needed when submitting an Incidental Take Permit application:

- review and analysis of the permit-compliance history for existing intake
- impingement and entrainment studies
- a flow and impingement/entrainment minimization plan

*The Water Desalination Act*

The Water Desalination Act authorizes the Secretary of Interior and the U.S. Bureau of Reclamation to award grants and enter into contracts through the Desalination and Water Purification Research and Development Program. These grants support desalination research, development and demonstration projects (Tamim Younos, Dec. 2005). In 2011, this Act reauthorized the Secretary of Interior to financially support desalination development and research through to the fiscal year of 2018 (OpenCongress website, Feb 2013).

*The California Coastal Act*

The California Coastal Act applies to desalination with regard to issues relating to environmental policies, growth inducement, coastal dependent vs. coastal related development and the feasibility of maintaining coastal areas (Tamim Younos, Dec. 2005). Section 30230, 30231, and 30224.5 are applicable to potential environmental issues due to desalination. Section 30213, 30222, 30222.5, 320234, 30250, 32054, 30255, and 30260 establish policies aimed at controlling growth and development in coastal areas.

According to the established desalination policies, new plants must take into account the coastal planning efforts and must not encourage growth outside of the set boundaries. Also, if a new plant is replacing an existing one, that plant must reduce or eliminate the existing impacts created by the current plant. The service area of a plant must be reviewed to ensure that the area of the plant is adequate to serve the maximum build-out of the service area. Coastal dependent developments receive the highest service priority, followed by recreational facilities. The only exceptions are locations where proposed, environmentally damaging development could affect public welfare and/or coastal development (Tamim Younos, Dec. 2005).

The environmental feasibility issues addressed in Section 30001.5 of the *California Coastal Act* relate to social, economic, environmental and technological feasibility:

- social feasibility takes into consideration the public's acceptance of mitigation measures
- economic feasibility looks at the cost of the measure
- environmental feasibility views the potential success of the measures
- technological feasibility views the ease of implementation of mitigation measures using the technology currently available

*Coastal Development Permit*

A Coastal Development Permit issued by the California Coastal Commission is required when a project is within an area that "encompasses the coastline and spans a distance of three miles offshore, and up to five miles inland" (Ocean Water Desalination Program Master Plan, Malcolm Pirnie, Jan. 2013). The specific information pieces that must be included when applying for this permit are:

- site development details
- location
- adjacent land use
- the presence of historic and/or cultural resources
- site maps

The largest concern with a project associated with desalination is the impingement and entrainment of marine life. If a desalination project involves open-ocean intake, a detailed study, clearly justifying the infeasibility of lower impact intake approaches, must be included in the permit application.

*The California Environmental Quality Act (CEQA)*

The *California Environmental Quality Act* does not identify and address specific types of projects but, instead, focuses on the significance of environmental impacts as determined through a "case by case" determination. This Act requires that every potentially large impact from a project be mitigated to a "less than significant level" (Schiffrin, 2012). Determining the significance of environmental impacts throughout a given development project is critical to achieving compliance with the *California Environmental Quality Act.* The lead agencies in given locations are authorized to determine significance thresholds.

*Environmental Impact Report*

"Environmental Impact Reports are required for projects that need discretionary approval from a State or local public agency that may have a potentially significant impact on the physical environment". These reports can be required by the *California Environmental Quality Act* or the *California Coastal Act* for development projects such as a desalination plant. An Environmental Impact Report only addresses environmental issues, and must be certified before the project will be given approval to proceed. The report issued by the

lead agency approving a given project must be used by other State or local public agencies when evaluating the potential environmental impacts of a project of the same type.

*Lake or Streambed Alteration Agreement*
The California Department of Fish and Game requires a *Lake or Streambed Alteration Agreement*, if the proposed development will occur within inland waters or within some areas of the bay/estuaries. This agreement is also required if project activities will significantly affect fish and wildlife resources. The agreement must set out the conditions that are necessary to protect wildlife resources and to comply with the *California Environmental Quality Act* (Ocean Water Desalination Program Master Plan, Malcolm Pirnie, Jan. 2013).

*The Rivers and Harbors Appropriation Act*
Section 10 of the *Rivers and Harbors Appropriation Act* requires that the Army Corp of Engineers authorize the issuance of a permit for any project affecting navigable waters in the U.S.. Such a permit may be either general or individual, depending on the anticipated environmental impact of the project (Ocean Water Desalination Program Master Plan, Malcolm Pirnie, Jan. 2013). Determination of whether the permit for a proposed project will be individual or general is made through an initial consultation with the Army Corp, for which the applicant must provide a well-defined concept of the anticipated intake and outfall of the given project.

For individual permits, the Army Corp of Engineers must notify the applicant within 15 days if there are any deficiencies in the application; once the application is completed, the Army Corp of Engineers must issue a public notice to this effect, allowing 30 days for comments. A general permit may be considered either regional or nationwide. In either case, the approval process is simple, and a permit application form may not be required (Ocean Water Desalination Program Master Plan, Malcolm Pirnie, Jan. 2013).

*The National Historic Preservation Act*
The *National Historic Preservation Act* directs federal agencies to ensure that historic preservation is taken into account for all activities that either indirectly, or directly, involve land use decisions. Section 106 of the Act requires that federal agencies consider the impact that any actions related to the desalination development may have on historic properties that are included on, or are eligible for inclusion on, the National Register of Historic Places (Ocean Water Desalination Program Master Plan, Malcolm Pirnie, Jan. 2013). The review process usually involves a formal consultation with the State Historic Preservation Officer, the Advisory Council on Historic Preservation and other parties that have knowledge of/interest in historic resources residing in the area impacted. Once the appropriate documentation is received, the State Historic Preservation Officer has 30 days to review and comment, and the Advisory Council on Historic Preservation has an additional 15 days. The review is usually completed prior to, or during, the *California*

*Environmental Quality Act* application process (Ocean Water Desalination Program Master Plan, Malcolm Pirnie, Jan. 2013).

*Right-of-way Permit/Land Use Lease*

The California State Lands Commission maintains a multiple-use management policy that assures the greatest benefit for the public. It is derived from legislation governing the use of State lands. In order to access State lands, a Right-of-Way Permit (or Land Use Lease) is required. Many proposed desalination plants plan on placing new intakes on state tidelands or changing existing intakes on these lands. Both of these actions require a Right-of-Way permit.

To obtain a permit, an initial inquiry regarding the use of State lands must be submitted to the California State Lands Commission. The Commission will then review the information given, and determine if the area is, in fact, within State jurisdiction. If it is, a Right-of-Way permit application is needed (Ocean Water Desalination Program Master Plan, Malcolm Pirnie, Jan. 2013). The proposed use of State land must comply with the provisions of the *California Environmental Quality Act,* and so the State Lands Commission may consult with the Department of Fish and Game for review of the permit.

Desalination development comes at a cost relating to the environment; removing seawater from a given location alters the ecosystem that once was there. Also, adding water with increased salinity to discharge waters has a high potential to change the water quality, adversely affecting wildlife. Also, impingement or entrainment of various types of wildlife living in aquatic environments near intakes can be a concern. Two types of fee-based mitigation measures can be required post development: Adult Equivalent Loss and Area of Production Foregone.

*Adult Equivalent Loss*

For Adult Equivalent Loss, a desalination plant pays a fee based on the number of adult fish eliminated by the entrainment of larval fish plus the fish loss due to impingement. This fee compensates for only the economic losses associated with adult fish.

*Area of Production Foregone*

For Area of Production Foregone, the mitigation fee is based on the cost of restoring sufficient habitat to produce marine organisms equivalent to those killed through entrainment (Mitigation and Fees for the Intake of Seawater by Desalination and Power Plants, Dominic Gregorio, Nov. 2011). Of the two mitigation methods, this one is preferable because the restoration of impacted habitat compensates for all wildlife harmed through entrainment, not just a select group of organisms, such as fish.

## B. Describe operational/physical parameters of desalination processing

The key physical parameters for desalination processes are:

- site location
- water quality

Location is important for the proximity to suitable discharge sites (for brine) and required piping distances (for intake piping, discharge piping and to potable water mains). The water quality, which varies with location, dictates the type and extent of treatment which must be used. For example, the Bay Area Regional Desalination Project Site at Mallard Slough in East Contra Costa County experiences very high loads of total dissolved solids during low water periods because of its location at the mouth of the Sacramento River delta. In contrast, a site near the City of Milpitas, such as the mouth of Coyote Creek, shows higher values for suspended particulate matter when compared with the delta near Mallard Slough (USGS, 2014). The pretreatment methods would differ for each of these locations. Also, site specific measurements must be undertaken for each water supply.

Also important is the issue of land acquisition. The City limits are not actually adjacent to the San Francisco Bay. As a result, locating a desalination plant within the city limits is an unlikely prospect without the use of long and expensive intake and discharge pipelines. An alternative is to treat brackish groundwater from shallow aquifers or collection wells within the city limits or near the Bay. This strategy would allow the City to pursue a desalination project while taking advantage of the availability of brackish water, which has naturally less dissolved solids than Bay water. The effluent brine from treated brackish groundwater would also have similar concentration of salts as the Bay water, resulting in fewer environmental impacts than the discharges from seawater desalination.

Another alternative is to use slant wells, which would be drilled from the City limits into Bay water sources or ground adjacent to the bay. However, the San Jose-Santa Clara Regional Wastewater Facility in Alviso, which is directly northwest of the City, lies between the City and the Bay, thus legally precluding the use of that location and a radius of 2,000 feet around it.

Energy requirements for producing pure water from salt water includes:

- raw water supply handling
- treatment process
- drinking water distribution
- residuals management
- support staff

The typical pressure ranges are as follows:

- 15-30 PSI for fresh surface water
- 150-650 psi for brackish to saline water

- 650-1200 psi for typical seawater

Pumping energy depends on the amount of dissolved solids and the temperature of intake water; warmer water will, in general, require less energy. Typical pumping requirements based on 50% recovery at 34,000 milligrams per liter feed water total dissolved solid is approximately 7.5 Kilowatts times hours per 1000 gallons. ("Seawater Desalination Power Consumption," WaterReuse website. 2011). However, due to variations in pretreatment methods, salinity of feed water, concentrate disposal and conveyance, energy costs can range from 3.5 kW to 9.0 kW.

## C. Identify necessary infrastructure for well operation

The principal processes for desalination use semi-permeable membranes and large pressures to cause water to flow against the concentration gradient and through the membranes, in a process called reverse osmosis. Along with the production of fresh water, is the generation of a salty brine water effluent.

Pretreatment is accomplished using conventional filtration, microfiltration, ultrafiltration and increasingly commonly, a combination of conventional and ultrafiltration.

- *conventional filtration* comprises two steps: settling and then filtration through a fine granular media such as anthracite coal
- *microfiltration* is a physical filtration process wherein a contaminated fluid is passed through a special pore-sized membrane to separate microorganisms and suspended particles from process liquid
- *ultrafiltration* is a form of filtration in which forces like pressure or concentration gradients lead to a separation through a semipermeable membrane. Ultrafiltration is not fundamentally different from microfiltration, as both methods separate through size exclusion or particle capture, although ultrafiltration results to higher quality water

Sometimes chemicals are added to pretreatment liquid for the purposes of enhancing filtration or for cleaning the filters.

- liquid chlorine, in the form of sodium hypochlorite, is often added as a disinfectant
- flocculants like aluminum chloride can be added to make suspended matter easier to filter.
- citric acid, phosphates and other acids may be used to clean the membranes periodically; however, this step results in an additional waste stream that must be dumped to sewerage
- water additives can be used to prevent scaling compounds in the water from precipitating and clogging the reverse osmosis unit

Reverse osmosis plants require specialized pumps that operate at high pressures (>300 psi for brackish water). The first pump is usually a well pump that pushes Bay water or

brackish water through conventional treatment, and is followed by a high speed centrifugal pump. This centrifugal pump can produce pressures in excess of 1,000 or pressure per square inch and can require thousands of horsepower, accumulating electricity costs that can add up to hundreds of thousands of dollars per month.

Replacing membranes, brine disposal and energy costs amount to nearly all of the operating costs of a desalination plant. Often, the greatest cost is brine disposal which can add up to over 60% of the operating and capital costs (Stanford University, "Final Report - Evaluation of Reverse Osmosis for Brackish Groundwater Desalination..."). Energy requirements can be the greatest operating cost, depending on the process; salinity concentrations of the feed water, recovery rate and pretreatment methods all contribute to changes in energy costs. Location challenges for a south bay desalination plant may also result in significant intake expense - Slant or horizontal intakes would be important options for the city to reduce intake costs. Brine disposal costs could be reduced by blending with treated wastewater effluent and returned to the bay or to a waste water discharge outfall. Also, an alternative energy source (such as solar panels or wind turbines) may be warranted for such a project.

## D. Discuss ownership, participation/partner aspect

While it appears that the City could build a small-to-medium-sized desalination project on its own, the regulatory costs seem to favor the City collaborating with a nearby agency (at the very least with the Santa Clara Valley Water District) to access San Francisco Bay water or brackish groundwater desalination.

Forming partnerships with neighboring communities for large, regional desalination plants or locally-run brackish desalination plants is likely the best solution to provide water source reliability and augmentation without the burden of overwhelming investment costs. The City might attempt to form a partnership with agencies having an existing or planned desalination project, such as the Santa Clara Valley Water District which has been examining brackish water ground supplies recently. Due to limited brackish groundwater sources, the City of Milpitas may not be ideally located for a desalination plant or a brackish water treatment plant. However, opportunities for partnerships and interagency cooperation should be encouraged. Coordinating or partnering with Bay Area regional desalination water projects when available should be investigated, as opportunities arise.

There are currently two local projects which the City could benefit from by partnering with other agencies. The Newark Desalination Facility uses reverse osmosis to treat brackish groundwater to low mineral water is southern Alameda County. Also, the Bay Area Regional Desalination Project, comprising the efforts of Contra Costa Water District, East Bay Municipal Utility District, San Francisco Public Utilities Commission and Santa

Clara Valley Water District will eventually produce a large regional desalination plant in the Concord-Antioch area.

## E. Identify current regional projects underway

The process of desalination has been utilized as a source of potable water in the Western United States for some time. The number of regional desalination plants continues to grow as groundwater aquifers are depleted, droughts persist and common water supplies decrease. Desalination in the United States has been instituted both as agency owned and operated systems, and as an investor owned entities. Both approaches have benefits and challenges. The following are a few examples of some of the projects currently underway:

*Bay Area Regional Desalination Project*

Currently underway is the Bay Area Regional Desalination Project. Contra Costa Water District, East Bay Municipal Utility District, San Francisco Public Utilities Commission and Santa Clara Valley Water District have been evaluating the idea of developing a shared regional desalination facility since 2003. In June 2010, Montgomery-Watson-Harza Global produced a Pilot Plant Engineering Report for this joint project, verifying the technical feasibility of a full-scale desalination facility to meet water quality targets ("Pilot Testing at Mallard Slough." Montgomery-Watson-Harza Global. June 8, 2010). The report recommends that the facility design be based on the level of pretreatment used. Due to the location, the facility will experience a wide range of salinities, and the most effective treatment will involve utilizing ultrafiltration membranes followed by a two-stage reverse osmosis process. An Alternative Analysis Report is currently being developed addressing key issues with the Bay Area Regional Desalination Project and providing options for implementing the project. This report is projected to be completed by the end of 2014 (Bay Area Integrated Regional Management Plan, 2014).

*Alameda County Water District Aquifer Reclamation Program*

In September 2003, the Newark Desalination Facility was created by the Alameda County Water District. The water is drawn from the Niles Cone Groundwater Basin, which contains brackish groundwater resulting from previous seawater intrusion. The Aquifer Reclamation Program was developed to prevent seawater within Niles Cone Groundwater Basin from spreading (Alameda County Water District website). This program produces water to supplement the aquifers within the basin to achieve freshwater conditions.

Through reverse osmosis, the Newark Desalination Facility converts brackish groundwater to low mineral water. This water is then blended with high mineral groundwater to obtain a uniform water hardness. The production rate at this facility is approximately 10 million gallons per day. Water Solutions, Inc. spoke with the general manager of Alameda County Water District in September 2014 concerning augmentation of the Milpitas Water Supply and while conceptually Alameda County Water District is

receptive to the idea, there seems to be an insufficient brackish supply to expand the system further.

*Monterey Peninsula Water Supply Project*
California American Water has proposed drilling slant wells close to the coastline from Marina to Moss Landing to collect ocean water for potable purposes. The goal is to produce nearly 10 million gallons per day of potable water through desalination to supply the Monterey Peninsula. Prior to installing the slant wells, 13 boreholes will be drilled and tested by hydrogeological experts to ascertain, for each location, the proportion of underground water that is ocean water and the proportion that is groundwater.

The potential impact on agricultural undertakings must also be considered, as slant well installation could impact the groundwater supply customarily used by Salinas Valley irrigation systems. The desalination plant will be located off Charles Benson Rd. in Marina, and water purification will be by reverse osmosis ("Monterey Peninsula Water Supply Project Progress Report," July 31, 2014).

*Carlsbad Seawater Desalination Project*
The Carlsbad Desalination Project is the largest seawater desalination project in the Western Hemisphere (Carlsbad Desalination Project website). When completed, it is hoped that it will have the highest energy efficiency and most advanced technology of all the desalination plants in California. This desalination plant includes a 10-mile, 54" diameter pipeline beginning in San Marcos and extending into the San Diego County Water Authority's distribution system. The plant is projected to be completed in 2016. San Diego County Water Authority has a 30-year design, build, operate contract with the investor firm, Poseidon Water.

*Proposed Santa Cruz Desalination Plant*
The proposed desalination facility in Santa Cruz would would have a capacity of 2.5 millions of gallons per day, have an intake 2000' offshore screening wildlife and be powered by solar panels and energy recovery units. Brine would be mixed with existing wastewater effluent (to reach the same salinity as the Ocean) and disposed of in the Ocean. The project would cost approximately $115 Million, including a 30% contingency and is between a partnership with the City of Santa Cruz and Soquel Creek Water District. The purpose of this facility is to supply water in peak months, recharge groundwater and prevent sea-water intrusion (Santa Cruz Water District[2] website).

*San Antonio Water System*

The San Antonio Water System is currently developing a brackish groundwater desalination program in south Bexar County, Texas. The plant will be located at the San Antonio Water System's Twin Oaks Aquifer Storage & Recovery site. Feasibility studies have confirmed that sufficient high-quality brackish groundwater is available within the Wilcox Aquifer to support the San Antonio Water System desalination program. This

program consists of three phases: Phase I involves developing a production field, a collection system and a treatment plant involving reverse osmosis, and is projected to be completed in 2016; Phases II and III are intended to meet the City of San Antonio's needs for the next 50 years and to reduce the use of water from the Edwards Aquifer (San Antonio Water System website).

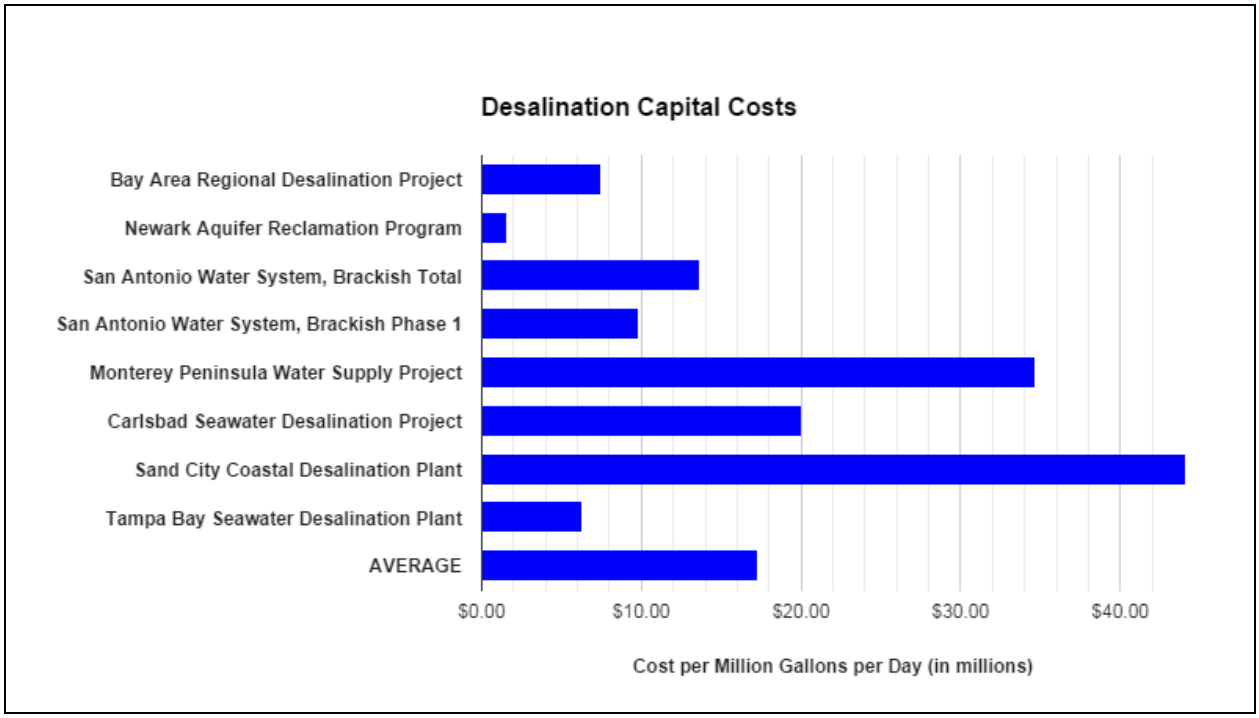
*Tampa Bay Desalination Plant*
The Tampa Bay Desalination plant was brought on line in 2007 following three project bankruptcies and a failed performance test. While the plant is capable of producing 25 million gallons a day, the water produced is significantly more expensive than traditional sources and was not being used in September of 2014 (Tampa Bay Water website).

*The City of Santa Barbara California*
The city constructed a "peaking" or emergency 6 million gallon per day desalination plant in 1992. The plant came on line coincident with the end of the drought and was decommissioned for operational cost reasons. As of September 2014 the city has authorized a study to rebuild the plant by 2016 (City of Santa Barbara website).

## F. Provide operational/physical parameters and estimated reductions of consumptions

Typically, brine disposal is the most significant cost when operating a desalination plant, amounting to up to 66% of operating costs and 75% of overall costs (Reinhard, M., 2008). However, energy costs are significant, and depending on the system, can be the greatest operating cost. Energy is consumed by centrifugal pumps operating at 1,000 pounds per square inch or more and can total hundreds of thousands of dollars per day for large facilities. Other costs include maintenance, operator costs, analytical testing, and membrane replacements. The following chart (Figure 1: Desalination Capital Costs) shows the capital costs for several recent desalination plants, expressed in dollars per hundred cubic feet of potable water produced per day (the average operating cost is $2.14 per hundred cubic feet daily). These capital costs were collected from the aforementioned sources and compiled by water solutions, Inc. into Figures 1 and 2.

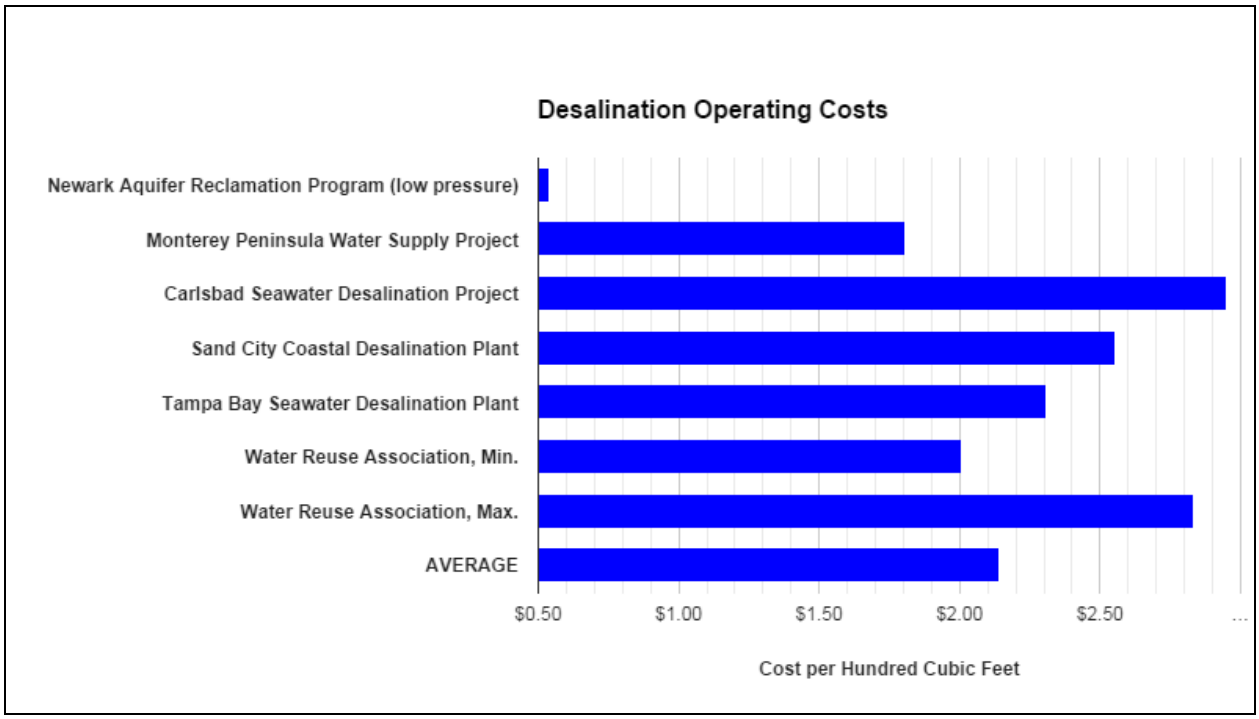
**Figure 1: Desalination Capital Costs** (Water Solutions, Inc.)




*Desalination in Milpitas*

The City of Milpitas currently has an average demand of 10.12 million gallons per day, according to the Bay Area Water Supply and Conservation Agency. Economies of scale dictate that a large plant would drive down the costs per unit, and so the City could benefit considerably by partnering with neighboring agencies or by building a plant sized to meet all of the City's demand and projected demands. By multiplying the average daily usage by the standard peaking factor of 2.25, one obtains the maximum potential daily demand, which provides an estimate for a designed plant capacity of 20 to 30 million gallons per day.

**Figure 2: Desalination Operating Costs** (Water Solutions, Inc.)




*25 Million Gallon per Day Plant*

At a cost of $17.25 million per million gallons per day, multiplied for a 25 million gallon per day plant, the City could expect costs of approximately $430 million for a plant capable of producing 25 millions of gallons per day. If the plant ran at half capacity to support average daily usage, operating costs would be $28,000 per day. Also, until the demand rose enough to meet the supplied quantity of water, Milpitas would have to export water, run the water at a lowered capacity or shut the plant down all together. The chart (Figure 2: Desalination Operating Costs) shows the operating costs for several desalination plants:

*10 Million Gallon per Day Plant*

Construction of a 10 million gallon per day plant at a cost of $20 million dollars per million gallons per day (more expensive due to economy of scale) would cost $200 million. Operating costs would be slightly more expensive (per volume of water) than a larger plant and could cost approximately $33,400 per day (based on a rate of $2.50 per hundred cubic feet). However, actual costs will vary depending on quantity of water, system efficiency, etc..

$$10\ million\ gallons/day\ =\ 10,337\ hundred\ cubic\ feet/day$$
$$10,337\ hcf/day \times 365\ days = 4,880,050\ hcf/yr$$

Using brackish water sources instead of seawater can reduce operating energy costs by over 5 times (based on a rate of $2.85 per hundred cubic feet for salt water at Carlsbad and the rate of $0.55 per hundred cubic feet of brackish water at Newark). Additionally, the capital cost would then be up to $20 million dollars for a brackish groundwater treatment facility producing 10 million gallons daily.

$$\$0.55\ per\ hundred\ cubic\ feet \times 4,880,050\ hundred\ cubic\ feet\ produced\ per\ year = \ldots$$
$$\ldots = \$2.68\ million,\ operations\ and\ maintenance\ costs\ per\ year$$

$$(\$20,040,000 + (\$2.68\ million \times 20)) \div (4,880,050\ hundred\ cubic\ feet\ per\ year \times 20\ yrs) = \ldots$$
$$\ldots = \$0.75\ per\ hundred\ cubic\ feet$$

## Legality

The legal activity associated with implementing a desalination project relates primarily to:

- negotiating the necessary rights-of-way for the infrastructure and property
- achieving regulatory compliance with any permitting or environmental review under the *California Environmental Quality Act*
- obtaining contract review related to bid services and specifications

Costs for these activities vary depending upon the specific situation, but for a complete project can estimated to be $150,000 - $300,000, assuming no challenges (e.g., *California Environmental Quality Act* or contract challenge).

The Urban Water Management Plan requires a description of the opportunities for development of desalinated water as a long-term supply when using source water that includes, but is not limited to, ocean water, brackish water and groundwater (Water Code § 10631(i)). The Milpitas plan states clearly that, at this time, the City has no intent to pursue desalination options or participate in any regional projects due to cost and geography. This constraint is unfortunate, because brackish groundwater treatment might well be within the City's reach.

By perusing the large number of permits required to operate a desalination facility, one can easily see that the legal efforts required to establish such a plant are not to be discounted. It should be noted, however, that permits regarding the waste stream (the salty brine water leaving the facility) amount to more than half of the permitting hurdles for this type of project. Interestingly, at this time, the San Jose-Santa Clara Regional Wastewater Facility is under regulatory action for discharging low salinity water into the Bay. It is feasible, therefore, that the operation of a desalination plant by, and in or near,

the City could make possible the easy discharge of brine into the waste stream of the Regional Wastewater Plant for the purpose of mixing, thus avoiding legal pitfalls.

## Finances

The costs of constructing and operating a desalination facility are significant, whether the source water is brackish groundwater, or bay, or seawater. Capital costs, while not to be ignored, can often be much less than those associated with operating reverse osmosis and pre-treatment plants, primarily because of energy costs. The following chart shows capital costs for the construction of recent desalination plants in terms of cost per gallon of drinking water (in dollars per gallon of drinking water capacity produced daily). The average capital cost is $17.25 million per million gallons daily.

Note that the cost of the brackish water desalination facility in Newark, CA, is much lower than that of other facilities. This difference is the result of intake infrastructure; a major element of a desalination plant is the intake and discharge, and a brackish water plant requires only wells as the intake facility. Note also that the Newark plant is a low pressure facility requiring no reverse osmosis filtration. The Newark plant is the best example of a recent, local, brackish groundwater plant and had a cost of $1.6 million per million gallons of daily production (Alameda County Water District, 2003).

The plant at Carlsbad, CA and Tampa Bay, FL both utilize pre-existing intakes and discharge facilities co-located at existing power plants. This pre-existing structure saves a lot of money, explaining why the Carlsbad plant is expected to cost much less than the Monterey Peninsula project, which is relatively far inland and will require slant wells to reach seawater.

Since the Tampa Bay project went bankrupt three times, the published capital costs may not include significant pre-bankruptcy costs.

The Sand City Coastal Desalination Plant (See Figure 1 and 2 for Desalination Capital and Operations Cost tables, above) illustrates the effect of economy of scale: In Monterey, the cost per unit of water is higher as the production capacity is only 267,000 gallons of drinking water per day.

# Results

Desalination is an expensive proposition. The capital costs and especially the operating costs of desalination plant ownership are very high in comparison with any other method of water supply augmentation. However, if the water is available, brackish groundwater treatment is much more feasible than seawater treatment. If the City were to perform a

brackish groundwater research study, much like the one that Santa Clara Valley Water District is paying to have done by Stanford, the City could find that a reliable supply of brackish water is available at a reasonable cost (e.g. Alameda County at Newark).

If this type of project is to move forward and augment the City's water supply during this or the next drought, legal issues must be tackled head on. A considerable amount of manpower will be needed for such an effort. Project timeline planning should take into account the considerable lengths of time legal matters often take.

# Conclusion

The primary benefit of desalination is the production of a local and reliable supply of potable water. However, the initial investment and operating costs can be substantial. Costly steps necessary before a facility can be operational include right-of-way acquisition, compliance with regulatory requirements, permitting and environmental review. Nevertheless, the highest costs are operating costs relating to energy usage.

Total electricity consumed will depend on the salinity of the supply. Historically, the quantity of brackish groundwater in Milpitas has been considered insufficient to justify the construction of a desalination plant. Although Alameda County Water District has indicated that additional production from brackish wells in the area of their Newark plant may not be feasible, additional sources of brackish groundwater for desalination may well be available to the south of the City in Santa Clara Valley. Nevertheless, use of brackish groundwater sources for desalination may prove unrealistic due to the scarcity of brackish groundwater in the area, which therefore would necessitate large transport distances.

In many instances, operating and start-up costs can be shared through partnerships or inter-agency cooperation agreements. These arrangements distribute capital costs and share the operating requirements of a municipal desalination project.

Other major issues for desalination projects are environmental impact mitigation and brine disposal. These activities can pose challenges, especially when disposing of brine where there is no wastewater treatment plant nearby. However, the City is very near the San Jose Santa Clara Regional Wastewater Facility, which might prove a considerable boon.

## Task 6: Desalination, Implementation Plan (NOT IMPLEMENTED)

**Proposed Implementation Schedule:**

1. Hire a consultant to pursue research on existing brackish groundwater studies. (Mar. 2015)
2. Hire a consultant to pursue cooperation agreements with other desalination partners. (Mar. 2015)
3. Hire a groundwater hydrogeologist with experience with brackish groundwater to do an up to date study on possibilities for Milpitas. (July 2015)
4. Hire a consulting engineer to design a desalination installation (for bay water or brackish groundwater). (Jan 2016)
5. Begin environmental and legal efforts for new desalination facility (Sept. 2016)
6. Open construction contracts for bid. (1 Jan. 2018)
7. Finalize bid documents. (1 Mar. 2018)
8. Begin construction of the brackish groundwater desalination facility. (1 May 2018)
9. Finish construction of the desalination facility. (1 Dec. 2019)
10. Complete permitting with state and federal governments. (1 Jan. 2020)

**Costs:**

- $20,000 for a background brackish groundwater study.
- $20,000 for a cooperation agreement with potential partners.
- Up to $20 million dollars for a brackish groundwater treatment facility producing 10 million gallons daily.
- The total capital cost of a desalination program would cost $20,040,000
- The ongoing cost of operations at the new desalination facility of $0.55 per hundred cubic feet or $2.68 million per year
- The total cost (capital and O&M combined) for the lifetime of the plant is $0.75 per hundred cubic feet.

**Benefit:**

- A savings of potentially 10 million gallons or 4,880,050 hundred cubic feet per year.

**Life Cycle:**

The life cycle of a brackish groundwater desalination facility is very much the same as a surface water treatment plant, being approximately 20 years.

**Ease of Implementation:**

By hiring consultants to do studies of past efforts and for the Milpitas area regarding brackish groundwater desalination, this process becomes much easier than if the City were to attempt to do this themselves. However, the legal entanglements of partnerships and desalination permitting are considerable.

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# *Water Solutions, Inc.*

## MEMORANDUM

**Date:** 27 March, 2015
**To:** Steven Machida, Milpitas City Engineer
**From:** Water Solutions, Inc. - Consultant
**Subject:** **Task 7: Additional Storage**

## Summary

A number of storage measures could be employed by the City of Milpitas to benefit water supplies, water supply reliability, recycled water reliability, stormwater management and/or energy costs. Possible applications include:

- surface water retention basins for irrigation, construction water or recycled water
- elevated storage tanks to reduce electrical costs due to a special rate structure with the Pacific Gas & Electric Company
- groundwater storage by use of percolation ponds or injection wells
- above ground or below ground storage tanks for additional storage capacity

Currently, Milpitas exceeds the state requirements for the quantity of potable water to be stored. Additional potable storage could be created to enhance reliability of the drinking water supply and to store water for use during peak periods. Similarly, recycled non-potable water storage could ease the burden of peak period use. Stormwater storage tanks could be used to reduce flooding and to improve wetland productivity through controlled release. However, water storage via the construction of additional reservoirs may be difficult for the City due to land rights acquisition.

The various functions of water storage should be combined to maximize beneficial use. One example would be to use stormwater catchment to provide a buffer against flooding during storm events and also to augment sensitive riparian habitats throughout drier months. Possibilities for receiving water credits or grants with the State Water Resource Control Board are also available for projects of this scope.

Whilst Milpitas has potable storage covered, Water Solutions does recommend recycled non-potable water storage for peak-shaving.

# Data

The information in this memo was gathered from the California Code of Regulations, Title 22, and the City Public Utilities staff and records. Other sources include the State Water Resource Control Board website, United States Environmental Protection Agency online publications, California Department of Fish and Wildlife, Santa Clara Valley Water District website, the City of Milpitas staff and publications about water storage. Additional information was obtained from representatives from several water districts, including Darin Taylor of the Santa Clara Valley Water District.

# Methodology

A. Discuss sizing (peak shaving vs long term idea; tank, reservoir, underground) and water quality concerns
B. Discuss preliminary regulatory compliance requirements
C. Discuss groundwater banking
D. Discuss local storage in form of above and below ground vs offsite, active storage and recovery plant
E. Describe operational/physical parameters with necessary infrastructure for operation
F. Provide operational/physical parameters, estimated reductions of consumptions

Legal and financial considerations will be addressed at the end of “Methodology” below.

There will be a final *Task 7 Implementation Plan Table* at the end of this memorandum. This will define an implementation schedule, compare cost and benefit, life cycle of plan and ease of implementation. Feasibility will be discussed in Task 9.

## A. Discuss sizing (peak shaving vs long term idea; tank, reservoir, underground) and water quality concerns

### Storage Tank Sizing & Water Quality

According to the calculation described in §64554(a) and (b)(3) of the California Code of Regulations Water Code, Milpitas (The City) has a maximum daily demand of 25.2 million gallons per day. According to the same section, Milpitas has a peak hourly demand of 1.58 million gallons per hour. The City is required “to meet four hours of peak hourly demand with source capacity, storage capacity, and/or emergency source connections.” This means the City must have at least 6.3 million gallons of potable water storage. The

City presently has 16.3 million gallons of storage capacity, 10 million gallons more than required by law; however, the City has very little water supplies other than those that are purchased.

The City's 2009 Water Master Plan Update (Table 5-7, Scenario 3) sets out a more stringent requirement. The following three components need to be satisfied for the storage sizing requirements to be met by the master plan:

- operational storage (20% of maximum day demand = 6.16 million gallons)
- emergency reserve storage (50% of maximum day demand = 15.4 million gallons)
- fire suppression storage (4 hours at 5,000 gallons per minute = 1.2 million gallons)

These components result in an overall storage requirement of 22.8 million gallons, leaving the City 6.6 million gallons short of its self-imposed requirement. Note that 22.8 million gallons represents the long-term requirement.

"Peak shaving" is the process of reducing the amount of potable water purchased from the utility company during peak hours when the charges are highest to reduce demand on the supplier's system. If the drinking water average daily usage, as measured in 2011-12, is 10.12 million gallons per day, and the maximum day demand is 25.2 million gallons per day, the resulting peak-demand increase is 15.1 million gallons per day (i.e., the maximum day demand minus average daily usage). As long as there is sufficient storage to meet the maximum day demand, increased water rates can be avoided. Currently, the City has plenty of storage for full peak demand shaving and need not add any more for implementation of this process.

Peak recycled water use however, is more taxing on the limited recycled water system than the potable water peaks are on the robust drinking water system. An analysis of existing peak use of recycled water using data from the BAWSCA Annual Survey 2012-13, estimated to be 1.92 million gallons per day maximum day demand versus 850,000 gallons of average daily usage, shows the need for approximately 1 million gallons of storage for each day of peak storage to be saved. This is for existing users only.

As further recycled water connections are made with potentially high-volume consumers such as Spring Valley and Summit Pointe Golf Courses, these numbers will go up, and we will see a change or "delta" in the amount of recycled water peak-shaving storage needed. Using potable water consumption data from January through May 2014 for the two golf courses, we see the average daily usage climb to 1.16 million gallons per day, and the maximum day demand climb to 2.62 million gallons per day. This leaves us with a new one-day peak storage requirement of 1.45 million gallons and a "delta" of roughly 500,000 gallons. Of course this does not include the sizeable Ed Levin Memorial Park. Milpitas does not know how much Ed Levin uses as it is a Santa Clara Valley Water District yet unknown to the City) voluminous consumption of recycled water that is

expected to occur in the future. Water Solutions, Inc. advises the City to pursue construction of a 3 million gallon recycled water storage tank to provide peak shaving support into the future.

## Tanks and Reservoirs

While the term reservoir often means a large natural or artificial lake used as a source of water supply, in a drinking water context this term means a supply or source of water, often for storage. A storage (or service) reservoir stores and supplies water to the farthest point in the area at the required pressure, often through the use of booster pumps.

Flat areas with stable soils are the most suitable sites for constructing a tank. In hilly areas, it is best to select the highest point and construct an elevated tank. An elevated tank, or water tower, would be placed between the area serviced and the source of water supply. The pressure within the system depends upon the water level in the tank. Water levels are usually kept low to minimize pumping costs. The lowest effective water level is determined from the pressure required to guarantee a minimum pressure at any point in the area being serviced.

Water towers can be made of concrete or steel and take various forms. The most common type is a cylinder with a curved or flat bottom. Shape is usually based on function and maintenance costs. Round tanks are inherently easier to maintain as they have no corners.

Storage reservoirs provide a reserve of treated water that is used to minimize interruptions of supply due to failures of mains, help maintain uniform pressure and provide a reserve of water for fire fighting/other emergencies. Reservoirs also allow for a decrease in the size of distribution mains and for pumping at the average, rather than the peak flow rate. The requirements of storage reservoirs are classified by their functions, as listed below.

### Definitions/Classifications of Storage Requirements

Storage Facilities include reservoirs, towers and tanks provide storage for treated water before it is distributed. The storage should be capable for domestic, commercial and industrial purposes. Here is a list of types of storage that must be accounted for when estimating the size needed for a tank:

- *Operating Storage:* Storage that provides the difference in volume between the “pump on” and “pump off” levels when tank is being used normally. As the pump turns on, storage is used up until the pump turns off.
- *Equalizing Storage:* Extra water to be used when source pump capacity is less than the peak system demands.

- *Fire Storage:* The volume of water stored within the water system for fighting fires. This volume varies with the city size and type/size of construction within service area.
- *Emergency Storage:* Back-up water used to provide water to the system during unusual or emergency conditions. Depends upon the likelihood of interruption and time it takes for an alternative water supply storage to be created.
- *Dead Storage:* Storage in tanks or reservoirs that cannot be drawn out due to the level of the piping or to low pressures.

## Tank Material Options

### *Steel*

Steel water tanks can be cylindrical or spherical. Tanks can be welded or bolted. The tanks must be installed at or above grade to allow for repainting. The physical footprint is significant, at an average of 48 feet in diameter and 30 feet high.

*Welded steel tanks* cost more to purchase than bolted steel tanks and have a 60-year life expectancy. Welded steel tanks must be repainted every 15 years, typically at a cost of one-third of the tank purchase cost. Painting requires that the tank be out of service for approximately one month, and requires workers to be introduced to the sanitary environs of the tank. The budget cost for welded steel is $1.85 per gallon or $925,000 for a 500,000-gallon tank.

*Bolted tanks* use thin steel and must be replaced after 20 to 25 years. Given that their cost is more than half the cost of a welded steel tank and their life-cycle is shorter, their life cycle cost is therefore higher. In corrosive environments such as the California Coast, these tanks may experience paint failure in as few as 15 years due to the bolt/panel interface.

Two steel variants reduce or eliminate the paint cost issue but have aesthetic issues. The first, *corten*, is a self-healing or oxide-coated steel that is a rusty red color but is stable. Water reservoirs constructed of this material have to be painted on the inside, and the only color option for the exterior is “rust red.” The second, *stainless steel*, is much higher in cost, and typically is only used for the bolt-together, sheet-metal tanks. Although tanks of stainless steel reduce or eliminate painting inside and out, they are often considered too shiny.

### *Fiberglass*

Fiberglass is an extremely long-lasting and corrosion-free material that can be used for water tanks. They come in thousands of gallons to millions of gallons in size. Although these tanks can be sited above ground, they tend to have a larger footprint than steel

tanks due to lower tank heights. The cost of fiberglass tanks is typically two to three times the cost of concrete or steel tanks due to fabrication and assembly costs.

Buried cylindrical fiberglass tanks are an excellent choice due to the minimal surface footprint, tank longevity and complete corrosion immunity. While these tanks are reasonable to purchase, the cost of trucking to the site typically doubles the tank cost. In 2014, a 75,000 gallon tank delivered to the Bay Area has a budget price of $200,000, yielding a cost per gallon of $2.66. The use of multiple tanks increases the overall operational risk due to interconnections and valves, over the life of the installation. These tanks are best suited for applications where only one or two tanks are required.

### *Concrete*

There are effectively two methods of constructing concrete tanks: pre-stressed and cast-in-place. Both methods provide effective, corrosion-free storage at all sizes. If necessary, concrete tanks can be buried. Because they are strong, concrete water tanks are ideal for under driveways, courtyards, or sheds, or in other areas where they would have to withstand loads. Concrete tanks are built on site because of the weight of the material; however, transport of the concrete materials is still an expensive endeavor.

Concrete underground tanks can be more expensive to install than their counterparts as more excavation is required, but they are exceedingly durable and are at little risk of "floating" (where the tank may float to the surface because the tank has a lesser density than the dirt). Concrete tanks are also unlikely to rust, corrode, or experience damage from tree roots. If damage should occur, it can be easily repaired.

Cast-in-place concrete walls are made with ready-mix concrete placed into removable forms erected on site. The interior of the forms is lined with steel reinforcement prior to filling with concrete. The use of removable forms makes this an easy process, but the forms are large and heavy and must be transported, thus increasing costs. Nevertheless, using forms brings only a minor increase to the on-site footprint.

Using prestressed concrete provides a means of overcoming concrete's natural weakness in tension. It can be used to produce beams, floors or roofs with a longer span than is practical with ordinary reinforced concrete. Prestressed concrete construction is very much like cast-in-place construction, except that a casement of prestressed steel tension members is added. This step requires that a prestressing machine is transported to the site and mounted on the exterior of the tank, which increases the footprint somewhat. However, prestressed concrete tanks have a longer lifespan than cast-in-place tanks.

**Table 1- Types of Tanks and their Life-Cycle Costs and Benefits**

| Type | Life | Cost | Paint and Corrosion | Above/Below Ground |
|---|---|---|---|---|
| Welded Steel | 60 years | $1.85/gallon | 15 year painting | Above ground |
| Bolted Steel | 25 years | $1.00/gallon | 15 year paint failure | Above ground |
| Fiberglass | 35 years | $2.66/gallon | N/A | Either |
| Cast-in-Place Concrete | 75 years | $1.75/gallon | N/A | Either |
| Pre-Stressed Concrete | 100 years | $2.00/gallon | N/A | Either |

### Storage Tank Reservoirs in Milpitas

There are currently five storage tank reservoirs in the City:

- San Francisco Public Utilities Commission:
    - Gibraltar Prestressed Concrete 5.00 million gallons
    - Ayer Prestressed Concrete 5.60 million gallons
    - Tularcitos Steel 0.31 million gallons
    - Minnis Steel 0.35 million gallons
- Santa Clara Valley Water District:
    - Gibraltar Prestressed Concrete 5.00 million gallons

Total stored water 16.26 million gallons. The City's 2009 Water Master Plan Update sets out a more stringent requirement resulting in an overall storage requirement of 22.8 million gallons, leaving the City 6.6 million gallons short of its self-imposed requirement.

Note also that another district tank sized at 6.6 million gallons is planned for the TASP Piper Drive area. This will exceed even the self-imposed requirement for water storage.

### Water Quality

It is understood that the residential and industrial water consumers within the City appreciate and desire consistent taste, odor and water quality. It is very likely, however, that this goal is not a sustainable state of affairs because any change in water supply will inevitably change water quality, if only by a minute amount.

There are various ways in which adding new sources affects water quality, most notably in taste and odor. Any additional source of water will invariably add or decrease certain

constituents such as dissolved sulfates, iron or manganese that greatly affect taste and odor.

The current source of water for the City is treated surface water from San Francisco Public Utilities Commision and Santa Clara Valley Water District, which comes from local reservoirs, from the Sacramento River Delta and from the Hetch Hetchy water system. According to the chart below (Figure 1 - Where Does Your Water Come From?), Santa Clara Valley Water District does not contribute groundwater to the City's water supply. This means that the City receives highly mixed and thoroughly treated water, albeit from a variety of sources.

**Figure 1 - Where Does Your Water Come From?** (Santa Clara Valley Water District website, 2014.) Note: That Milpitas was using recycled water at this time, although the chart does not indicate this.

| | Local water | | | Imported water | | | Other |
|---|---|---|---|---|---|---|---|
| | Natural groundwater | From reservoirs to replenish groundwater | From reservoirs to drinking water treatment plants | Thru Delta to replenish groundwater | Thru Delta to drinking water treatment plants | From Hetch Hetchy | Recycled |
| Alviso | | | | | | • | • |
| Campbell | • | • | • | • | • | | |
| Cupertino | • | • | • | • | • | | |
| Gilroy | • | • | | • | | | • |
| Los Altos | • | • | • | • | • | | |
| Los Altos Hills | • | • | • | • | • | • | |
| Los Gatos | • | • | • | • | • | | |
| Milpitas | | | • | | • | • | |
| Monte Sereno | • | • | • | • | • | | |
| Morgan Hill | • | • | | • | | | |
| Mountain View | • | • | • | • | • | • | • |
| Palo Alto | | | | | | • | • |
| San Jose | • | • | • | • | • | • | • |
| San Martin | • | • | | • | | | |
| Santa Clara | • | • | • | • | • | • | • |
| Saratoga | • | • | • | • | • | | |
| Sunnyvale | • | • | • | • | • | • | • |

Blending water from the Pinewood well with purchased treated surface water would add groundwater minerals to the mix. Many people find the taste of untreated groundwater quite pleasurable. However, to people accustomed to the softness (lack of mineral content) of surface water, the change to groundwater might be challenging. Therefore, treatment consisting of iron and manganese filtration as well as conventional softening or activated carbon filtration might be necessary to remove trace amounts of these constituents if a groundwater source is used.

Due to the need for additional sources of water, the City should consider a publicity campaign to go along with any new infrastructural source addition. In fact, even if the

additional sources are treated surface water, there might be taste and/or odor issues. By keeping the public aware of the possibility of change and up-to-date on any changes, public reaction to minute differences in water quality would be minimized. Most importantly, water provided to the community will continue to be safe, wholesome and clean.

## B. Discuss preliminary regulatory compliance requirements

All potential avenues for additional storage will need to be reviewed and approved by the California government. The State has been given local primacy by the United States Environmental Protection Agency, the sole regulator of drinking water supplies in the United States.

### Storage Tanks

The design and construction of storage tanks is strictly defined by the American Water Works Association standards. Each type of tank has a related standard and according to the Water Code, section 64585, these standards must be adhered to by law.

- welded water tanks must conform to American National Standards Institute/American Water Works Association standard D100
- factory-coated, bolted steel tanks must conform to American National Standards Institute/American Water Works Association standard D103
- storage tanks must be painted externally/internally with American Water Works Association D101 and D102 certified paint
- additionally, all water tank appurtenances such as piping, joints and fittings must conform to American Water Works Association specifications
- all materials used in the construction of the tank that will come into contact with the drinking water must be National Sanitation Foundation standard 61 approved National Sanitation Foundation. Materials requiring approval are listed on its website. Storage structures should be thoroughly cleaned and inspected every 3 to 5 years

### Surface Water Reservoirs

The steps for acquiring rights for the use of surface water and groundwater are as follows:

- filing an application
- acceptance of the application
- environmental review
- public notice
- protest resolution
- permit issuance

Conditions may be placed on the permit. Riparian rights are also required for use of a

correlative share of the water flowing past a property.

*"A water right is a legal entitlement authorizing water to be diverted from a specified source and put to beneficial, non-wasteful use. Water rights are property rights, but their holders do not own the water itself. They possess the right to use it. The exercise of some water rights requires a permit or license from the State Water Resources Control Board (State Water Board), whose objective is to ensure that the State's waters are put to the best possible use, and that the public interest is served.*

*In making decisions, the State Water Board must keep three major goals in mind:*

1. *Developing water resources in an orderly manner;*
2. *Preventing waste and unreasonable use of water; and*
3. *Protecting the environment."*

- The State Water Resource Control Board, Water Rights

The California Department of Water Resources is the primary governing agency for projects involving dams, reservoirs, storage ponds, groundwater banking, etc. If the City decides to pursue any of these approaches, the Department will have to be satisfied.

*"The [State of California Department of Water Resources], under the police power of the state, shall supervise the construction, enlargement, alteration, repair, maintenance, operation and removal of dams and reservoirs for the protection of life and property as provided in this part." (Chapter 4. Article 1)*

*Construction of any new dam or reservoir or the enlargement of any dam or reservoir shall not be commenced until the owner has applied for and obtained from the department written approval of plans and specifications. (Chapter 5. Article 1)"*

- State of California Department of Water Resources; Statutes and Regulations Pertaining to Supervision of Dams and Reservoirs

## C. Discuss Groundwater Banking

Groundwater banking transports water to a centralized location during wet months to be stored and redistributed during the drier seasons. Two of the world's largest underground water storage and recovery facilities are in Kern County:

- Semitropic Water Storage Bank
- Kern Water Bank Authority

Their proximity to the California Aqueduct, Friant-Kern Canal and agricultural epicenters allows water to be distributed throughout Central and Southern California, as needed. The benefits of groundwater banking include the following:

- enhancement of the water supply reliability during drought years

- provision of an effective water management tool
- reduction in the number of groundwater pumping lifts for agricultural water users

Currently, there are several groundwater storage facilities in the area of Kern County. Note, the use of the Kern Water Bank is likely to prove infeasible due to practical limitations, however, this is a great example for groundwater banking potential.

Since the early 1990s, the water exchange market (including water rights trading) has expanded to account for approximately 5% of all water used annually by California businesses and residents. The length of the water contracts is shifting from short-term to extended, several-year durations. However, due to controversies arising from water banks withdrawing large amounts of water during droughts and from other issues, approval processes are now relatively complicated due to new pumping legislation.

Underground tanks are beneficial for:
- mixed use designs (e.g., building on top of a tank) and to conceal
- minimize the construction foot-print

## D. Discuss local storage in form of above and below ground vs offsite, active storage and recovery plant

The primary types of storage structures are:
- hydropneumatic tanks include any circular steel tanks, concrete tanks, and composite structures that use air in such a way as to create pressure in the system
- ground-level reservoirs include lakes, constructed water tanks and artificial ponds for water storage
- elevated tanks use the force of gravity to regulate the pressure through the system. Although pumps are needed initially to transport the water to a storage tower or reservoir on a hill, they can operate during non-peak hours and thus take advantage of peak-tiered electrical rates, where available

The ability to store water increases water supply reliability. The ability to store alternate sources of water can reduce electrical costs, reduce supply infrastructure for local water generation and lead to opportunities for obtaining water at reduced rates. Increasing the capacity of water storage located in a centralized place can avoid distribution pressure losses resulting from long conveyance distances.

### Underground Tanks

One of the greatest advantages of underground tanks is the ability to combine storage

capacity with building space. Given the proper loading requirements, underground tanks can be built under parking lots, recreational fields, buildings and other features.

Suitable types of underground storage tanks include fiberglass, carbon-fiber, cast-in-place concrete, fiber-reinforced plastic, steel/aluminum and composite overwrapped. The type of tank to be selected will depend on the soil conditions, quantity of water, budget criteria, aesthetic considerations and location. For example, steel/aluminum tanks should be avoided in corrosive soils, and cast-in-place concrete tanks may be difficult to construct in isolated or mountainous terrains.

### Aboveground Tanks

Aboveground tanks include elevated tanks, standpipes, reservoirs and ground-level tanks.

- elevated tanks generally consist of a water tank supported by a steel or concrete tower; most elevated tanks are constructed of steel and generally are welded
- standpipes are tanks on the ground with a height greater than the diameter; most standpipes are constructed of steel and generally are welded
- reservoirs include a wide range of water storage systems including ponds, lakes, earth-embankment reservoirs and water storage structure
- the two main types of reservoirs used for large-scale municipalities are steel tanks and concrete tanks
- concrete tanks include cast-in-place, circular prestressed and hydraulically applied, concrete-lined reservoirs
- ground level tanks have the advantage of being convenient to drain, clean and be inspected by water system workers with relative ease; always, attention should be given to the safety of workers in confined spaces

### Offsite Storage

The ideal location for off-site water storage is near a large seasonal water supply and adjacent to water tributaries. For purposes of this memo, the topic of additional off-site water storage includes obtaining water rights in reservoirs outside of Milpitas, offstream riparian habitat augmentation (and water storage) and flood-mitigation reservoirs.

The benefits of off-site water storage are:

- water supply reliability for municipal and industrial uses
- agriculture water supply
- creation or rehabilitation of wildlife refuges

The benefits of off-site storage include actions that:

- augment riparian environs to improve fish and threatened species survival
- water quality improvements for estuarine species

- recreation opportunities at new reservoirs
- could also lead to local flood damage mitigation
- offsite storage could also support improved flexibility and long-term viability of the Central Valley Project and State Water Project by increasing storage and conveyance capacity

### Active Storage

The following water storage strategies can be considered active storage:

- stormwater banking
- indirect potable reuse
- intelligent storage capacity
- reservoirs that are used to decrease power costs via special rate structures, to increase reliability and to augment fire-suppression capacity are also a form of active storage.

Stormwater collection, storage, treatment and distribution can be considered stormwater banking. Active water harvesting is the development of a conveyance and storage system that collects stormwater from impermeable surfaces to store in reservoirs for future use. The benefit of stormwater collection and storage is the availability of water during drier months. Milpitas has the potential to collect a total of 10,880 acre-feet of stormwater (using the maximum theoretical collection for the average rainfall in Milpitas), based on an average annual precipitation rate of 15 inches and an area of 13.6 square miles (United States Census Bureau).

Indirect potable reuse is becoming more common due to necessity and to better management of the supplies. This approach involves injection of reverse-osmosis-treated reclaimed water into groundwater aquifers then a sustainable withdrawal from a recovery plant/well. One scenario would include groundwater wells with injection wells placed at a sufficient distances away from the groundwater well. The groundwater sources would be used for potable use, while the resulting effluent from the water treatment plant would undergo additional treatment to meet advanced treatment standards. The highly-treated recycled water would then be pumped into the injection wells. This process results in a closed-loop water supply that is resistant to cost- changes in imported water sources. Also, increased groundwater relation and percolation would lead to additional water treatment through aquifers.

New uses for improved intelligent water storage are also becoming available. IBM® Intelligent Water optimizes water operations by integrating data about a utility's infrastructure, assets and operations to deliver water more efficiently. The process uses advanced data management, visualization, correlation and collaboration technologies to transform vast amounts of data received from devices such as metering systems, assets

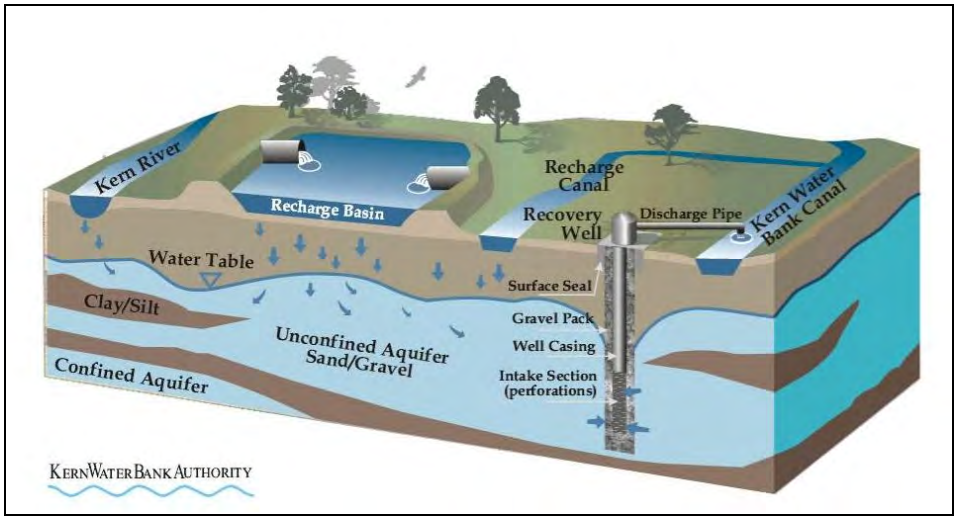
and other systems into information that can guide planning and operational decisions. The result is an overview of water operations that transcends individual systems, devices and departments.

Active storage could also include elevated or pneumatic tanks to store water, pumping during times of low electrical rates, if a special rate structure is available, and thus reducing electrical costs. This form of storage would place less strain on water and electrical infrastructure, as well as increasing fire-demand storage and reliability.

### *Recovery Plant*

A recovery well/plant is a necessary part of an active groundwater management system and involves withdrawing water for potable water use and irrigation and monitoring usage. A recovery plant is basically a groundwater well that is strategically placed downstream from an injection well (based on groundwater streams). The amount of water that can be sustainably withdrawn from a recovery plant is based on rainfall rates, percolation, slope elevations, geology, amount of water added to injection wells (see Figure 2). Regular water quality testing and inspection are required.

**Figure 2: Groundwater Banking Process**




## Disinfection

Based on the water quality and the results from a Title 22 report, treatment and/or disinfection is likely to be required depending on concentrations of contaminants in the water supply. Water quality testing will determine the best treatment and disinfection methods, based on the individual water constituents. (See “Task 3: Surface Water Detention” for additional information regarding groundwater wells and indirect potable reuse.)

## E. Describe operational/physical parameters with necessary infrastructure for operation

### Infrastructure Required

The operational parameters and infrastructure for additional storage capacity include:

- tanks/reservoirs
- pumps
- conveyance system
- potential treatment/disinfection
- monitoring
- maintenance

The following is a brief description of the steps necessary to implement additional storage capacity:

***Tanks and Reservoirs***

The available tank options are hydropneumatic tanks, ground-level reservoirs and elevated tanks. Tanks of welded steel, cast-in-place concrete and prestressed concrete are used most commonly for municipal water storage. However, reservoirs and surface retention ponds could provide a more cost-effective approach, depending on land availability. For a complete description of surface water reservoirs see “Task 3: Surface Water Detention.”

***Pumps***

The type of pump selected should be based on criteria that include maximum flow rates, piping distances, elevation changes, system pressure. Water Solutions, Inc. would recommend the use of a multistage, variable-drive submersible pump able to withstand the harsh environment of the tank or reservoir. Often, two or more pumps can be run in parallel to allow for service/repairs without disrupting the flow and to provide emergency backup.

***Conveyance System***

A conveyance system is needed to connect incoming water supplies with tanks or reservoirs, treatment housing, and water mains for potable consumption. The design of the pipe system should be based on soil-type, water flow rates, piping distance, system pressure. Recommended materials include ductile or galvanized iron, PVC, flexible PVC or reinforced concrete (more suitable for water collection).

***Treatment and Disinfection***

After cleaning and painting, water storage tanks must be disinfected before being placed

in service. Cleaning should be done using either 1) liquid sodium hypochlorite solution, or 2) calcium hypochlorite granules or tablets. Water entering the tank should be treated or disinfected as necessary, or screened before being stored. The storage tank should inspected periodically to find any cracks or structural problems.

### *Permitting Requirements*

The State Water Resources Control Board and local permitting agencies should be contacted prior to construction. Encroachment permits, building permits, operating permits, and an amendment to the domestic water supply permit may be required.

### *Operational Parameters*

The following is a list of the possible operational parameters involved with water storage: pumping costs, water flow rates, water quality, blending, disinfection, system pressure and system location.

## F. Provide estimated reductions of consumptions

### Estimated Reduction of Consumption

The addition of water storage tanks will not contribute directly to reduced water consumption. However, additional water storage will allow for greater amounts of stormwater, groundwater or local sources of water to be stored, which can lead to opportunities for purchasing water at reduced rates by augmenting available water supplies. The maximum amount of stormwater that can be collected in Milpitas, based on an average year with 15” of rainfall, is 10,800 acre-feet per year. However, this assumes every drop of rainfall is collected, whereas the amount that is feasible to collect would be much less.

Elevated tanks can be used to reduce operating costs, improve reliability and maintain constant pressures. This involves pumping water up a tower or mountain during times of reduced electrical rates in places with special rate structures.

### *Implementation Strategies*

The following steps are needed to increase the available storage:

- secure funding
- create a request for proposal
- complete permitting requirements
- hydrologic site investigations
- secure land suitable for water collection and storage.

## Legality

### State Water Resource Control Board, Division of Drinking Water

The California Code of Regulations, Title 22, explicitly states requirements for drinking water and potable water sources to determine treatment and disinfection methods. These need to be followed and the appropriate permits need to be applied for and approved.

### United States Environmental Protection Agency

Conditions regarding the use of surface water for water storage applications are set out by the Environmental Protection Agency under the Surface Water Treatment Rule, and under the National Pollution Discharge Elimination System's minimum creek level requirements. National Pollution Discharge Elimination System permits must be obtained.

### California Department of Fish and Wildlife

Wildlife impact mitigation measures will be required by the California Department of Fish and Wildlife, in accordance with California Water Codes, which address surface water collection, stream withdrawals, environmental easements. The California Department of Fish and Wildlife has jurisdiction over the conservation, protection and management of fish, wildlife, native plants and habitats necessary for biologically sustainable populations of those species. When appropriating new sources of water, or constructing near riparian habitats, the State Water Resource Control Board is required to consult with the California Department of Fish and Wildlife on the amount of water needed for fish and wildlife and on impact mitigations measures.

### Water Rights Acquisition

Water rights must be obtained for the use of water from stormwater runoff, lakes, creeks and waterways. Ownership of these rights varies based on location, historic water usage, precedence and other factors. Many water rights in the area are likely under the jurisdiction of the Santa Clara Valley Water District.

## Finances

If the City were to pursue the construction of an additional 3 million gallons of recycled water storage, this might be at a fairly significant cost. Aside from land acquisition, this would cost approximately $3.75 million at least ($1.25 per gallon), if a single 3 million gallon tank were to be constructed. In addition there would be significant costs for the associated pump station and piping. Estimated at $6 million, this is not a trivial investment and one which provides a minimal payoff. Moreover, maintenance costs can be significant as well. Approximately 15% of the construction cost must be spent on

maintenance every 15-20 years. This means that for a $6 million tank site, approximately $3 million (or $3 million / 50 yrs. = $60,000 per year) will need to be spent over the 50-100 year lifetime of the tank to maintain it.

Outside funding sources may be needed to construct this type of project. Typical funding sources for capital improvement projects include the:

- California State Water Resource Control Board through grants awarded through the State Water Resource Control Board's Drinking Water Program
- California Department of Water Resources
- U.S. Bureau of Reclamation
- Environmental Protection Agency (Clean Water State Revolving Fund)
- Drinking Water State Revolving Fund
- United States Department of Agriculture for water improvement projects
- Grants for communities of under 10,000 persons are also offered in the State of California.
- A future funding source to watch for is California Proposition 1, which is a $7.5 billion dollar bond measure that was recently passed by Californian voters in November, 2014.
- www.Grants.gov is also a potentially useful funding source.

# Results

Additional storage capacity for the City is not necessarily needed but is desirable. The 2009 update to the master plan recommends that the City have an additional 3.8 million gallons of potable water storage. However, this is the only recommendation for this amount of storage. In fact, because the City relies on purchased water pumped by other entities, the addition of one or more storage facilities would simply increase pumping costs to the City.

We recommend, therefore, that the City not pursue any further storage construction options at this time. Even though water is scarce, the money would be best spent elsewhere. The sole potentially viable option is to construct an elevated water tank for off-peak pumping and distribution system pressure regulation in the zone supported by the single pump station operated by the City.

Although not a recommendation, another possibility would be surface water storage (nonpotable) using stormwater. A storage facility could be constructed in Milpitas, and water rights could be shared with the Santa Clara Valley Water District or other adjacent districts. This facility would probably be owned exclusively by the City, with shared water rights with Santa Clara Valley Water District; however, shared ownership could be arranged. Acquisition of water rights would be challenging, and could encounter many issues, for example, water rights would need to be bought, traded or used for water

credits. Also, such facilities incur large capital costs, as well as land costs and the cost of mitigation measures for procurement.

Surface water collection and augmentation applications could be used for habitat restoration partnerships. Surface water ponds, acting as artificial wetlands, could be enhanced or constructed to provide aquatic habitats for animals, recreational opportunities for people, and environmental learning centers, as well as to provide an efficient means of treating surface water runoff. Projects of this nature could even include partnership between the City of Milpitas, Santa Clara Valley Water District, Alameda County Water District and other nearby districts to improve riparian habitats. Possible locations include the boundary between Milpitas and Fremont near Dixon Landing along the confluence of Coyote creek with the San Francisco Bay mud sloughs, as well as along Coyote Creek and along Berryessa Creek. Although work is already being done here, more could be undertaken. Project scope could include the augmentation (or construction) of wetlands for additional water storage and the construction of water storage tanks. Although unnecessary, water storage tanks could be used to reduce the overall footprint, provide additional stormwater storage capacity and help to regulate water levels in the estuary. This approach could augment native estuaries and thus provide habitat for wildlife. These wetlands would encourage recharge of the shallow and deeper aquifers and thus make more water available in these aquifers in the dry seasons.

Berryessa Creek has the potential to provide additional water storage in the event of flooding caused by severe storms, as well as having a relatively moderate-to-high potential for habitat improvements. Storm management could be expanded to increase the surface water storage potential by constructing water storage tanks and to incorporate the planting of native vegetation. This step could also create recreational opportunities and provide habitat for sensitive species. Similar restoration efforts could be made at Coyote Creek and, possibly, at Arroyo de los Coches and Piedmont Creeks.

# Conclusion

Adding water storage to the City of Milpitas' system might save money and/or create additional regional water storage capacity in the form of groundwater recharge via stormwater, or as recycled non-potable water. It is feasible that the City might reduce electrical fees by pumping at off-peak hours or benefit from additional water credits, though not presently guaranteed, from Santa Clara Valley Water District, which is the groundwater manager. However, neither of these advantages directly addresses the City's need for additional water at this time. As stated above, Water Solutions, Inc. recommends that the City not pursue water storage construction options at this time.

If the City were to decide to pursue adding storage capacity to its system, the next step

would be to execute an implementation plan. The following is the sequence for implementation and construction of additional water storage structures: secure funding, create a request for proposal and complete permitting requirements. The most important step would be to secure adequate land suitable for ground/surface water collection and storage. The location of any infiltration ponds would be determined by drainage areas, geological conditions and available land (see “Implementation Plan” below for additional information).

## Task 7: Additional Water Storage, Implementation Plan (NOT IMPLEMENTED)

**Proposed Implementation Schedule:**

1. Determine the potential need for additional water storage and the most suitable application(s) for meeting these needs. (June 2015).
2. Obtain water sources, water rights and/or cooperative water use agreements with San Francisco Public Utilities Commission and/or Santa Clara Valley Water District. (January 2016).
3. Secure funding for additional water storage (February, 2016).
4. Hire a geotechnical or hydrogeological consultant to pursue site investigations for optimal sites regarding additional water storage potential (March, 2016).
5. Site location and water quantity determination (April, 2016).
6. Develop a request for proposal or in-house project proposal documents; including bid documents, etc. (June, 2016).
7. Bid-procurement and awardance of contract for additional water storage (September, 2016).
8. Pre-construction meetings, determining consultants/contractors for environmental mitigation measures and developing construction schedules (October, 2016).
9. Begin environmental and legal efforts for additional water storage (November, 2016).
10. Surveying and preconstruction site tasks (February, 2017).
11. Begin construction of additional water storage structures (April 2017).
12. Finish construction of water storage structures (August, 2017).
13. Complete permitting with state and federal governments. (September, 2017).

**Costs:**

- ~$2.00 per gallon for small tanks less than 500,000 gallons.
- ~1.50 - $1.75 per gallon for tanks 500,000 gallons to 1 million gallons
- ~$1.25 per gallon for large tanks greater than 1 million gallons. ($1.25 per million gallons of storage).
- Pump Station Construction at $500,000+
- Regular maintenance costs of $3 million over the tank lifetime ($3 million / 50 yrs = $60,000 per year).
- Triennial maintenance and inspection costs.
- Routing costs at about $422,000 to $1,500,000 per mile (or about $10 to $35 per inch*foot = $422,000 / 5280 feet per 8 in pipe).
- Water rights acquisition costs
- Land acquisition costs

**Benefit:**

- Additional non-potable water storage capacity for emergency supply and peak-shaving
- Water supply reliability due to ruptured water mains, etc.
- Ability to store water when rates are lower and/or to store water from lower cost sources.
- Potential energy cost savings by pumping to elevated storage tanks when electrical rates are low and allowing gravity to supply pressure during peak hours.

**Life Cycle:**

The life cycle of a water storage tank depends on the type of material used for the construction and the design parameters for water storage tanks. Typically, a plastic or fiberglass tank will last between 20-35 years, while a concrete or welded steel tank can last significantly longer (40-60+years). Maintenance at around 15 to 20 years will be required for most concrete and steel tanks, including repainting, replacing seals and for other maintenance issues. We would recommend a tank with a lifetime of approximately 50 years.

**Ease of Implementation:**

The ease of implementing new water storage infrastructure can be greatly increased by hiring a consultant to do hydrological and geological studies, as well as prepare design concepts for construction. However, additional costs may be accrued because of this. The process for additional water storage is relatively straight-forward and requires funding, contacting agencies for permitting and construction.

# List of References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- Santa Clara Valley Water District website. Web access: Nov. 2014.
- State Water Resource Control Board (State Water Resource Control Board) website. Website access: Nov. 2014. http://www.waterboards.ca.gov/waterrights/board_info/water_rights_process.shtml.
- United States Census Bureau website. Web access: Nov. 2014.
- United States Environmental Protection Agency (EPA) online publications. Web access: Nov. 2014.
- "Where Does Your Water Come From?" Santa Clara Valley Water District. Web access: October 16, 2014. http://www.valleywater.org/services/wheredoesyourwatercomefrom.aspx

# Water Solutions Inc.

## MEMORANDUM

Date: 27 March, 2015
To: Steven Machida, Milpitas City Engineer
From: Water Solutions, Inc. Consultant
Subject: Task 8: Funding

## Summary

Funding is a critical element of any infrastructural improvement campaign. Regularly required infrastructure repair projects can consume Capital Improvement Plan funds, often leaving little left over for critical improvements. During this time of drought, it is imperative that existing water resources be managed effectively. This requires fees and other regulatory actions to mitigate use. Customer conservation reduces their own payments, but also proportionally reduces the City's income. Growth can spur consumption. With that need also comes competition for what little supply is available. Moreover, as supplies of water dwindle, contaminants become more concentrated, thus lowering overall quality and requiring expensive treatment. For these, and other reasons, funding is exceptionally important for water infrastructure projects.

Currently, there are a variety of funding options available to the City of Milpitas, hereafter referred to as “the City,” which are detailed below. Though most federal funding is available through the state, some funding can be garnered directly from federal sources. Funding for water resource projects are currently available as grants and loans (State Water Resources Control Board, 2014); contact information for these sources is provided in the Conclusion section of this document. The City will be eligible for funding due to the necessity for water infrastructure that is required for continued growth and prosperity in the City.

The use of rate hikes and bonds is presently common for funding water infrastructure improvements. These measures would provide accessible funding for the City, although the timeline for rate hikes and bonds are dependent upon administrative functions. Bonds, loans and grants are the most effective means for allocating funding for infrastructure improvements.

Increases in connection fees, service charges and institution of fines could also be implemented for funding; however, this could prove unpopular. Fines in particular, are more

effectively used to discourage negligent water use than to increase revenues to fund improvement projects. Leveraging fines can make people angry and is susceptible to issues of harassment, etc. Connection fees and service charges would be an effective way of generating funds; however, additional sources of funding would undoubtedly be required.

A tax increase could provide the required funding if the community votes in favor of such a measure. This would be an effective way for determining community support, as well as provide the necessary funding without the costs associated with loans.

Funding requires a constant awareness of the changing loans, grants, etc. offered by the various agencies, as they become available.

# Data

The information in this memo drew data from a variety of sources, including:

- California State Water Resource Control Board
- California Department of Water Resources
- U.S. Bureau of Reclamation
- Environmental Protection Agency (Clean Water State Revolving Fund and Drinking Water State Revolving Fund)
- United States Department of Agriculture
- City of Milpitas website
- Other water district websites
- Internet, such as: Grants.gov, SF Gate

Please see the List of References below for more specific sourcing.

# Methodology

## A. Discuss options of funding the improvements (grants, loans, meter rates (volumetric), connection fee, bonds, etc.).

Legal and financial considerations will be addressed at the end of “Methodology” below.

There will be a final Task 8 Implementation Plan Table at the end of this memorandum. This will define an implementation schedule, compare cost and benefit, life cycle of plan and ease of implementation. Feasibility will be discussed in Task 9.

Funding sources for water improvement projects are currently available from the United States Department of Agriculture grants for communities under 10,000 persons in size, as well as Proposition 50 Desalination Grants offered by the State of California. This

memorandum analyzed the various funding options (i.e. grants, loans meters rates, connection fees, bonds, etc) to determine the constraints of each; primarily the benefits and disadvantages for funding uses.

In addition to conventional funding sources, Grants.gov was examined for potentially useful funding. The California State Water Resources Control Board and California Department of Water Resources websites were also examined for active funding sources that might be useful to the City. Also forthcoming is California Proposition 1, a $7.5 billion dollar bond measure to be voted on by California voters this November (SFGate).

## A. A. Discuss options of funding the improvements (grants, loans, meter rates (volumetric), connection fee, bonds, etc.).

Most federal funds for water infrastructure development come from the Environmental Protection Agency, and are routed through the California State Water Resources Control Board. The U.S. Bureau of Reclamation offers a direct application for its funds and they recommended that more direct federal funds may be found at Grants.gov.

### Grants

Although grant funding for infrastructure projects is traditionally hard to acquire, it has recently become readily available with allocations such as:

Formerly Available Grant Monies
Grant monies are a moving target. Grants can be funded, depleted and replaced by new grants. This is a quick overview of what grant monies are currently available. Further research would need to be done to have a complete survey of what will be available at the time money is needed. Grant monies do not need to be repaid.

- American Recovery and Reinvestment Act: This Act was executed expediently and there is no more funding
- State Water Resources Control Board's Drinking Water Program provides funding via the Proposition 50 and 84 grant programs, which were longer-lasting and more recent, and have been mostly depleted as a result of grants

Currently Available Grant Monies

- California Department of Water Resources still has remaining funds. These funds are available from the Integrated Regional Water Management Grant Program, and the Desalination Grant Program.
- Proposition 13 monies, according to the State Water Resources Control Board, in a recent call, that in the amount of $2.5 million per year, are available as grants for recycled water projects, with a cap of $4 million or 25% of the project cost (Newton, Dan. Telephone Interview, Sept. 8, 2014).

- The Water Recycling Funding Program (through the State Water Resource Control Board) offers monies for Recycled Water Facilities Planning Studies. Approximately $75,000 per planning project is allowed for, though funding for the actual construction is limited.
- The U.S. Bureau of Reclamation operates two funding programs pertinent to the situation facing the City. In 2015, the WaterSMART program will provide $19 million in grants for projects that address water efficiency or initiate advanced water treatment of brackish groundwater, seawater or other impaired waters (Bureau of Reclamation: WaterSMART - Sustain…", 2014). The Title XVI Water Reclamation and Reuse Program is slated for $21.5 million, from which "Under the Title XVI Program" project sponsors may receive federal funding on a cost-shared basis for planning and pre-construction activities and for construction of specific, congressionally authorized water recycling projects ("Title XVI Water Reclamation and Reuse Program", 1992). Both of these programs post details of these opportunities at www.Grants.gov, where grant applications may be submitted online ("Bureau of Reclamation: WaterSMART...", 2009).

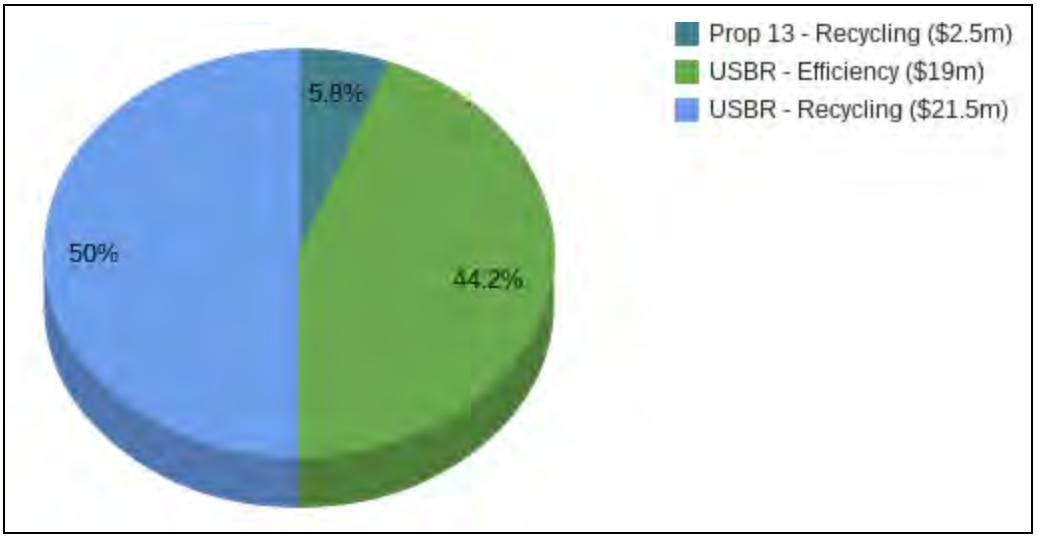


Figure 1: Potential grant funds (U.S. Bureau of Reclamation)

## Meter Rates, Permitting & Connection Fees

Another way to obtain funding is to create a more steeply tiered rate structure for water meters. This can be accomplished by establishing "mixed-use" zoning codes that incorporate "water-wise" rate tier structures. This approach can be based upon specific types of customers, for example, single family residential and dedicated irrigation. A single family unit typically uses one water meter that services that specific house, whereas dedicated irrigation

customers typically are businesses with two meters -- one dedicated to the business facility and one to irrigation (City of Santa Rosa website, 2014). Commercial and industrial customers may also be tiered separately.

A tiered rate structure can also be based upon Site Specific Evaluations. With this approach, each customer has a base index of water use. As long as that customer's water use stays below his particular base index, indicating that water is being conserved, the charge is below the nominal rate. However, if and when the base index is exceeded, indicating a higher-than-usual use of water, the charge to the customer is higher than the nominal rate. Site specific evaluations do require resources and staff to implement.

In addition, connection fees can provide an important stream of single occurrence income. Increases in connection fees can be used for near-term improvements that would allow new customers such benefits as extended water treatment services, desalination plants, and new groundwater wells.

Connection fees can also provide a source of income when traditional customers are converted to recycled water customers, whether the conversion is required by ordinance or is voluntary. Further, as new recycled water connections come online, they will generate income, although the connection fee in this instance may be dedicated to offset the costs of infrastructural development for this or other projects. In fact, as grant and loan funding sources wax and wane for various types of projects, funds such as connection fees becomes useful for water projects in general. It may, therefore, be appropriate to allocate fees from recycled water connections to infrastructure improvements such as new wells, while grant funds for recycled water improvements are still available.

Permits are required from the City when constructing in the public right away, for commercial/residential development and when working near water system infrastructure - Funds allocated through encroachment and building permits can be used to offset costs of inspection, and, some instances, for water supply funding.

## Loans

The U.S. Environmental Protection Agency's, the Clean Water State Revolving Fund and the Drinking Water State Revolving Fund are long-standing sources of loan funding for recycled water and drinking water projects. These programs provide large loans for public water systems at low interest rates (a percentage of the prime rate). The programs have been administered in California by the State Water Resources Control Board for many years. Often considered the funding source that is most easily accessed, State Revolving Funds are very large funds that select recipients by ranking projects according to a sequence of eligibility priority groups. Various types of projects are eligible for SRF funding, with recycled water projects now being included. Loans are now available at 1%, which is very low compared to the usual range of 2.5% to 3.5% for a 20-year term. The Clean Water State Revolving Fund, Drinking Water State Revolving Fund and grant funding available through the State of California require two initial Pre-Applications, one for recycled water and one for drinking water, respectively. Loan monies must be repaid.

### Bonds

Bonds are essentially a type of loan. Stock market investors are able to purchase “bonds” and receive repayment - generally with interest payments or increased value after a set time period. Water Utility Revenue Bonds may be a funding source for City’s water projects. These investments are considered the second-most-secure type of municipal bond and thus are attractive to lenders, even though they are only repayable with topically-generated revenue, such as water fees, but can not be paid with other tax revenues. General obligation bonds can also be issued by the City and are the most secure type of bond for lenders, being payable through tax revenue as well as other revenue streams.

### Parcel Tax and Sales Tax Hikes

A sales tax or parcel tax hikes could be placed on a ballot for water projects or water capital improvement programs that would benefit the entire city or parcels adjacent to shared beneficial use. For example, a ½ cent sales tax could be implemented to fund recycled water irrigation projects in the right of way or recreational/water storage opportunities for adding surface water retention ponds.

### Fines and Enforcement

Lastly, although fines are a less common and highly politicized form of revenue, they are becoming more prevalent in these times of recurring drought. Water may be rationed as it currently is in cities such as Santa Cruz, California: High use customers may be fined based on their level of water use; they may also be forced to audit their use, and if leaks are found and not repaired, additional fines may be levied. In some Southern California locales, conservation enforcement actions are taken against high-irrigation use. For example, customers with three or more acres of turf face a 100% increase in rates unless they reduce their consumption by 10% (“Drought in California...”, 2014). Fines should be sufficient to pay for enforcement - However, excessive fines should be avoided.

## B. Describe constraints, any advantages and disadvantages of these options.

### Grant Constraints

Grant funding for infrastructure projects can be difficult to acquire. In the recent past, funds were more readily available from sources such as the American Recovery and Reinvestment Act. Associated costs with acquiring grants include time and money to complete applications as well as the careful financial management of granted funds. Grants are basically free funding; no repayment or investment funds are required.

### Meter Rate, Permitting & Connection Fee Constraints

Funds from meter rates and connections provide an important stream of income; connection fees are useful for supplying funding for water projects (i.e.new developments require additional connections and service fees which, in turn can be used to fund capital improvement projects to the development). Connection fees associated with permits, etc. are similarly important; however, these revenue streams are dependent on new development and exhibit “plug-flow” trends - Funds are generated all at once at construction without future revenue, in most cases. Recycled water connections could also be considered for a one-time revenue source.

Tiered service rates can allow additional funding, as well as provide sufficient water for sustained growth; however, certain customers may become upset or overall productivity can decrease. Also, less irrigation will lead to a drier City with less aesthetically appealing vegetation or lawned surfaces.

### Loan Constraints

The largest constraints for acquiring loan funding for water projects include:

- interest rates
- public support
- completing applications properly
- service fees

The queue for receiving loan funds is based on when the application was processed and the necessity of the project. Other disadvantages to loans include long payback periods, investment costs and application costs.

### Bond Constraints

Using bonds is considered to be a secure and dependable method for allocating funds for capital improvement or water supply projects. Unlike grants, bonds have to be paid back with interest, which can be a significant percentage of the total project costs.

### Parcel Tax and Sales Tax Hikes Constraints

Possible benefits for a sales tax hike or parcel tax is the relative effectiveness of fund usage and public involvement; citizens are much more concerned about allocating funds and project quality. However, passing tax hikes can be very difficult to get on the ballot due to a large public resistance. Important public projects with limited funding sources, large public support and a large social benefit can be funded through the use of parcel tax and sales tax hikes.

### Fine and Enforcement Constraints

Leveraging additional fines can be used to generate small revenues of funding - However, excessive fines can lead to citizen unrest and dissatisfaction. The use of fines are best used for enforcement and practical purposes.

## C. Provide funding options and summarized in feasibility section below.

(See Results)

### Legality

In general, the City's ability to fund alternative water supplies or the infrastructure required to obtain those supplies through increased taxes and charges is limited by the California Constitution. The provisions of the Constitution Articles XIIIA, XIIIB, XIIIC, and XIIID, all added by initiative, limit the taxation and appropriation power of local governments.

Proposition 13 added Article XIII A to the California Constitution. Billed as a property-taxpayer relief measure, it included a real property tax rate limitation (Article XIII A, § 1), a real property assessment limitation (Article XIII A, § 2), and a restriction on local taxes (Article XIII A, § 4). Additionally, Article XIII A, section 4 limited local governments by establishing a two-thirds voter approval requirement for any special tax to be imposed by cities.

Proposition 218 amended the California Constitution by adding Articles XIIIC and XIIID, which established substantive and procedural requirements and limitations on new, extended and increased taxes, new and increased property-related fees or charges, and all assessments. The substantive requirements generally mandate that the fees or charges do not exceed the cost to provide the service and the procedural requirements include providing notice, a public hearing and an approval (majority protest) process.

### Financial

Taxes and water rates usually pay for a Capital Improvements Program via regular budget allotments. Generally, rate hikes, bonds and loans pay for special projects improvements beyond the Capital Improvements Program.

The only cost for seeking funding for special water projects is personnel time. A single employee could be assigned to research funds and write grants. The cost would be that of a full-time college-educated employee.

# Results

> "The real silver bullet in the water marketplace would be a more rapid move toward smarter and full cost-based pricing,"
>
> - Maxwell, Steve, 2014, TechKNOWLEDGEy Strategic Group

The City is a high income area, with residents making approximately 130% of the California median household income. This is the metric that is used by the government to determine eligibility for grant funding and, as such, may reduce the City's eligibility for federal and state grants. However, household income does not eliminate the City as an applicant for loan funding or funding through other means. he following table provides a comparative analysis of the aforementioned funding options.

Since 1996, water and wastewater rates have increased by 4.9% per year, almost twice the rate of inflation as measured by the Consumer Price Index. The long term sustainability of the water industry in the U.S. depends on finding ways to make the necessary system improvements across the country, while understanding the impact of these improvements on customers' ability to pay for water services. Integrated resource planning, an approach endorsed by the Environmental Protection Agency, considers all water-related needs of a community while, at the same time, conducting a financial capability assessment. Such planning considers the costs of ongoing operations, repair and replacement, asset management and compliance actions. Also, included in this type of planning are capital financing and data from actual customer bills that can help to estimate affordable pricing (Davis, 2014).

| ITEM | ADVANTAGES | DISADVANTAGES |
|---|---|---|
| Grants | Essentially free money with no obligation for targeted projects | City often ineligible; most currently available funds have been exhausted; timing is critical |
| CWSRF/DWSRF Loans | Very low rates (1%) | Lengthy application process; project priority may delay funding |
| Tiered Rate Structure | Very common process; self regulating; cost effective; drought independent | Negative impact on low-income households; fairness in the establishment of a site specific evaluation is an issue |
| Connection Fee Increases | Large one-time deposit on growth; potential limit on growth | Publicly unpopular; non-renewable source of funding |
| Bonds | Publicly popular; very common process | High interest rates |
| Fines | Cost effective; drought independent | Publicly unpopular; negative impact on low-income households |

# Conclusion

Choosing the appropriate funding avenue(s) can be difficult. Fortunately, the Environmental Protection Agency provides assistance in form of the Financial Alternatives Comparison Tool, which can be downloaded and used to determine the most cost effective method(s) to fund drinking water water programs. Financial Alternatives Comparison Tool provides a comprehensive analysis of a variety of useful reports on financing options using key financial figures. As well, it can create graphical comparisons of annual and total costs (Financing Alternatives Comparison Tool, 2014).

We recommend that, once the City has identified the projects it wishes to pursue, it immediately contact:

- The State Water Resources Control Board - Division of Drinking Water coordinator for Region II is Maria Pang at (916) 445-2493. This contact will help the City with their Universal Application for loan and grant funding from the state and the federal governments.
- The City should also immediately begin perusing the website www.grants.gov for U.S. Bureau of Reclamation funding opportunities and contact Sue Fry, U.S. Bureau of Reclamation Bay-Delta Office Manager at (916) 414-2400 for assistance in applying for WaterSMART Conservation funding or Title XVI Water Reuse funding.

Water Solutions is available to focus and strategize these requests.

Once access to potentially “free” money has been examined thoroughly, the City should immediately begin the planning of Site Specific Evaluated Tiered Water Rate Structure. The implementation of this structure and of corresponding rate increases would bolster the City’s current tiered rate structure. Subsequently, by substantially increasing the fees for customers who are not conserving, that is, not keeping their water below their base index, the structure would generate a sustainable stream of revenue that would be drought independent.

Some municipalities have gone so far as to set rate increases for far into the future. In San Diego County for example, some agricultural irrigation customers are paying as much as $1,500 per acre foot, and that number is expected to increase. The setting of a Drought Rate Structure is easily done by hiring a consultant to perform a study and produce a report which includes allocations and rate structures. Proposition 218 requires that a public hearing be publicized during this process. The result for the City would be a much greater Capital Improvement Program fund and an effective series of water system improvements.

## Task 8: Funding, Implementation Plan

Possible Implementation Schedule

1. Determine Appropriate Projects for which to garner funding (Mar. 2015)
2. Submit Funding Pre-Applications and Search www.grants.gov
    a. U.S. Bureau of Reclamation: WaterSMART & Title XVI (5 Jan. 2016) - www.grants.gov
    b. State Water Resources Control Board: Clean Water State Revolving Fund and Proposition 13 (5 Jan. 2016)
    c. State Water Resources Control Board-Division of Drinking Water: Drinking Water State Revolving Fund (5 Jan. 2016)
3. Evaluate property or sales tax increases within existing tax structure (1 Feb. 2016)
4. Evaluate the City's tiered water-rates for possible increase by initiating a Planning Study for Site Specific Evaluation-based Tiered Water Rate increases (1 Feb. 2016)
5. Complete Planning Study for Rate Increases (1 June 2016)
6. Complete Full Funding Applications
    a. U.S. Bureau of Reclamation: WaterSMART & Title XVI (31 Mar. 2016)
    b. State Water Resources Control Board: Clean Water State Revolving Fund and Prop. 13 (30 June 2016)
        i. CWSRF Application: Engineering for Segments 2, 3, 4 & 5, Tank & Pump Station, Loop Completion
        ii. CWSRF Application: Construction of Segment 1
        iii. CWSRF Application: Construction of Segments 2, 3, 4 & 5, Tank & Pump Station, Loop Completion
    c. State Water Resources Control Board-Division of Drinking Water: Drinking Water State Revolving Fund (30 June 2016)
        i. DWSRF Engineering plan application for treatment at Curtis, blending at Curtis and Pinewood and 2 new wells (Apr. 2015 - Dec. 2015)
        ii. DWSRF SCADA construction application (Apr. 2015 - Dec. 2015)
        iii. DWSRF construction application for treatment at Curtis, blending at Curtis and Pinewood and 2 new wells (July 2016 - Mar. 2017)
7. Signing of Funding Agreements (~6 months after Submission of an Application)
8. Begin Public Comment Period on Site Specific Evaluation Tiered Rate Increases (1 Oct. 2016)
9. Finish Planning or Construction of Water Projects
10. Submit Claims for Reimbursement if funding not yet received

Costs

There is a modest cost for applying for funding. A single employee position could provide services as both a fund researcher and a grant writer.

Benefit

Water Planning or Construction projects could be paid for in full or with loan money at a very low interest rate.

| |
|---|
| Life Cycle<br>The life cycle of a low-interest for non-disadvantaged communities is 20 years. |
| Prioritization by life-cycle<br>1. Grant funding from U.S. Bureau of Reclamation (no loan repayment, instant reimbursement)<br>2. Grant funding and loan funding from the State/State Revolving Fund (20-year life cycle) |
| Ease of Implementation<br>Grant funding from U.S. Bureau of Reclamation is not as circuitous a process as are the State Revolving Funds. |

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# Water Solutions Inc.

## Description of Water Supply Augmentation Work Plan

Date: 27 March 2015
To: Steven Machida, Milpitas City Engineer
From: Water Solutions, Inc. - Consultant

As a result of the Water Supply Augmentation Study a lot of new sub-tasks will need to be planned and completed, staff will need to assigned and funding will need to be acquired.

The Water Supply Augmentation Work Plan spreadsheets help to see what needs to be done, by when and by who.

The first sheet simply lists the tasks, the sub-tasks, staffing time (as a percentage of a full-time employee), and funding source. Each sub-task is broken down into smaller actions, estimating how long each action would take, and then placed in sequence on a 5-year timeline.

With this spreadsheet three full-time employees were defined as being needed to complete the tasks and an additional three multi-year contract employees will be needed for support of the engineering staff.

On the second sheet we created a Staffing Plan. We took the first sheet and colorized the timelined sub-tasks. Each color represents how each employee should be assigned so as to allow for the best grouping of skill sets over task and time, accounting for continuity.

Only the #6 Project Engineer has a gap in the job's work flow of three months, April to June, 2017. Two employees, one as the TASP and Meters Project Engineer and one as Old Infrastructure and Conservation Outreach, will be full-time and ongoing. One employee will go full-time, then part-time (SCADA and water rights). Three project engineers will be needed for 3 and 4 years.

The Priorities List (third sheet) shows each task prioritized from 0 to 28. The zeros were assigned to tasks that have already been started.

Lastly, the fourth sheet calculates the System Operator Certification Requirements scores for treatment and distribution criteria for chief operators in each discipline. T2 and D4 chief operators will be required to conduct ongoing water system operation.

Work Plan Sheet 1 is deleted as it is the same information as sheet 2, staffing plan

# Staffing Plan (with schedule and cost) of Work Plan related to Water Supply Augmentation Feasiblity Study

| Row | Task | Sub-Task | Staff | Cost | Funding | Fiscal Year 2014-15 | | | | Fiscal Year 2015-16 | | | | Fiscal Year 2016-17 | | | | Fiscal Year 2017-18 | | | | Fiscal Year 2018-19 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | July-Sept. | Oct.-Dec. | Jan.-Mar. | Apr.-June | July-Sept. | Oct.-Dec. | Jan.-Mar. | Apr.-June | July-Sept. | Oct.-Dec. | Jan.-Mar. | Apr.-June | July-Sept. | Oct.-Dec. | Jan.-Mar. | Apr.-June | July-Sept. | Oct.-Dec. | Jan.-Mar. | Apr.-June |
| 1 | | Smartmeter Concept | 0.375 | $6,250,000 | Grant/Loan/CIP | Large Pilot (1 meter) | | | | | Large Install (60 meters) | | | Small Pilot | | | | Small Install (16,000 meters) | | | | | | | |
| 2 | | Outreach | 0.25 | $35,000 | Water O&M | | | | Ongoing: Advertisement and Education for SCVWD Rebate Programs etc. | | | | | | | | | | | | | | | | |
| 3 | **Conservation** | SCADA efficient water management | 0.5 | $5,000,000 | Grant/Loan | | | | Funding/Application: SCADA efficient water management | SCADA: Installation of City-wide Pressure & Flow Sensors | | | | | | | PG&E Power | SCADA: Installation of Remote control valves | | | | | | | |
| 4 | | System-Wide Leak Detection | 0.25 | $175,000 | CIP | | | | | | | | | | | | | Hiring of Leak Detection Company | | | | | | | |
| 5 | | Aging Infrastructure Field Investigation | 0.75 | $105,000 | Water O&M | | | | | Ongoing: Aging infrastructure field investigation | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | | Recycled Water Modeling | 0.25 | $75,000 | Grant/Loan | | | | | | | | Modeling | | | | | | | | | | | | |
| 8 | | TASP Construction | 0.375 | $9,400,000 | TASP | Construction (ongoing; development-driven) | | | | | | | | | | | | | | | | | | | |
| 9 | | Segment 1 (east extension) | 0.375 | $3,900,000 | Grant/Loan | | | Engineering | | | | Funding/Application: Construction of Segment 1 | | Construction | | | | | | | | | | | |
| 10 | | Segment 2 (north loop) | 0.25 | $2,000,000 | Grant/Loan | | | | Funding/Application: Engineering for Segments 2, 3, 4 & 5, Tank & Pump Station, Loop Completion | | | Consultant Selection | Engineering | | | | Application: Construction of Segments 2, 3, 4 & 5, Tank & Pump Station, Loop Completion | | Construction | | | | | |
| 11 | **Recycled Water** | Segment 3 (golf courses) | 0.25 | $3,200,000 | Grant/Loan | | | | | | | Consultant Selection | Engineering | | | | | | Construction | | | | | | |
| 12 | | Segment 4 (school & park) | 0.25 | $3,200,000 | Grant/Loan | | | | | | | Consultant Selection | Engineering | | | | | | Construction | | | | | | |
| 13 | | Segment 5 (south loop) | 0.25 | $2,000,000 | Grant/Loan | | | | | | | Consultant Selection | Engineering | | | | | | | Construction | | | | | |
| 14 | | Reservoir & Booster Pump Station | 0.25 | $10,000,000 | Grant/Loan | | | | | | | Consultant Selection | Engineering | | | | | | | | Construction | | | | |
| 15 | | Loop Completion | 0.25 | $12,800,000 | Grant/Loan | | | | | | | Consultant Selection | Engineering | | | | | | | | | Construction | | | |
| 16 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 17 | | Original Conceptual Blending Study (Done) | | | | | | | | | | | | | | | | | | | | | | | |
| 18 | | Blending Treatment: Onsite vs. transmission | 0.375 | $3,000,000 | Grant/Loan | | | | Funding/Application: Engineering for Treatment at Curtis, Blending of Curtis and Pinewood & Piping, Pinewood Generator & Control, 2 new wells | | | Consultant Selection | Blending & Piping Engineering | Funding/Application: Construction of Treatment at Curtis, Blending of Curtis and Pinewood, Pinewood Generator & Control, 2 new wells | | | Construction of Blending & Piping | | | | Permit to Operate | | | Chief Treatment Operator (T2 Required by SWRCB) and 2x Shift Treatment Operators (T1) | |
| 19 | | Pinewood | 0.25 | $100,000 | Grant/Loan | | | | | | | Consultant Selection | Blending & Piping Engineering | | | | | Construction of Blending & Piping | | | | Permit to Operate | | | |
| 20 | **Groundwater** | Curtis | 0.25 | $500,000 | Grant/Loan | | | | | | | Consultant Selection | Hardness (Mn, Fe) Treatment Engineering | | | | | Construction of Hardness Treatment and Blending & Piping | | | | Permit to Operate | | | |
| 21 | | New Well 1: Starlite? | 0.25 | $3,000,000 | Grant/Loan | | | | | | | Consultant Selection | Site Selection, Test Bore, Engineering | | | | | Construction of New Well #1 | | | | Permit to Operate | | | |
| 22 | | New Well 2 | 0.25 | $3,000,000 | Grant/Loan | | | | | | | Consultant Selection | Site Selection, Test Bore, Engineering | | | | | Construction of New Well #2 | | | | Permit to Operate | | | |
| 23 | | New Well 3? | 0.25 | $3,000,000 | Grant/Loan | | | | | | | | | | | | | | | | | | | | |
| 24 | | SWRCB Planning - Groundwater sources (reliability) | 0.375 | $52,500 | Grant/Loan | | | | Application: Engineering for Treatment at Curtis, Blending of Curtis and Pinewood & Piping, Pinewood Generator & Control, 2 new wells | | | | | | | | | | | | | | | | |
| 25 | | SWRCB Construction - SCADA efficient water management | 0.375 | $52,500 | Grant/Loan | | | | Application: SCADA efficient water management | | | | | | | | | | | | | | | | |
| 26 | **Funding (all loans, to be repaid by gen'l oblig. or other bonds)** | SWRCB Construction - Groundwater sources (reliability) | 0.375 | $52,500 | Grant/Loan | | | | | | | | | Application: Construction of Treatment at Curtis, Blending of Curtis and Pinewood, Pinewood Generator & Control, 2 new wells | | | | | | | | | | | |
| 27 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 28 | | SWRCB Planning - Recycled Water | 0.375 | $52,500 | Grant/Loan | | | | Application: Engineering for Segments 2, 3, 4 & 5, Tank & Pump Station, Loop Completion | | | | | | | | | | | | | | | | |
| 29 | | SWRCB Construction - Recycled Water | 0.375 | $52,500 | Grant/Loan | | | | | | | Application: Construction of Segment 1 | | | | | | | | | | | | | |
| 30 | | SWRCB Construction - Recycled Water | 0.375 | $52,500 | Grant/Loan | | | | | | | | | | | | Application: Construction of Segments 2, 3, 4 & 5, Tank & Pump Station, Loop Completion | | | | | | | | |
| 31 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 32 | **O&M** | PRV from SCVWD to SFPUC Zone | 0.25 | $300,000 | CIP | | | | Engineering | Construction | | | | | | | | | | | | | | | |
| 33 | **Desalination** | Partnership Research | 0.25 | $35,000 | Water O&M | | | | | Ongoing: Desalination Partnership research | | | | | | | | | | | | | | | |
| 34 | **Water Rights** | ACWD Purchase | 0.25 | $105,000 | Water O&M | | | Negotiation for Purchase of Allotment | | | | | | | | | | | | | | | | | |
| 35 | | Water Rights Research | 0.25 | $35,000 | Water O&M | | | | | Ongoing: Available water rights research | | | | | | | | | | | | | | | |
| 36 | **Surface Water** | Construction Water Fill Stations (4) | 0.25 | $200,000 | Water O&M | | | | | Engineering | Construction | | | | | | | | | | | | | | |

**Estimated Total New FTE Needed** 3

**Total Budget** approx. $72 million

| | | |
|---|---|---|
| #1 TASP/Meters Engr. | 1 | FTE ongoing |
| #2 Old Infrastructure & Outreach Admin III | 1 | FTE ongoing |
| #3 SCADA & Water Rights Engr. | 1 | FTE => P/T |
| #4 Project Engr. | 1.75 | 4 yr contract |
| #5 Project Engr. | 1 | 4 yr contract |
| #6 Project Engr. | 1.5 | 3 yr contract |

FTE: full time employee

P/T: part time (employee)

# Priorities List

0 means completed or already underway

* Refers to row number of work plan (staffing and schedule) spreadsheet

TASP and CIP are not counted for funding budget/level

| Priority | Row * | Task | Sub-Task | Staff | Cost | Funding | |
|---|---|---|---|---|---|---|---|
| 0 | 17 | **Groundwater** | Original Conceptually Blending Study Done | | | | |
| 0 | 9 | **Recycled Water** | Segment 1 (east extension) | 0.375 | $3,900,000 | Grant/Loan | |
| 0 | 8 | **Recycled Water** | TASP Construction (by developers) | 0.375 | $9,400,000 | TASP | |
| 0 | 34 | **Water Rights** | ACWD Purchase | 0.25 | $105,000 | Water O&M | |
| 1A | 24 | **Funding** | SWRCB Planning - Groundwater sources (reliability) | 0.375 | $52,500 | Grant/Loan | |
| 1B | 28 | **Funding** | SWRCB Planning - Recycled Water | 0.375 | $52,500 | Grant/Loan | |
| 1C | 25 | **Funding** | SWRCB Construction - SCADA efficient water management | 0.375 | $52,500 | Grant/Loan | |
| 1D | 29 | **Funding** | SWRCB Construction - Recycled Water sement 1 | 0.375 | $52,500 | Grant/Loan | |
| 1E | 30 | **Funding** | SWRCB Construction - Recycled Water remain segments | 0.375 | $52,500 | Grant/Loan | |
| 1F | 26 | **Funding** | SWRCB Construction - Groundwater sources (reliability) | 0.375 | $52,500 | Grant/Loan | |
| 2 | 1 | **Conservation** | Smartmeter Concept | 0.375 | $6,250,000 | CIP | |
| 3 | 19 | **Groundwater** | Pinewood | 0.25 | $100,000 | Grant/Loan | |
| 4 | 20 | **Groundwater** | Curtis | 0.25 | $500,000 | Grant/Loan | |
| 5 | 18 | **Groundwater** | Blending Treatment: Pinewood-Onsite vs transmission Curtis-Onsite vs. Gibraltar transmission | 0.375 | $3,000,000 | Grant/Loan | |
| 6 | 7 | **Recycled Water** | Recycled Water Modeling | 0.25 | $75,000 | Grant/Loan | |
| 7 | 5 | **Conservation** | Aging Infrastructure Field Investigation | 0.75 | $105,000 | Water O&M | |
| 8 | 21 | **Groundwater** | New Well 1: Starlite? | 0.25 | $3,000,000 | Grant/Loan | |
| 9 | 2 | **Conservation** | Outreach | 0.25 | $35,000 | Water O&M | |
| 10 | 32 | **O&M** | PRV from SCVWD to SFPUC Zone | 0.25 | $300,000 | CIP | |
| 11 | 4 | **Conservation** | System-Wide Leak Detection | 0.25 | $175,000 | CIP | |
| 12 | 10 | **Recycled Water** | Segment 4 (schools and parks) | 0.25 | $3,200,000 | Grant/Loan | approx $15 million level |
| 13 | 11 | **Recycled Water** | Segment 3 (golf courses) | 0.25 | $3,200,000 | Grant/Loan | |
| 14 | 3 | **Conservation** | SCADA efficient water management | 0.5 | $5,000,000 | Grant/Loan | **recommended level ($ approx 22 million)** |
| 15 | 12 | **Recycled Water** | Segment 2 (north loop) | 0.25 | $2,000,000 | Grant/Loan | |
| 16 | 13 | **Recycled Water** | Segment 5 | 0.25 | $2,000,000 | Grant/Loan | |
| 17 | 14 | **Recycled Water** | Reservoir & Booster Pump Station | 0.25 | $10,000,000 | Grant/Loan | |
| 18 | 15 | **Recycled Water** | Loop Completion | 0.25 | $12,800,000 | Grant/Loan | |
| 19 | 22 | **Groundwater** | New Well 2 | 0.25 | $3,000,000 | Grant/Loan | |
| 20 | 23 | **Groundwater** | New Well 3? | 0.25 | $3,000,000 | Grant/Loan | |
| 21 | 33 | **Desalination** | Partnership Research | 0.25 | $35,000 | Water O&M | |
| 22 | 35 | **Water Rights** | Water Rights Research | 0.25 | $35,000 | Water O&M | |
| 23 | 36 | **Surface Water** | Construction Water Fill Stations | 0.25 | $200,000 | Water O&M | |
| | | | total | approx | $72,000,000 | | |

## Operator certification level

| **Treatment Criteria** | **Points** |
|---|---|
| Type: Groundwater & Purchased Treated Water | 2 |
| Median Coliform Density: less than 1 per 100 mL | 0 |
| Treatment Process: Hardness | 3 |
| Treatment Process: Blending (< MCL) | 0 |
| Treatment Process: Disinfection | 10 |
| Facility Flow (2 * 8.2 MGD) | 17 |
| **TOTAL POINTS** | **32** |
| **REQUIRED CHIEF OPERATOR CERTIFICATION** | **T2** |

| **Distribution Criteria** | **Points** |
|---|---|
| Population Served: 70,000 | D4 |
| Pressure Zones: 9 | 4 |
| Distribution System Disinfection: Yes | 5 |
| Largest Pump: XXXXXXX | 4 |
| Storage Reservoirs: 5 | 4 |
| **TOTAL POINTS** | **17** |
| **ESTIMATED REQUIRED CHIEF OPERATOR CERTIFICATION** | **D4** |
| *6 Points for serving recycled water - SWRCB Calculated (updated April 14)* | ***D5*** |

*8

City Clerk's Office
APR 13 2015
RECEIVED

**City of Milpitas**
**Donation or Fee Waiver/Reduction Request Application Form for Non-Profit Organizations**

*Complete this form and return it to Milpitas City Clerk*

Please provide a copy of the IRS tax-exempt letter with the application.

Name of Organization American Cancer Society

Is there a Milpitas branch or affiliation? Relay For Life of Milpitas

Mailing Address: 1948 Grand Teton Drive

Milpitas, CA 95035

Contact Person: Tima Maharaj Telephone No. 669.444.0256

Email Address: tima.maharaj@cancer.org

What is your request? Donation Amount Requested $1,450 – see attached OR

Fee Requested to be waived (type and $ amount) _____

Event date(s): June 20 - 21, 2015

What is the purpose of the event? 24 hour fundraising walk to fight cancer

How will the Milpitas community benefit from this event? All of our programs and services are free and all Milpitas residents can access them. This event unites a community in the global fight against cancer.

What % of the fund raising proceeds will benefit Milpitas community? Please see attached documents we have constraints with confidentiality agreements.

How will the City's contribution (if granted) be recognized in any publicity? The city will be recognized on our participant t-shirts, website and promotional material.

***Within 60 days after completion of the event for which a donation was received or a fee waiver/ reduction was granted by the City of Milpitas, your organization will provide a written report to the City Clerk to include at minimum: number of participants, copies of all publicity of the event, any benefit to the community, amount of funds raised and an accounting of how the proceeds of the event will be dispersed.***

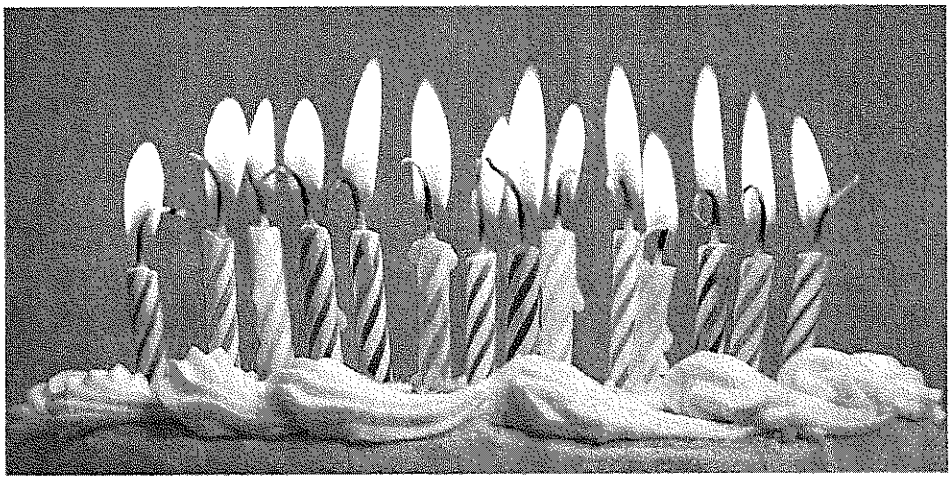
Signature of Officer: _____ Date: 4/9/15

Print Name & Title: Jennifer Highland - Senior Manager, Relay For Life

| | | |
|---|---|---|
| **2015 Facility Rental Costs** | | |
| City of Milpitas and Relay For Life of Milpitas | | |
| | | |
| **Recreation Services:** | **Totals:** | |
| Use of Football Field | | |
| $20.00 Application Fee | 20 | |
| $1,200 (30 hours @ $40.00) | 1200 | *Request to be waived |
| | | |
| Use of Mobile Stage | | |
| Deposit (to be returned after event) | 1,000 | |
| $350 Per Day | $700 | **To be dropped off Saturday AM |
| Attendant Fee/Set Up and Tear Down $30/hr | 60 | *Request to be waived |
| Stage Towing* ACS to Pay | 125 | |
| | | |
| Fire Permit | | |
| $460.77 | 460.77 | |
| ?Safe House provided? ($50) | | |
| | | |
| Planning Department | | |
| Special Event Permit | 250 | *Request to be waived |
| | | |
| **Totals:** | **3815.77** | |
| Request to be Waived | 1450 | |
| Return deposit for stage | 1,000 | |
| | | |
| **After Relay Total:** | 1,366 | |

AMERICAN CANCER SOCIETY

# RELAY FOR LIFE



***Join the fight against cancer!***

# Relay For Life of Milpitas

## A 24-Hour Community Walk Against Cancer

## June 20 – June 21, 2015
## 10:00am – 10:00am

Milpitas Sports Center
1325 E Calaveras Blvd, Milpitas, CA 95035

Register your team today at:
www.RelayForLife.org/MilpitasCA

For more information call 408.688.0126

RELAY FOR LIFE
American Cancer Society

**Celebrate. Remember. Fight Back.®**

RelayForLife.org | 1.800.227.2345

IRS Department of the Treasury
Internal Revenue Service

OGDEN UT 84201-0046

In reply refer to: 0423291515
Apr. 15, 2013 LTR 1224C 0
13-1788491 000000 00
00013477
BODC: TE

AMERICAN CANCER SOCIETY INC
NATIONAL HOME OFFICE
% FINANCE
250 WILLIAMS ST 4TH FLR
ATLANTA GA 30303-1032

003456

Taxpayer Identification Number: 13-1788491

Dear Taxpayer:

Thank you for your correspondence dated Mar. 08, 2013.

Our records indicate that your organization is exempt under Section 501(c) 3 of the Internal Revenue Code.

If you need forms, schedules or publications to respond to this letter, you can obtain them by visiting the IRS website at www.irs.gov or by calling 1-800-TAX-FORM (1-800-829-3676).

If you have any further questions about your organization's filing requirements, accounting period, or exempt status, please contact our Customer Service Site at 1-877-829-5500.

Whenever you write, please include this letter and, in the spaces below, give us your telephone number with the hours we can reach you. Keep a copy of this letter for your records.

Telephone Number ( )_____ Hours_____

We apologize for any inconvenience we may have caused you, and thank you for your cooperation.

# American Cancer Society Relay For Life
# What Does Your Dollar Do?

The American Cancer Society Relay For Life movement is the world's largest fundraising event to end cancer, uniting communities across the globe to finish the fight. Dollars raised by more than four million Relay participants in 24 countries help the American Cancer Society save lives by supporting education and prevention efforts, funding groundbreaking cancer research, and providing free information and services for people with cancer who need them. **Here are just some of the ways you're helping the Society finish the fight.**

IN 2013, WE GAVE
CANCER PATIENTS MORE THAN
**380,000**
RIDES TO & FROM TREATMENT
OR MEDICAL APPOINTMENTS.

IN 2013,
WE FULFILLED
NEARLY
**1 MILLION REQUESTS**
FOR CANCER INFORMATION
VIA THE PHONE, EMAIL, AND ONLINE CHATS.

IN 2013, WE SAVED
PATIENTS MORE THAN
**$38 MILLION**
IN LODGING COSTS
BY PROVIDING A
FREE PLACE TO STAY
when they had to travel for treatment.

IN 2013, WE GRANTED
**$31.8 MILLION**
TO THE AMERICAN CANCER SOCIETY
CANCER ACTION NETWORK
TO ENSURE LAWMAKERS MAKE CANCER A TOP NATIONAL PRIORITY.

WE'VE MARKED A
**20%** DECLINE
IN CANCER
DEATH RATES
SINCE 1991.
THAT MEANS MORE THAN
**1.3 MILLION**
**LIVES SAVED.**

SINCE 1946, WE'VE
INVESTED MORE THAN
**$4 BILLION**
IN CANCER RESEARCH
that has helped confirm the link between cigarette smoking and lung cancer, establish the link between obesity and multiple cancers, and develop drugs to treat leukemia and advanced breast cancer, among many other breakthroughs.

OUR WORK HAS CONTRIBUTED TO A
**50% DROP**
**IN SMOKING**
SINCE 1965, WHICH IN TURN HAS LED TO AN
AN OVERALL DROP IN
LUNG CANCER DEATH RATES.

EVERY YEAR, MORE THAN
**4 MILLION PEOPLE**
**COME TOGETHER AT**
**RELAY FOR LIFE EVENTS**
AROUND THE WORLD TO SUPPORT THE
AMERICAN CANCER SOCIETY AND HELP FINISH THE FIGHT AGAINST CANCER!

IN 2013, WE HELPED MORE THAN
**45 MILLION**
**VISITORS**
TO OUR WEB SITE,
**CANCER.ORG,**
GET THE CANCER INFORMATION
AND SUPPORT THEY NEEDED.

RelayForLife.org | 1.800.227.2345

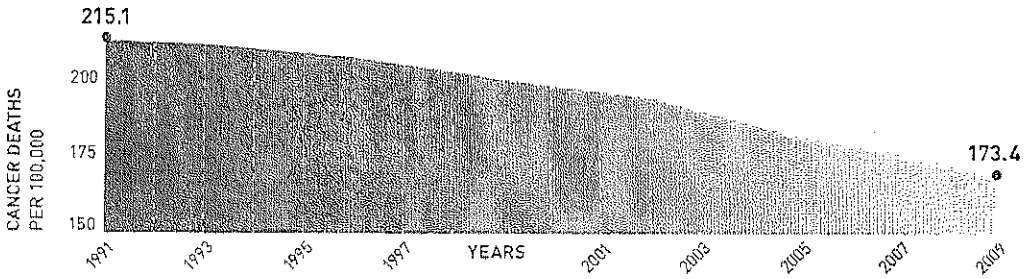
© 2014 American Cancer Society, Inc. – No. 000916

# WHERE DOES YOUR MONEY GO? (Data from 2012)



With your help, the American Cancer Society is saving the birthdays that might otherwise be lost to cancer. We are extremely committed to our obligation to spend donor dollars wisely. Here's a year-end glimpse at how your donations helped save lives every day — by the numbers.

## THIS YEAR, WE CELEBRATE A **20% DECLINE IN CANCER DEATH RATES** SINCE 1991.




## HERE'S HOW WE HELPED PEOPLE IN 2012

### STAY WELL

We reached our goal of recruiting 300,000 participants for Cancer Prevention Study-3, our latest landmark research initiative.

Our Nutrition and Physical Activity Guidelines are used to illustrate how weight, nutrition and activity affect cancer risk.

Our CHANGE grants provided thousands of screenings to people in under-served communities to combat health disparities.

### GET WELL

We provided free lodging at our Hope Lodge® facilities for more than 41,000 patients and their caregivers who must travel to treatment.

Cancer Information Specialists provided free information and support to nearly 1 million callers (800-227-2345).

32,000,000 unique visitors came to cancer.org for credible, compelling cancer and health-related information.

### FIND CURES

Our legacy of funding pioneering research continues: A 47th Society-funded researcher won the Nobel Prize, the highest accolade a scientist can receive.

Our annual *Cancer Facts and Figures* publication presents the most current trends in cancer occurrence, survival, prevention, early detection, and treatment.

We spent an estimated $160.1 million on research and health professional training.

### FIGHT BACK

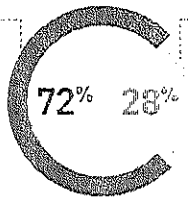
We granted $25M+ to the American Cancer Society Cancer Action Network℠ to ensure lawmakers make cancer a top national priority.

Relay For Life®, the world's largest movement to end cancer, engaged 4 million people in 6,000 communities across 20 countries.

Our Making Strides Against Breast Cancer walks turned awareness into action by engaging 1 million people to raise $60 million.

## HERE'S HOW WE SPENT THE MONEY

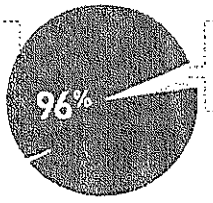
| PROGRAM SERVICES | |
|---|---|
| CANCER RESEARCH | $160M |
| PATIENT SUPPORT | $304M |
| PREVENTION INFO & EDU. | $153M |
| DETECTION & TREATMENT | $97M |




| SUPPORTING SERVICES | |
|---|---|
| $59M | MGMT. & GEN. EXPENSES |
| $218M | FUNDRAISING EXPENSES |

## AND WHERE IT CAME FROM

PEOPLE LIKE YOU
SPECIAL EVENTS
PERSONAL GIFTS
CORPORATE GIFTS
BEQUESTS
ETC.




1%
GRANTS AND CONTRACTS FROM GOVERNMENT AGENCIES

3%
INVESTMENT INCOME

Many of these donors were individuals who gave an **average gift of just $50** to help those affected by cancer.

## SUPPORT THE AMERICAN CANCER SOCIETY

100 years ago, we began the fight of a lifetime. Today, you can join us to help finish the fight. When you support the American Cancer Society, you join millions of others who are committed to the fight to end cancer. You help save lives in your community and around the world. Thank you for supporting these lifesaving efforts that get us closer to a world with less cancer and more birthdays.

**Learn More** // cancer.org
**Volunteer** // cancer.org/getinvolved
**Donate** // cancer.org/donate

THE OFFICIAL SPONSOR OF BIRTHDAYS℠

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The American Cancer Society is a qualified 501(c)(3) tax-exempt organization and donations are tax-deductible to the full extent of the law.

CITY OF MILPITAS
CALIFORNIA
INCORPORATED
JANUARY 26, 1954

# MILPITAS

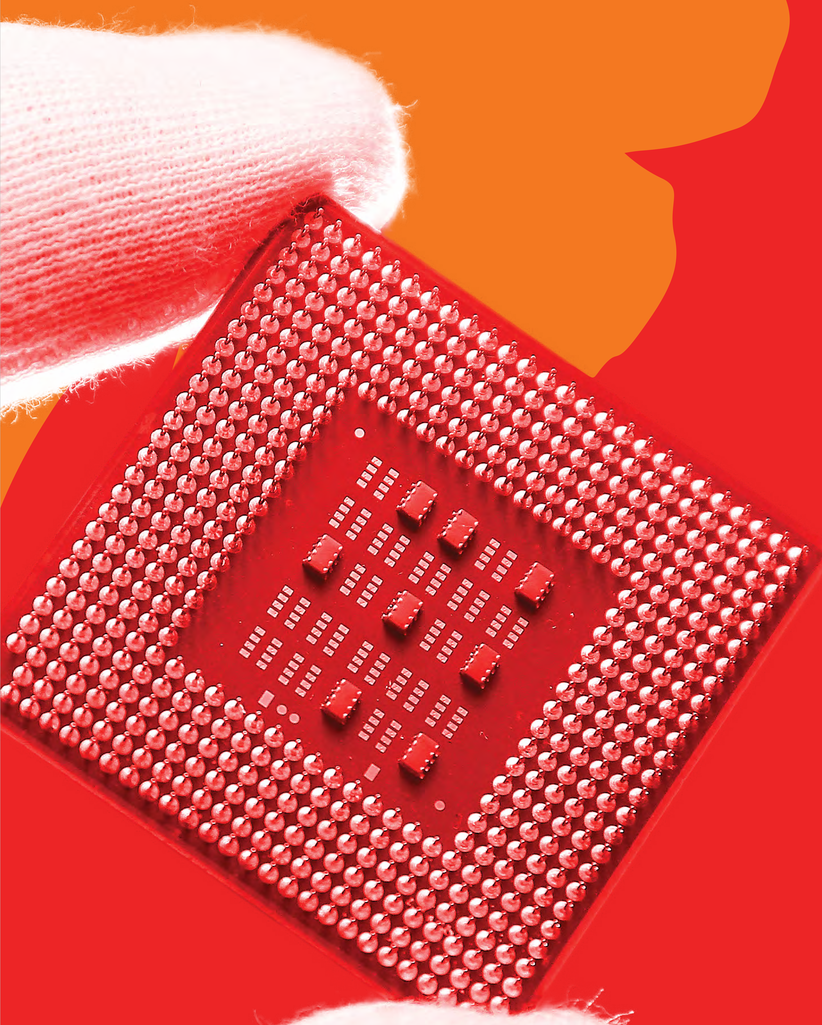
Live
CITY OF MILPITAS
CALIFORNIA
INCORPORATED
JANUARY 26, 1954

# MILPITAS

Shop
CITY OF MILPITAS
CALIFORNIA
INCORPORATED
JANUARY 26, 1954

# MILPITAS

# Work



CITY OF MILPITAS
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JANUARY 26, 1954

MILPITAS

# Give

CITY OF MILPITAS
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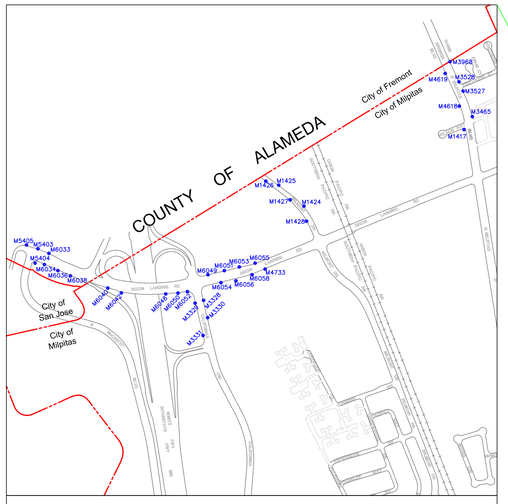
JANUARY 26, 1954

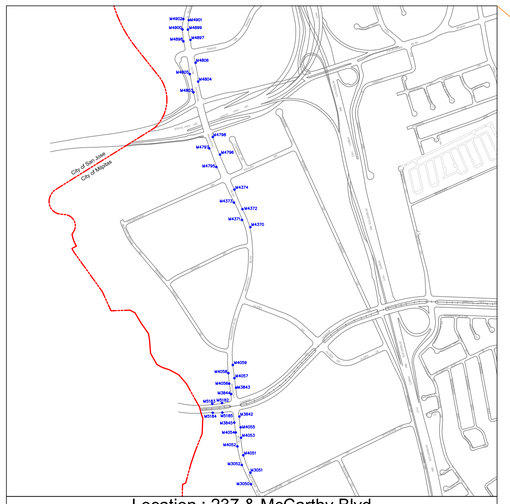
MILPITAS

# Street Light Map for Banners

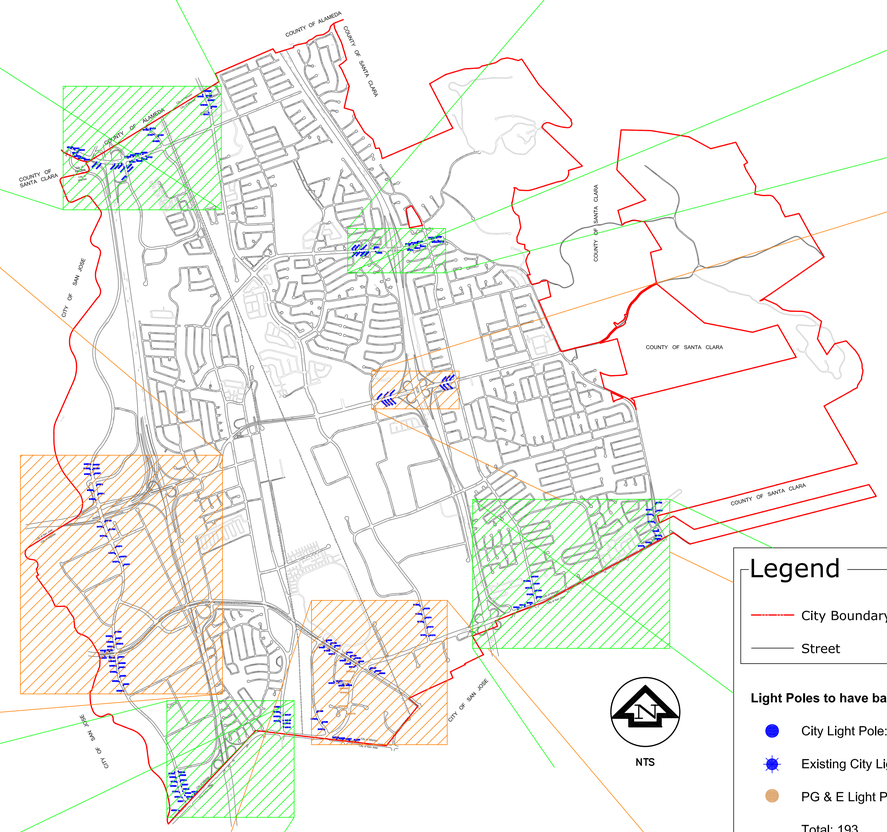


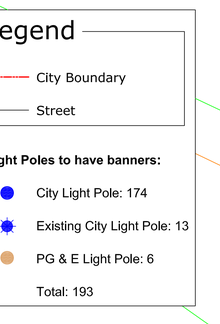

Location : 880 & Dixon Landing Rd
Warm Springs Blvd & N. Milptias Blvd

Location : 680 & Jacklin Rd



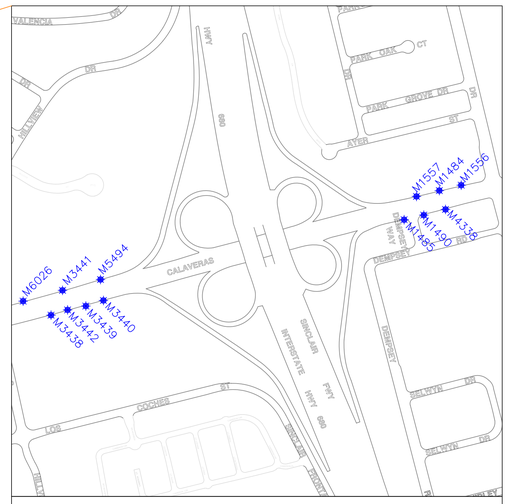

Location : 237 & McCarthy Blvd
880 & Calaveras Blvd
880 & GreatMall Pkwy



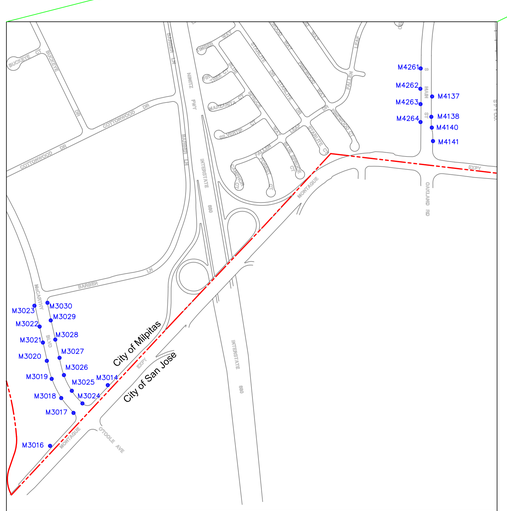





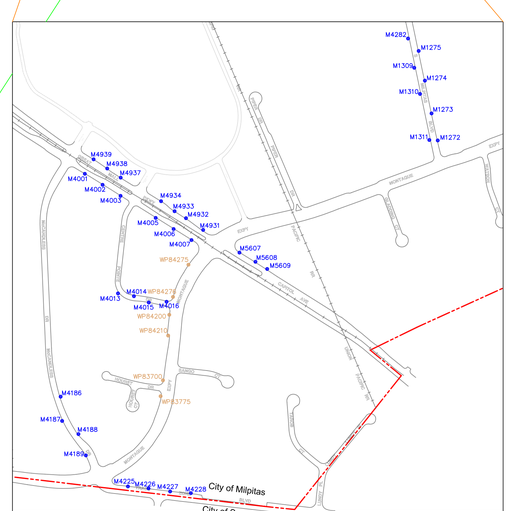




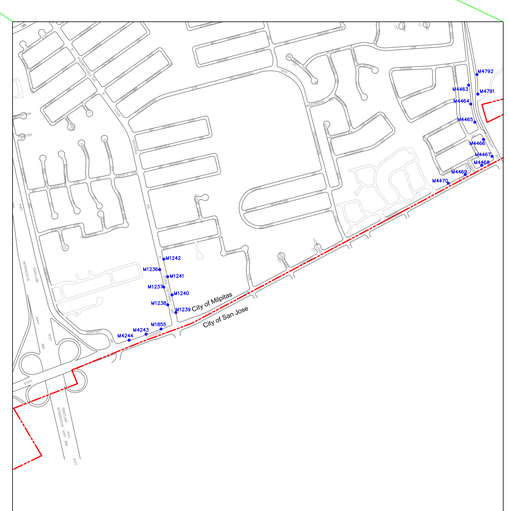

Location : 680 & Calaveras Blvd




Location : O'toole Ave & Montague Exp
880 & Montague Exp
Oakland Rd & S. Main ST




Location : Capitol Ave & Great Mall Pkwy
Trade Zone Blvd & Montague Exp




Location : 680 & Landess Ave
Piedmont Rd(San Jose to Milpitas)

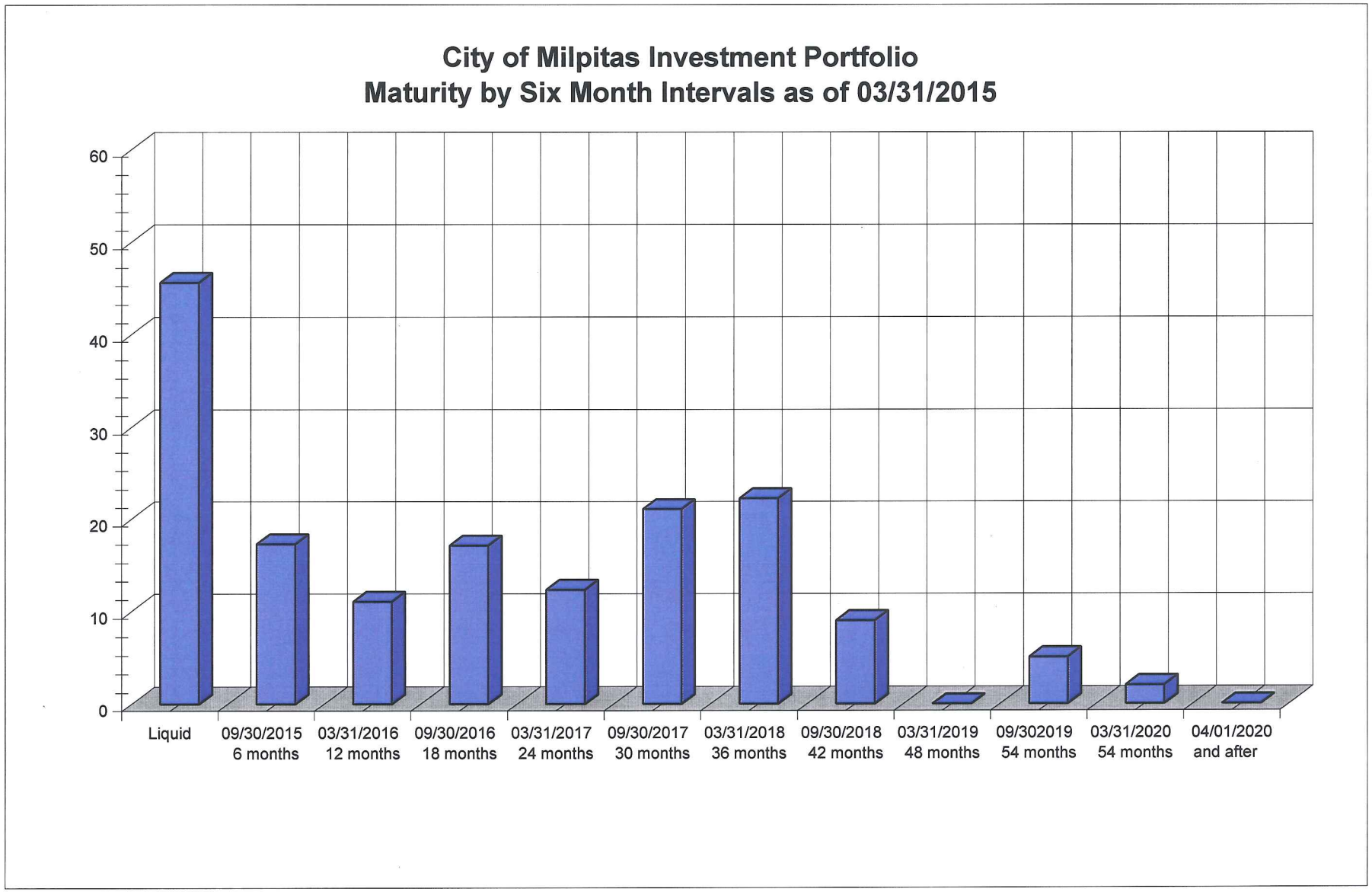
# *CITY OF MILPITAS*
# *INVESTMENT PORTFOLIO STATUS*

## PERCENT OF TOTAL DOLLARS INVESTED AT QUARTER ENDED

| TYPE OF SECURITY | Mar-15 | Dec-14 | Sep-14 | Jun-14 |
|---|---|---|---|---|
| LAIF & Money Market | 28 | 31 | 32 | 31 |
| Corporate Medium Term Notes | 8 | 9 | 9 | 8 |
| Treasury Notes / Bills | 18 | 18 | 16 | 13 |
| Federal Agency | 45 | 41 | 43 | 48 |
| Negotiable CD's | 1 | 1 | <1 | <1 |
| | 100 | 100 | 100 | 100 |

| | Mar-15 | Dec-14 | Sep-14 | Jun-14 |
|---|---|---|---|---|
| Market Value | 162,631,657 | 152,935,989 | 152,417,238 | 171,637,827 |
| Cost | 162,155,260 | 152,924,177 | 152,495,303 | 171,460,765 |
| **Days** | | | | |
| Weighted Average Maturity | 510 | 517 | 521 | 467 |
| **Rates** | | | | |
| Average Yield | 0.66% | 0.66% | 0.63% | 0.56% |
| **Benchmarks:** | | | | |
| LAIF | 0.27% | 0.27% | 0.25% | 0.23% |
| 2 Year Treasury - (12 Month Average) | 0.52% | 0.46% | 0.41% | 0.36% |

Exhibit 2




Maturity by Six Month Intervals FY 15.xls As of 03-31-15

# City of Milpitas Investment Portfolio Yields Compared to Benchmarks for the Quarters Ended 06/30/12 – 03/31/15

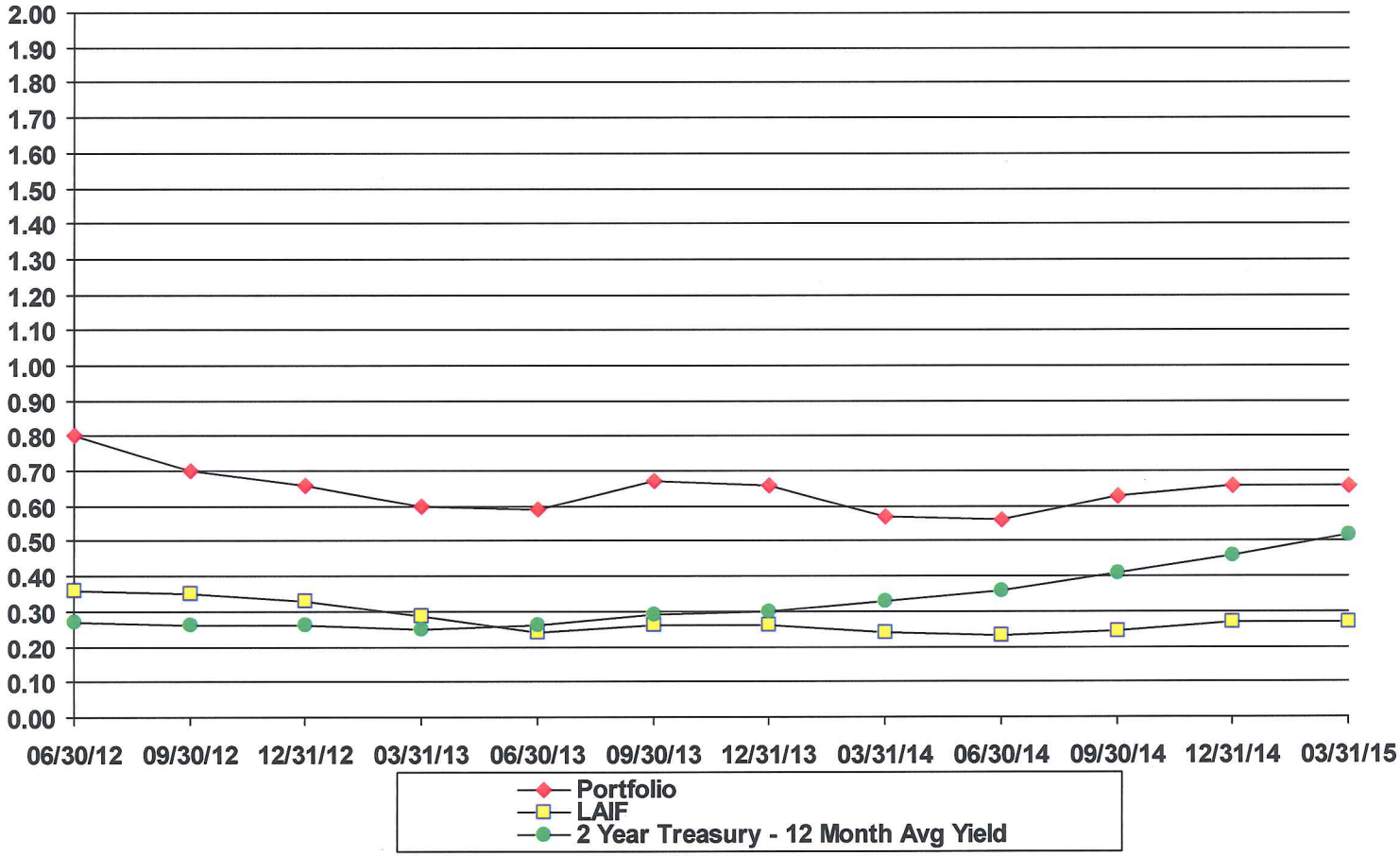



Exhibit 3

# City of Milpitas
# Portfolio Management
# Portfolio Summary
# March 31, 2015

| Investments | Par Value | Market Value | Book Value | % of Portfolio | Term | Days to Maturity | YTM 360 Equiv. | YTM 365 Equiv. |
|---|---|---|---|---|---|---|---|---|
| LAIF | 41,400,000.00 | 41,415,886.34 | 41,400,000.00 | 25.53 | 1 | 1 | 0.274 | 0.278 |
| Money Market Funds | 3,992,653.53 | 3,992,653.53 | 3,992,653.53 | 2.46 | 1 | 1 | 0.010 | 0.010 |
| Corporate Notes | 13,000,000.00 | 13,085,036.25 | 13,056,194.91 | 8.05 | 1,370 | 660 | 0.915 | 0.928 |
| Federal Agency | 65,000,000.00 | 65,271,420.00 | 65,009,514.94 | 40.09 | 1,417 | 820 | 0.998 | 1.012 |
| Federal Agency Discounts | 7,000,000.00 | 6,999,130.00 | 6,998,478.93 | 4.32 | 158 | 76 | 0.103 | 0.104 |
| Treasury Coupon Securities | 30,000,000.00 | 30,089,311.04 | 29,935,385.14 | 18.46 | 1,187 | 632 | 0.800 | 0.811 |
| GNMA | 13,033.01 | 13,186.39 | 13,033.01 | 0.01 | 7,207 | 724 | 8.082 | 8.195 |
| Negotiable CDs -2 | 1,750,000.00 | 1,765,033.74 | 1,750,000.00 | 1.08 | 992 | 772 | 1.169 | 1.185 |
| **Investments** | **162,155,686.54** | **162,631,657.29** | **162,155,260.46** | **100.00%** | **916** | **510** | **0.709** | **0.719** |
| **Cash** | | | | | | | | |
| Passbook/Checking (not included in yield calculations) | 2,415,960.54 | 2,415,960.54 | 2,415,960.54 | | 1 | 1 | 0.005 | 0.005 |
| **Total Cash and Investments** | **164,571,647.08** | **165,047,617.83** | **164,571,221.00** | | **916** | **510** | **0.709** | **0.719** |

| Total Earnings | March 31 Month Ending | Fiscal Year To Date |
|---|---|---|
| Current Year | 93,649.73 | 781,424.26 |
| **Average Daily Balance** | **168,155,573.73** | **153,836,982.15** |
| **Effective Rate of Return** | **0.66%** | **0.68%** |

To the best of my knowledge, this report accurately reflects all City and RDA pooled investments and is in conformity with all State laws and the City's investment policy. A copy of the policy is available at the office of the City Clerk. This investment program herein shown provides sufficient cash flow liquidity to meet next six months' estimated expenditures.

Em C. Karl — 4/24/15

Emma C. Karlen, Director of Finance

# City of Milpitas
# Portfolio Management
## Portfolio Details - Investments
## March 31, 2015



| CUSIP | Investment # | Issuer | Average Balance | Purchase Date | Par Value | Market Value | Book Value | Stated Rate | S&P | YTM 365 | Days to Maturity | Maturity Date |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **LAIF** | | | | | | | | | | | | |
| SYS82000010 | 82000010 | Local Agency Invest. Fd - City | | | 19,900,000.00 | 19,907,636.19 | 19,900,000.00 | 0.278 | | 0.278 | 1 | |
| SYS97090401 | 97090401 | Local Agency Invest. Fd - MPFA | | | 21,500,000.00 | 21,508,250.15 | 21,500,000.00 | 0.278 | | 0.278 | 1 | |
| | | **Subtotal and Average** | **42,319,354.84** | | **41,400,000.00** | **41,415,886.34** | **41,400,000.00** | | | **0.278** | **1** | |
| **Money Market Funds** | | | | | | | | | | | | |
| SYS | 12020109 | Dreyfus Treasury & Agency Fund | | | 0.00 | 0.00 | 0.00 | 0.010 | AAA | 0.010 | 1 | |
| SYS | 150317318 | U S Bank | | 03/17/2015 | 526,794.95 | 526,794.95 | 526,794.95 | 0.010 | AAA | 0.010 | 1 | |
| SYS | 150317319 | U S Bank | | 03/17/2015 | 3,465,858.58 | 3,465,858.58 | 3,465,858.58 | 0.010 | AAA | 0.010 | 1 | |
| | | **Subtotal and Average** | **9,781,638.66** | | **3,992,653.53** | **3,992,653.53** | **3,992,653.53** | | | **0.010** | **1** | |
| **Corporate Notes** | | | | | | | | | | | | |
| 961214BW2 | 12100201 | Westpac Banking Corp | | 10/02/2012 | 1,000,000.00 | 1,003,650.00 | 1,000,593.51 | 1.125 | AA- | 1.000 | 177 | 09/25/2015 |
| 06366RJH9 | 12110601 | Bank of Montreal | | 11/06/2012 | 1,000,000.00 | 1,002,560.00 | 1,000,418.06 | 0.800 | A+ | 0.729 | 219 | 11/06/2015 |
| 822582AU6 | 12120601 | Shell Int'l Finance BV | | 12/06/2012 | 1,000,000.00 | 1,001,320.00 | 1,000,455.34 | 0.625 | AA | 0.557 | 247 | 12/04/2015 |
| 38259PAC6 | 12120602 | Google Inc | | 12/06/2012 | 1,000,000.00 | 1,019,310.00 | 1,016,388.93 | 2.125 | AA | 0.660 | 414 | 05/19/2016 |
| 742718DV8 | 13051302 | Proctor & Gamble Co | | 05/13/2013 | 1,000,000.00 | 1,011,930.00 | 1,012,434.30 | 1.450 | AA- | 0.535 | 502 | 08/15/2016 |
| 89233P5E2 | 13052001 | Toyota Motor Credit | | 05/20/2013 | 1,000,000.00 | 1,019,540.00 | 1,016,978.48 | 2.000 | AA- | 0.815 | 533 | 09/15/2016 |
| 88579YAD3 | 12021401 | 3M Company | | 02/14/2012 | 2,000,000.00 | 2,025,580.00 | 2,010,915.10 | 1.375 | AA- | 1.000 | 547 | 09/29/2016 |
| 166764AA8 | 13060501 | Chevron Corporation | | 06/05/2013 | 1,000,000.00 | 1,000,890.00 | 998,018.44 | 1.104 | AA | 1.180 | 979 | 12/05/2017 |
| 30231GAL6 | 15031201 | Exxon Capital Corp | | 03/12/2015 | 1,000,000.00 | 1,005,977.50 | 1,001,101.58 | 1.305 | AAA | 1.274 | 1,070 | 03/06/2018 |
| 931142DF7 | 15031202 | Walmart Stores | | 03/12/2015 | 1,000,000.00 | 1,005,938.75 | 1,001,897.92 | 1.125 | AA | 1.220 | 1,106 | 04/11/2018 |
| 037833AJ9 | 13051301 | Apple Inc | | 05/13/2013 | 2,000,000.00 | 1,988,340.00 | 1,996,993.25 | 1.000 | AA+ | 1.050 | 1,128 | 05/03/2018 |
| | | **Subtotal and Average** | **12,347,134.38** | | **13,000,000.00** | **13,085,036.25** | **13,056,194.91** | | | **0.928** | **660** | |
| **Federal Agency** | | | | | | | | | | | | |
| 3135G0LN1 | 12062801 | Federal Nat'l. Mortgage Assoc | | 06/28/2012 | 2,000,000.00 | 2,001,760.00 | 2,000,000.00 | 0.500 | AA+ | 0.500 | 92 | 07/02/2015 |
| 3133EADW5 | 12021702 | Federal Farm Credit Bank | | 02/17/2012 | 2,000,000.00 | 2,002,820.00 | 2,000,000.00 | 0.550 | AA+ | 0.550 | 138 | 08/17/2015 |
| 3133EAQV3 | 12051501 | Federal Farm Credit Bank | | 05/15/2012 | 2,000,000.00 | 2,003,060.00 | 2,000,000.00 | 0.550 | AA+ | 0.550 | 167 | 09/15/2015 |
| 3133ECTC8 | 13062801 | Federal Farm Credit Bank | | 06/28/2013 | 2,000,000.00 | 2,006,640.00 | 1,999,105.81 | 0.640 | AA+ | 0.695 | 302 | 01/28/2016 |
| 313375RN9 | 12020901 | Federal Home Loan Bank | | 02/09/2012 | 2,000,000.00 | 2,011,400.00 | 2,005,197.01 | 1.000 | AA+ | 0.720 | 345 | 03/11/2016 |
| 313375RN9 | 12062903 | Federal Home Loan Bank | | 06/29/2012 | 2,000,000.00 | 2,011,400.00 | 2,006,520.79 | 1.000 | AA+ | 0.650 | 345 | 03/11/2016 |
| 3133EARB6 | 12062902 | Federal Farm Credit Bank | | 06/29/2012 | 1,000,000.00 | 1,004,730.00 | 1,001,109.38 | 0.750 | AA+ | 0.650 | 412 | 05/17/2016 |
| 3133EAUH9 | 12061401 | Federal Farm Credit Bank | | 06/14/2012 | 3,000,000.00 | 3,012,000.00 | 3,000,000.00 | 0.750 | AA+ | 0.750 | 440 | 06/14/2016 |
| 3133EAVQ8 | 12062901 | Federal Farm Credit Bank | | 06/29/2012 | 2,000,000.00 | 2,005,540.00 | 2,000,000.00 | 0.800 | AA+ | 0.800 | 610 | 12/01/2016 |
| 313383FB2 | 13061901 | Federal Home Loan Bank | | 06/19/2013 | 2,000,000.00 | 2,001,980.00 | 2,000,000.00 | 0.580 | AA+ | 0.580 | 628 | 12/19/2016 |
| 3133EDNC2 | 14061301A | Federal Farm Credit Bank | | 06/13/2014 | 1,600,000.00 | 1,603,216.00 | 1,600,000.00 | 0.700 | AA+ | 0.700 | 653 | 01/13/2017 |

# City of Milpitas
# Portfolio Management
## Portfolio Details - Investments
## March 31, 2015



| CUSIP | Investment # | Issuer | Average Balance | Purchase Date | Par Value | Market Value | Book Value | Stated Rate | S&P | YTM 365 | Days to Maturity | Maturity Date |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Federal Agency** | | | | | | | | | | | | |
| 3133EDNC2 | 14061301B | Federal Farm Credit Bank | | 06/13/2014 | 400,000.00 | 400,804.00 | 400,000.00 | 0.700 | AA+ | 0.700 | 653 | 01/13/2017 |
| 3136G1E88 | 13022702 | Federal Nat'l. Mortgage Assoc | | 02/27/2013 | 1,000,000.00 | 1,002,670.00 | 1,000,000.00 | 0.750 | AA+ | 0.750 | 698 | 02/27/2017 |
| 3133ECT79 | 13062701 | Federal Farm Credit Bank | | 06/27/2013 | 2,000,000.00 | 2,013,320.00 | 2,000,000.00 | 1.000 | AA+ | 1.000 | 700 | 03/01/2017 |
| 3133ECMM3 | 13042501 | Federal Farm Credit Bank | | 04/25/2013 | 2,000,000.00 | 1,998,660.00 | 2,000,000.00 | 0.600 | AA+ | 0.600 | 755 | 04/25/2017 |
| 3133ECPA6 | 13051502 | Federal Farm Credit Bank | | 05/15/2013 | 2,000,000.00 | 1,997,220.00 | 2,000,000.00 | 0.600 | AA+ | 0.600 | 775 | 05/15/2017 |
| 3134G43S5 | 13051501 | Fed Home Loan Mortgage Corp | | 05/15/2013 | 2,000,000.00 | 1,991,280.00 | 2,000,000.00 | 0.650 | AA+ | 0.650 | 775 | 05/15/2017 |
| 3133EDPC0 | 14062701 | Federal Farm Credit Bank | | 06/27/2014 | 2,000,000.00 | 2,010,720.00 | 2,000,000.00 | 1.000 | AA+ | 1.000 | 818 | 06/27/2017 |
| 3133EDEB4 | 14012801 | Federal Farm Credit Bank | | 01/28/2014 | 2,000,000.00 | 2,016,980.00 | 2,000,000.00 | 1.100 | AA+ | 1.100 | 819 | 06/28/2017 |
| 3133EDXH0 | 14101401 | Federal Farm Credit Bank | | 10/14/2014 | 2,000,000.00 | 2,039,380.00 | 2,000,000.00 | 1.000 | AA+ | 1.000 | 835 | 07/14/2017 |
| 3133EDKP6 | 14050101 | Federal Farm Credit Bank | | 05/01/2014 | 2,000,000.00 | 2,008,240.00 | 2,000,000.00 | 1.070 | AA+ | 1.070 | 884 | 09/01/2017 |
| 3134G3J68 | 13053001 | Fed Home Loan Mortgage Corp | | 05/30/2013 | 2,000,000.00 | 1,994,660.00 | 1,997,581.95 | 0.900 | AA+ | 0.950 | 901 | 09/18/2017 |
| 3133ED3Z3 | 13100401 | Federal Farm Credit Bank | | 10/04/2013 | 2,000,000.00 | 2,016,760.00 | 2,000,000.00 | 1.230 | AA+ | 1.230 | 917 | 10/04/2017 |
| 3136G0L58 | 12101801 | Federal Nat'l. Mortgage Assoc | | 10/18/2012 | 1,000,000.00 | 997,980.00 | 1,000,000.00 | 1.000 | AA+ | 1.000 | 931 | 10/18/2017 |
| 3130A3QQ0 | 14122901 | Federal Home Loan Bank | | 12/29/2014 | 1,000,000.00 | 1,006,310.00 | 1,000,000.00 | 1.150 | AA+ | 1.150 | 1,003 | 12/29/2017 |
| 3135G0UE1 | 13021401 | Federal Nat'l. Mortgage Assoc | | 02/14/2013 | 3,000,000.00 | 3,000,420.00 | 3,000,000.00 | 1.000 | AA+ | 1.000 | 1,050 | 02/14/2018 |
| 3136G23B1 | 14081501 | Federal Nat'l. Mortgage Assoc | | 08/15/2014 | 2,000,000.00 | 2,004,320.00 | 2,000,000.00 | 1.300 | AA+ | 1.300 | 1,051 | 02/15/2018 |
| 3133EEQM5 | 15022001 | Federal Farm Credit Bank | | 02/20/2015 | 2,000,000.00 | 2,003,500.00 | 2,000,000.00 | 1.110 | AA | 1.110 | 1,056 | 02/20/2018 |
| 3136G1DG1 | 13022701 | Federal Nat'l. Mortgage Assoc | | 02/27/2013 | 2,000,000.00 | 1,985,180.00 | 2,000,000.00 | 1.050 | AA+ | 1.050 | 1,063 | 02/27/2018 |
| 3133ECW75 | 13080101 | Federal Farm Credit Bank | | 08/01/2013 | 2,000,000.00 | 2,026,940.00 | 2,000,000.00 | 1.610 | AA+ | 1.610 | 1,218 | 08/01/2018 |
| 3130A4DP4 | 15022701 | Federal Home Loan Bank | | 02/27/2015 | 2,000,000.00 | 2,012,460.00 | 2,000,000.00 | 1.300 | AA+ | 1.300 | 1,244 | 08/27/2018 |
| 3136G24C8 | 14082901 | Federal Nat'l. Mortgage Assoc | | 08/29/2014 | 3,000,000.00 | 3,054,030.00 | 3,000,000.00 | 2.000 | AA+ | 2.000 | 1,608 | 08/26/2019 |
| 3136G25W3 | 14091201 | Federal Nat'l. Mortgage Assoc | | 09/12/2014 | 2,000,000.00 | 2,003,680.00 | 2,000,000.00 | 1.000 | AA+ | 2.174 | 1,625 | 09/12/2019 |
| 3136G2C96 | 15012301 | Federal Nat'l. Mortgage Assoc | | 01/23/2015 | 2,000,000.00 | 2,021,360.00 | 2,000,000.00 | 2.000 | AA+ | 2.000 | 1,758 | 01/23/2020 |
| | | **Subtotal and Average** | **65,977,685.24** | | **65,000,000.00** | **65,271,420.00** | **65,009,514.94** | | | **1.012** | **820** | |
| **Federal Agency Discounts** | | | | | | | | | | | | |
| 313384FX2 | 15010901 | Federal Home Loan Bank Discoun | | 01/09/2015 | 2,000,000.00 | 1,999,880.00 | 1,999,745.00 | 0.090 | AA+ | 0.093 | 51 | 05/22/2015 |
| 313588HJ7 | 15010701 | Federal Nat'l Mort Asssoc Disc | | 01/07/2015 | 3,000,000.00 | 2,999,550.00 | 2,999,211.67 | | AA+ | 0.113 | 86 | 06/26/2015 |
| 313588HJ7 | 15011201 | Federal Nat'l Mort Asssoc Disc | | 01/12/2015 | 2,000,000.00 | 1,999,700.00 | 1,999,522.26 | 0.100 | AA+ | 0.103 | 86 | 06/26/2015 |
| | | **Subtotal and Average** | **6,998,183.10** | | **7,000,000.00** | **6,999,130.00** | **6,998,478.93** | | | **0.104** | **76** | |
| **Treasury Coupon Securities** | | | | | | | | | | | | |
| 912828SZ4 | 12062201 | United States Treasury Note | | 06/22/2012 | 3,000,000.00 | 3,001,890.00 | 2,999,846.51 | 0.375 | AA+ | 0.400 | 75 | 06/15/2015 |
| 912828UG3 | 13012801 | United States Treasury Note | | 01/28/2013 | 3,000,000.00 | 3,003,510.00 | 2,999,410.22 | 0.375 | AA+ | 0.400 | 289 | 01/15/2016 |
| 912828VC1 | 13053101 | United States Treasury Note | | 05/31/2013 | 2,000,000.00 | 1,998,280.00 | 1,995,491.90 | 0.250 | AA+ | 0.452 | 410 | 05/15/2016 |
| 912828VG2 | 13062401 | United States Treasury Note | | 06/24/2013 | 2,000,000.00 | 2,003,280.00 | 1,995,752.78 | 0.500 | AA+ | 0.678 | 441 | 06/15/2016 |

# City of Milpitas
# Portfolio Management
## Portfolio Details - Investments
## March 31, 2015



| CUSIP | Investment # | Issuer | Average Balance | Purchase Date | Par Value | Market Value | Book Value | Stated Rate | S&P | YTM 365 | Days to Maturity | Maturity Date |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Treasury Coupon Securities** | | | | | | | | | | | | |
| 912828VL1 | 13071501 | United States Treasury Note | | 07/15/2013 | 2,000,000.00 | 2,006,100.00 | 1,997,584.84 | 0.625 | AA+ | 0.720 | 471 | 07/15/2016 |
| 912828VR8 | 13082601 | United States Treasury Note | | 08/26/2013 | 2,000,000.00 | 2,005,940.00 | 1,995,264.84 | 0.625 | AA+ | 0.800 | 502 | 08/15/2016 |
| 912828RJ1 | 11101101 | United States Treasury Note | | 10/11/2011 | 2,000,000.00 | 2,017,180.00 | 1,998,538.34 | 1.000 | AA+ | 1.050 | 548 | 09/30/2016 |
| 912828C32 | 14032001 | United States Treasury Note | | 03/20/2014 | 1,000,000.00 | 1,003,910.00 | 997,750.34 | 0.750 | AA+ | 0.867 | 714 | 03/15/2017 |
| 912828WH9 | 14051501 | United States Treasury Note | | 05/15/2014 | 2,000,000.00 | 2,011,260.00 | 1,998,543.34 | 0.875 | AA+ | 0.910 | 775 | 05/15/2017 |
| 912828TB6 | 14061302 | United States Treasury Note | | 06/13/2014 | 1,000,000.00 | 1,002,030.00 | 995,966.00 | 0.750 | AA+ | 0.932 | 821 | 06/30/2017 |
| 912828WT3 | 14071501 | United States Treasury Note | | 07/15/2014 | 2,000,000.00 | 2,010,000.00 | 1,993,802.46 | 0.875 | AA+ | 1.013 | 836 | 07/15/2017 |
| 912828G20 | 14111701 | United States Treasury Note | | 11/17/2014 | 2,000,000.00 | 2,005,416.69 | 1,993,644.92 | 0.875 | AA+ | 1.000 | 959 | 11/15/2017 |
| 912828G79 | 14121501 | United States Treasury Note | | 12/15/2014 | 2,000,000.00 | 2,010,780.00 | 1,995,206.15 | 1.000 | AA+ | 1.090 | 989 | 12/15/2017 |
| 912828J68 | 15031601 | United States Treasury Note | | 03/16/2015 | 2,000,000.00 | 2,007,394.35 | 1,995,994.55 | 1.000 | AA+ | 1.070 | 1,079 | 03/15/2018 |
| 912828VE7 | 13062101 | United States Treasury Note | | 06/21/2013 | 2,000,000.00 | 2,002,340.00 | 1,982,587.95 | 1.000 | AA+ | 1.285 | 1,156 | 05/31/2018 |
| | | **Subtotal and Average** | **28,968,277.72** | | **30,000,000.00** | **30,089,311.04** | **29,935,385.14** | | | **0.811** | **632** | |
| **GNMA** | | | | | | | | | | | | |
| 36216NNL3 | 88021601A | GNMA | | 07/01/1997 | 1,008.02 | 1,012.74 | 1,008.02 | 9.500 | AA+ | 9.615 | 563 | 10/15/2016 |
| 362174T46 | 87042001C | GNMA | | 07/01/1997 | 3,050.37 | 3,088.10 | 3,050.37 | 8.000 | AA+ | 8.075 | 714 | 03/15/2017 |
| 36217FKE8 | 87042001A | GNMA | | 07/01/1997 | 8,974.62 | 9,085.55 | 8,974.62 | 8.000 | AA+ | 8.076 | 745 | 04/15/2017 |
| | | **Subtotal and Average** | **13,299.78** | | **13,033.01** | **13,186.39** | **13,033.01** | | | **8.195** | **724** | |
| **Negotiable CDs -2** | | | | | | | | | | | | |
| 02587DQD3 | 13071801 | American Express Centurion Bnk | | 07/18/2013 | 250,000.00 | 250,369.53 | 250,000.00 | 0.700 | A- | 0.700 | 110 | 07/20/2015 |
| 254672BR8 | 14101602 | Discover Bank | | 10/16/2014 | 250,000.00 | 251,408.50 | 250,000.00 | 1.050 | BBB | 0.844 | 565 | 10/17/2016 |
| 36163CWS5 | 14101001 | GE Capital Bank | | 10/10/2014 | 250,000.00 | 253,078.80 | 250,000.00 | 1.450 | AA+ | 1.451 | 923 | 10/10/2017 |
| 140420QD5 | 14101601 | Capital One Bank USA | | 10/16/2014 | 250,000.00 | 253,098.33 | 250,000.00 | 1.450 | BBB+ | 1.451 | 929 | 10/16/2017 |
| 38148JBF7 | 14102901 | Goldman Sachs Bank USA | | 10/29/2014 | 250,000.00 | 253,143.98 | 250,000.00 | 1.450 | A | 1.249 | 943 | 10/30/2017 |
| 05580AAY0 | 14111401 | BMW Bank of North America | | 11/14/2014 | 250,000.00 | 252,693.35 | 250,000.00 | 1.400 | | 1.401 | 958 | 11/14/2017 |
| 29266NF28 | 14120501 | EnerBank USA | | 12/05/2014 | 250,000.00 | 251,241.25 | 250,000.00 | 1.200 | NR | 1.201 | 979 | 12/05/2017 |
| | | **Subtotal and Average** | **1,750,000.00** | | **1,750,000.00** | **1,765,033.74** | **1,750,000.00** | | | **1.185** | **772** | |
| | | **Total and Average** | **168,155,573.73** | | **162,155,686.54** | **162,631,657.29** | **162,155,260.46** | | | **0.719** | **510** | |

# City of Milpitas
# Portfolio Management
## Portfolio Details - Cash
## March 31, 2015



| CUSIP | Investment # | Issuer | Average Balance | Purchase Date | Par Value | Market Value | Book Value | Stated Rate | S&P | YTM 365 | Days to Maturity |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Money Market Funds** | | | | | | | | | | | |
| SYS1000 | 1000 | Cash in Bank | | | 330,299.00 | 330,299.00 | 330,299.00 | 0.020 | | 0.020 | 1 |
| SYS1000 | 131127930 | Cash in Bank | | | 226,643.88 | 226,643.88 | 226,643.88 | 0.020 | | 0.020 | 1 |
| SYS1030 | 1030 | Cash with Fiscal Agent | | | 1,859,017.66 | 1,859,017.66 | 1,859,017.66 | | | 0.000 | 1 |
| | | **Average Balance** | **0.00** | | | | | | | | **1** |
| | | **Total Cash and Investments** | **168,155,573.73** | | **164,571,647.08** | **165,047,617.83** | **164,571,221.00** | | | **0.719** | **510** |

# City of Milpitas
# Portfolio Management
## Activity By Type
## March 1, 2015 through March 31, 2015



| CUSIP | Investment # | Issuer | Stated Rate | Transaction Date | Purchases or Deposits | Redemptions or Withdrawals | Balance |
|---|---|---|---|---|---|---|---|
| **LAIF (Monthly Summary)** | | | | | | | |
| SYS82000010 | 82000010 | Local Agency Invest. Fd - City | 0.278 | | 2,000,000.00 | 5,000,000.00 | |
| | | **Subtotal** | | | **2,000,000.00** | **5,000,000.00** | **41,400,000.00** |
| **Money Market Funds (Monthly Summary)** | | | | | | | |
| SYS1000 | 1000 | Cash in Bank | 0.020 | | 330,299.00 | 385,251.00 | |
| SYS1000 | 131127930 | Cash in Bank | 0.020 | | 3.52 | 9,453.36 | |
| SYS | 12020109 | Dreyfus Treasury & Agency Fund | 0.010 | | 14.23 | 3,451,591.55 | |
| SYS1030 | 1030 | Cash with Fiscal Agent | | | 1,859,017.66 | 5,683,814.65 | |
| SYS | 150317318 | U S Bank | 0.010 | | 526,794.95 | 0.00 | |
| SYS | 150317319 | U S Bank | 0.010 | | 3,465,858.58 | 0.00 | |
| | | **Subtotal** | | | **6,181,987.94** | **9,530,110.56** | **3,992,653.53** |
| **Corporate Notes** | | | | | | | |
| 30231GAL6 | 15031201 | Exxon Capital Corp | 1.305 | 03/12/2015 | 1,000,900.00 | 0.00 | |
| 931142DF7 | 15031202 | Walmart Stores | 1.125 | 03/12/2015 | 997,130.00 | 0.00 | |
| | | **Subtotal** | | | **1,998,030.00** | **0.00** | **13,056,194.91** |
| **Federal Agency** | | | | | | | |
| 3135G0HG1 | 12020801 | Federal Nat'l. Mortgage Assoc | 0.375 | 03/16/2015 | 0.00 | 2,000,000.00 | |
| | | **Subtotal** | | | **0.00** | **2,000,000.00** | **65,009,514.94** |
| **Federal Agency Discounts** | | | | | | | |
| | | **Subtotal** | | | | | **6,998,478.93** |
| **Treasury Coupon Securities** | | | | | | | |
| 912828J68 | 15031601 | United States Treasury Note | 1.000 | 03/16/2015 | 1,995,880.00 | 0.00 | |
| | | **Subtotal** | | | **1,995,880.00** | **0.00** | **29,935,385.14** |
| **GNMA** | | | | | | | |
| 36217FKE8 | 87042001A | GNMA | 8.000 | 03/15/2015 | 0.00 | 353.29 | |
| 362174T46 | 87042001C | GNMA | 8.000 | 03/15/2015 | 0.00 | 172.34 | |
| 36216NNL3 | 88021601A | GNMA | 9.500 | 03/15/2015 | 0.00 | 65.08 | |
| | | **Subtotal** | | | **0.00** | **590.71** | **13,033.01** |

# City of Milpitas
# Portfolio Management
## Activity By Type
## March 1, 2015 through March 31, 2015



| CUSIP | Investment # | Issuer | Stated Rate | Transaction Date | Purchases or Deposits | Redemptions or Withdrawals | Balance |
|---|---|---|---|---|---|---|---|
| Negotiable CDs -2 | | | | | | | |
| | | Subtotal | | | | | 1,750,000.00 |
| | | Total | | | 12,175,897.94 | 16,530,701.27 | 162,155,260.46 |

# City of Milpitas

## Investment Broker Dealer List

Cantor Fitzgerald & Co.

Dreyfus Institutional Services

Mischler Financial Group, Inc.

Morgan Stanley Smith Barney

State of California Local Agency Investment Fund

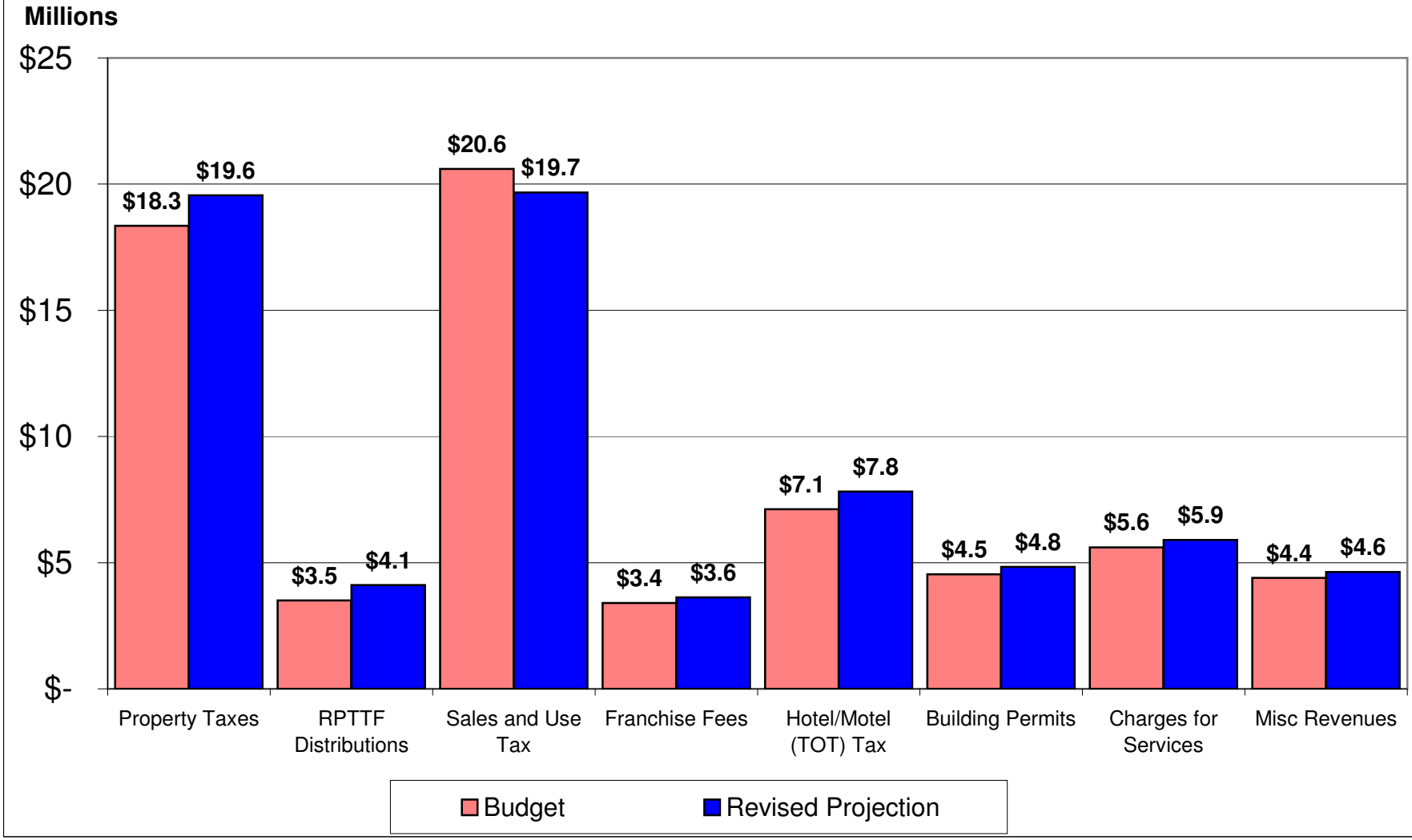
US Bank, N.A.

Vining Sparks IBG, L.P.

# FY 2014/15 Revenue Report
## For Fiscal Year-To-Date March 31, 2015
## With comparative Information for the same period in FY 13/14

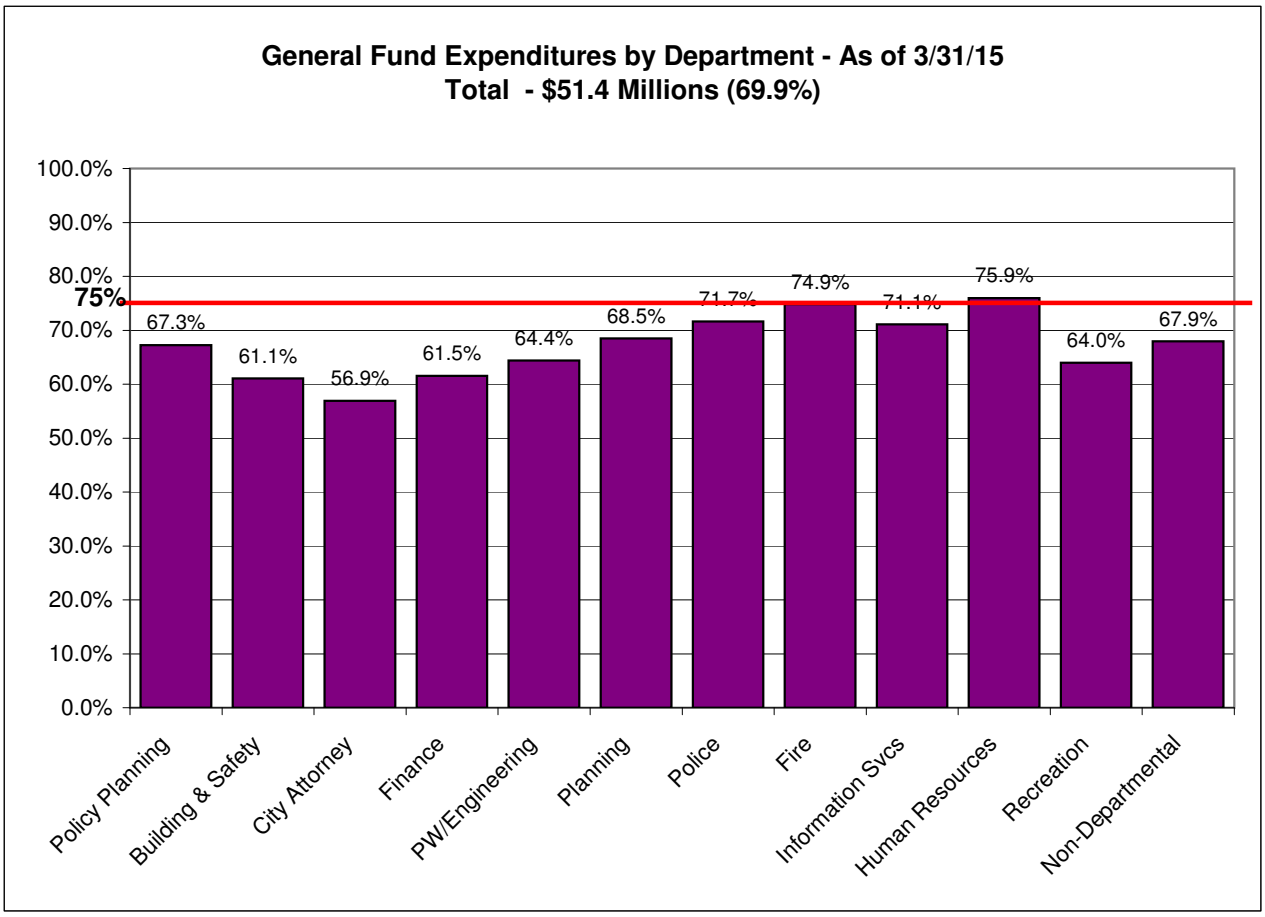
| | FY 13/14 | | | FY 14/15 | | | | FY 14-15 Revised vs. Budget Increase (Decrease) | |
|---|---|---|---|---|---|---|---|---|---|
| | Actual | Year to Date | Percentage of Actual | Budget | Year to Date | Percentage of Budget | Revised Projection | Amount | Percentage |
| **Revenues** | | | | | | | | | |
| General Fund | | | | | | | | | |
| Property Taxes | $ 17,943,631 | $ 10,088,322 | 56.22% | $ 18,349,000 | 11,431,440 | 62.30% | 19,560,000 | $ 1,211,000 | 6.60% |
| RFTTF Distributions | 9,663,929 | - | 0.00% | 3,500,000 | 2,145,040 | 61.29% | 4,109,000 | 609,000 | 17.40% |
| Sales and Use Taxes | 19,766,138 | 12,824,203 | 64.88% | 20,606,000 | 12,708,097 | 61.67% | 19,666,000 | (940,000) | -4.56% |
| Franchise Fees | 3,453,139 | 1,237,609 | 35.84% | 3,398,000 | 1,311,137 | 38.59% | 3,628,000 | 230,000 | 6.77% |
| Business License Tax | 334,139 | 261,060 | 78.13% | 349,000 | 279,581 | 80.11% | 349,000 | - | 0.00% |
| Hotel/Motel (TOT) Tax | 7,473,691 | 4,732,306 | 63.32% | 7,114,000 | 5,408,180 | 76.02% | 7,819,000 | 705,000 | 9.91% |
| Building Permits | 5,953,478 | 4,576,586 | 76.87% | 4,536,727 | 4,837,773 | 106.64% | 4,838,000 | 301,273 | 6.64% |
| Fire Permits and Inspection Fees | 1,775,280 | 1,337,470 | 75.34% | 1,679,000 | 1,219,143 | 72.61% | 1,535,000 | (144,000) | -8.58% |
| Fines and Forfeitures | 415,396 | 245,277 | 59.05% | 382,000 | 306,087 | 80.13% | 429,000 | 47,000 | 12.30% |
| Investment Income | 384,551 | 231,661 | 60.24% | 168,000 | 84,291 | 50.17% | 165,000 | (3,000) | -1.79% |
| Intergovernmental | 1,397,209 | 808,084 | 57.84% | 1,056,758 | 763,891 | 72.29% | 1,203,258 | 146,500 | 13.86% |
| Charges for Current Services | 5,563,026 | 3,733,270 | 67.11% | 5,607,000 | 4,302,892 | 76.74% | 5,896,000 | 289,000 | 5.15% |
| Other Revenue Sources | 774,656 | 546,803 | 70.59% | 757,578 | 675,656 | 89.19% | 945,000 | 187,422 | 24.74% |
| **Total General Fund Revenue** | **74,898,264** | **40,622,651** | 54.24% | **67,503,064** | **45,473,208** | **67.36%** | **70,142,258** | **2,639,195** | **3.91%** |
| **Water M & O Fund** | | | | | | | | | |
| Charges for Services | 21,191,565 | 16,974,899 | 80.10% | 21,885,000 | 16,324,799 | 74.59% | 20,959,000 | (926,000) | -4.23% |
| **Sewer M & O Fund** | | | | | | | | | |
| Sewer Service Charges | 12,687,777 | 9,511,655 | 74.97% | 13,860,000 | 10,804,611 | 77.96% | 13,941,000 | 81,000 | 0.58% |

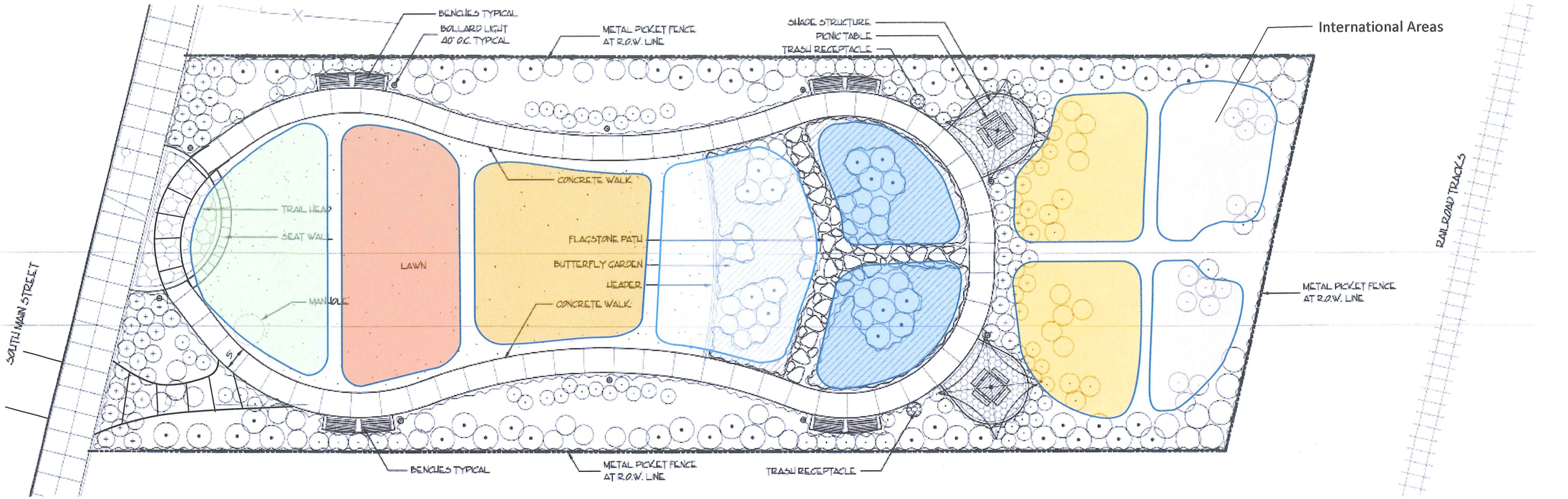
# FY14-15 General Fund Revenue
# Budget vs. Revised Projection



**General Fund Expenditures by Department - March 2015 (not including encumbrances)**

| | Budget | YTD Expenditures | 75.00% Of Budget |
|---|---|---|---|
| City Council | $ 249,961 | $ 159,301 | 63.73% |
| City Manager | 1,331,518 | 724,943 | 54.44% |
| City Clerk | 432,098 | 470,167 | 108.81% |
| Policy Planning | 2,013,577 | 1,354,411 | 67.26% |
| Building & Safety | 3,355,033 | 2,048,785 | 61.07% |
| City Attorney | 1,174,835 | 668,607 | 56.91% |
| Finance | 2,193,067 | 1,349,270 | 61.52% |
| Public Works/Engineering | 7,422,838 | 4,778,697 | 64.38% |
| Planning | 2,052,598 | 1,406,117 | 68.50% |
| Police | 25,063,164 | 17,957,884 | 71.65% |
| Fire | 15,293,644 | 11,447,379 | 74.85% |
| Information Svcs | 2,171,280 | 1,544,156 | 71.12% |
| Human Resources | 995,548 | 756,063 | 75.94% |
| Recreation | 3,714,241 | 2,376,114 | 63.97% |
| Non-Departmental | 8,361,086 | 5,679,160 | 67.92% |
| Total | 73,810,911 | 51,366,643 | 69.59% |


General Fund Expenditures by Department - As of 3/31/15
Total - $51.4 Millions (69.9%)
100.0%
90.0%
80.0%
75%
70.0%
60.0%
50.0%
40.0%
30.0%
20.0%
10.0%
0.0%
67.3%
61.1%
56.9%
61.5%
64.4%
68.5%
71.7%
74.9%
71.1%
75.9%
64.0%
67.9%
Policy Planning
Building & Safety
City Attorney
Finance
PW/Engineering
Planning
Police
Fire
Information Svcs
Human Resources
Recreation
Non-Departmental



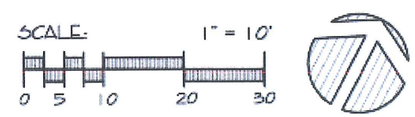

HETCH HETCHY TRAIL - OFF MAIN STREET

## International Park Concept for Tom Evatt Park

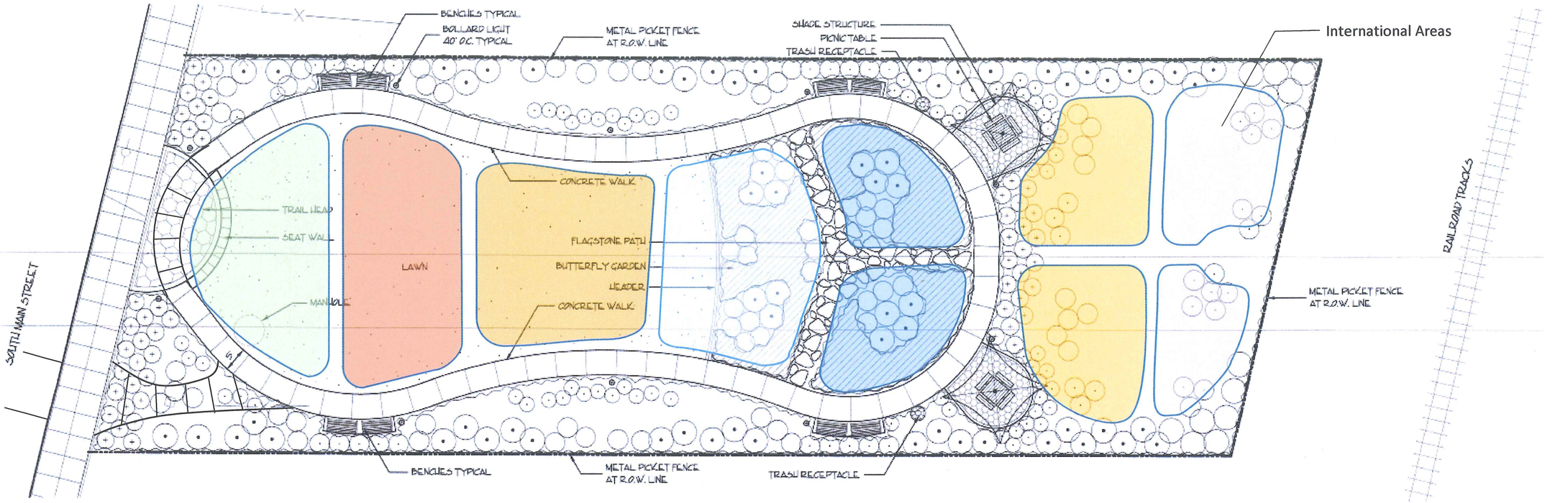
The City has received requests from international organizations, representing Philippines, India, Korea, and Vietnam organizations to have a public place to represent the culture of each respective country. Additional country representation is anticipated. Preliminary discussions have resulted in a concept of an "International Park" in Milpitas, and Tom Evatt Park was identified as a possible location due to its central and accessible midtown location.

The International Park concept is to provide a public space with an educational non-political theme of culture, arts, history, architecture, geography, native plants for each participating international group. The park could be divided into small delineated areas with the first to be located on the east side of Main Street. The concept could be expanded to the west side of main Street dependent on other organizations participation interest. If the concept moves forward, staff would develop policies, procedures and specifications for size of each areas. Although there are no preliminary design plans to review, Staff will discuss with the Commission and request the Commission review the concept and provide feedback.

**International Park Concept for Tom Evatt Park**




February 25, 2015

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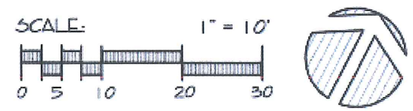
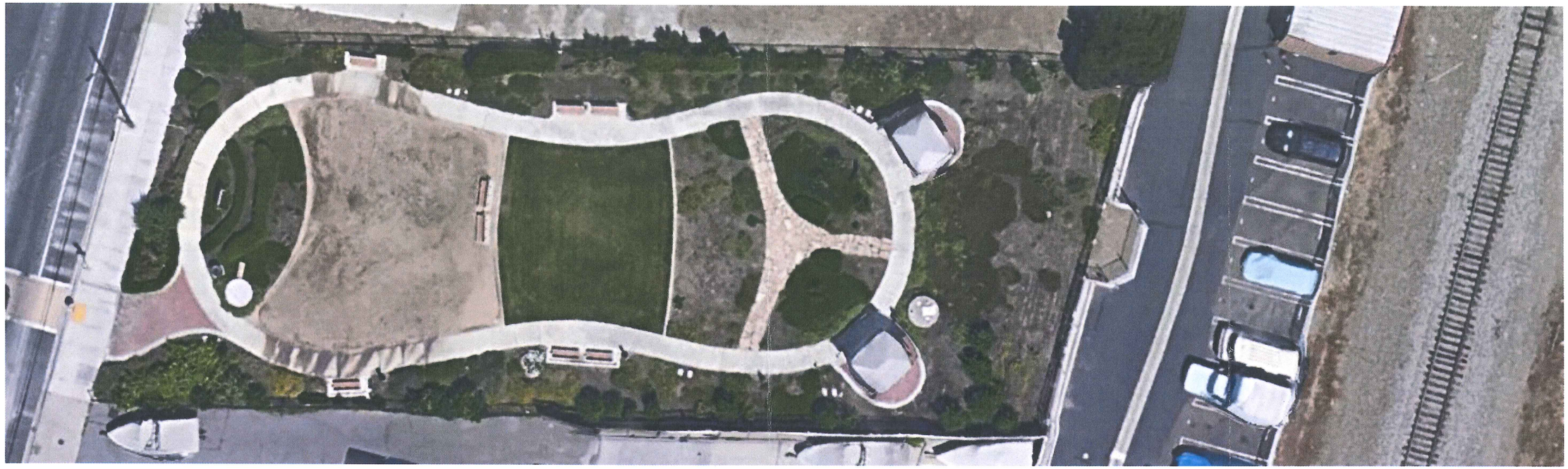



February 25, 2015



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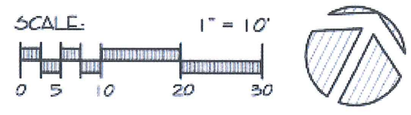


February 25, 2015

**REGULAR** *13

**NUMBER:** **38.822**

**TITLE:** **AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF MILPITAS AMENDING CHAPTER 10 OF TITLE XI OF THE MILPITAS MUNICIPAL CODE PERMITTING TRANSITIONAL AND SUPPORTIVE HOUSING IN MIXED USE ZONING DISTRICT AND MANUFACTURED HOMES IN RESIDENTIAL ZONING DISTRICT**

**HISTORY:** This Ordinance was introduced (first reading) by the City Council at its meeting of April 28, 2015, upon motion by Councilmember Giordano, and was adopted (second reading) by the City Council at its meeting of _____, upon motion by _____. The Ordinance was duly passed and ordered published in accordance with law by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

ATTEST:

_____
Mary Lavelle, City Clerk

APPROVED:

_____
Jose S. Esteves, Mayor

APPROVED AS TO FORM:

_____
Michael J. Ogaz, City Attorney

**RECITALS AND FINDINGS:**

**WHEREAS**, Title XI, Chapter 10, Section 4 entitled "Residential Zones and Standards" of the Milpitas Zoning Code sets forth the permitted, conditionally permitted, and prohibited uses in the Residential Zoning District; and

**WHEREAS**, California Government Code Section 65852.3 requires that manufactured housing be allowed on lots zoned for conventional single family dwellings; and

**WHEREAS**, Table XI-10-4.02-1 entitled "Residential Zone Uses" of the Milpitas Zoning Code currently permits single family dwellings in R1 and R2 Zoning Districts, but permits manufactured housing only in R1 Zoning District; and

**WHEREAS**, Title XI, Chapter 10, Section 6 entitled "Mixed Use Zones and Standards" of the Milpitas Municipal Code sets forth the permitted, conditionally permitted, and prohibited uses in the Mixed Use Zoning District; and

**WHEREAS**, California Government Code Section 65583 requires transitional and supportive housing in all zoning districts that permit or conditionally permit residential uses; and

**WHEREAS**, Table XI-10-6.02-1 entitled "Mixed Use Zone Uses" currently permits multi-family housing in MXD, MXD2 and MXD3 Zoning Districts and does not permit transitional or supportive housing; and

**WHEREAS**, on February 25, 2015, the Planning Commission conducted a duly noticed public meeting and recommended the City Council adopt the 2015-2023 General Plan Housing Element Amendment; and

**WHEREAS**, the 2015-2023 Housing Element includes programs (Programs D.4.3 and D.5.3) which require that changes to the Milpitas Zoning Code be adopted in accordance with State law as described above. The changes will allow opportunities for transitional and supportive housing in the Mixed Use Zoning District in compliance with the provisions of California Government Code Section 65583(a)(5) and allow manufactured homes in the R-2 Zoning District in compliance with California Government Code Section 65852.3.

**NOW, THEREFORE**, the City Council of the City of Milpitas does ordain as follows:

**SECTION 1. RECORD AND BASIS FOR ACTION**

The City Council has duly considered the full record before it, which may include but is not limited to such things as the City staff report, testimony by staff and the public, and other materials and evidence submitted or provided to the City Council. Furthermore, the recitals set forth above are found to be true and correct and are incorporated herein by reference.

**SECTION 2. FINDINGS**

Zoning Text Amendment (Section XI-10-57.02(G)(3)) - The City Council makes the following findings based on the evidence in the public record in support of Zoning Text Amendment No. ZA15-0015:

1. *The proposed amendment is consistent with the General Plan.*

The General Plan land use designation for both the MXD and R2 zoning district allow for residential uses. The proposed zone amendments clarify additional residential uses that are allowed in the zone districts in accordance with State law. Allowing supportive/transitional housing and manufactured housing in the MXD and R2 zone districts, respectively, is consistent with the Residential General Plan land use designation.

2. *The proposed amendment will not adversely affect the public health, safety and welfare of the residents of Milpitas.*

The proposed zoning amendment is required under State law and will result in a more efficient use of land. The land use regulations will not affect the range of uses permitted or conditionally permitted. Residential uses are already allowed in both MXD and R2 zone districts and will continue to be allowed. Therefore, the general well-being of Milpitas residents will be maintained since the changes will still facilitate a broad range of land uses, but will encourage more a more diverse mix of housing opportunities for the City and residents.

**SECTION 3. AMENDMENT OF MILPITAS MUNICIPAL CODE TITLE XI, CHAPTER 10**

Table XI-10-4.02-1 entitled "Residential Zone Uses" of the Milpitas Municipal Code is amended to read as follows:

Table XI-10-4.02-1
Residential Zone Uses

| Use | R1 | R2 | R3 | R4 | R5 |
|---|---|---|---|---|---|
| 1. Commercial | | | | | |
| Commercial services[1,2] | NP | NP | C | C | C |
| 2. Professional Offices and related uses | | | | | |
| Offices[1,2] | NP | NP | C | C | C |
| 3. Public/Quasi-Public and Institutional Uses | | | | | |
| Child care center | C | C | C | C | P |
| Nursing home[3] | NP | C | C | C | C |
| Park, playground or community center (non-profit) | C | C | C | C | C |
| Parking lots | C | C | C | C | C |
| Public service structure | C | C | C | C | C |
| School (not trade or vocational) | C | C | C | C | C |
| Social hall, lodge, fraternal organization, club and religious assembly (non-profit) | C | C | C | C | C |
| 4. Residential Uses | | | | | |
| Condominiums and condo conversions | NP | SFR: C<br>Duplex: C | C | C | C |
| Duplex (Two dwellings) | NP | P | NP | NP | NP |
| Group dwelling | NP | NP | NP | C | C |
| Guest house | C | NP | NP | NP | NP |
| Manufactured home[4] | P | P | NP | NP | NP |
| Multi-family dwellings (Three or more units) | NP | NP | P | P | P |
| Planned unit development[5] | P | P | P | P | P |
| Second residential dwelling unit[6] | P | SFR: P<br>Duplex: NP | NP | NP | NP |
| Single family dwelling | P | P | NP | NP | NP |
| Single-room occupancy residences[7] | NP | NP | C | C | C |
| Transitional and supportive housing | P[8] | P[8] | P[9] | P[9] | P[9] |
| 5. Restaurants | | | | | |
| Restaurants[1,2] | NP | NP | C | P/C | P/C |
| 6. Unclassified Uses | | | | | |

| | | | | | |
|---|---|---|---|---|---|
| Agriculture[10] | P | P | P | NP | NP |
| Boarding house (three or more persons) | NP | C | C | C | C |
| Golf course[11] | C | C | C | NP | NP |
| Live work units[12] | NP | NP | C | C | C |
| Model home complex[13] | P | P | P | P | P |

[1] Refer to Subsection XI-10-4.03(A), Residential Zone Special Uses, of this Chapter, for standards.
[2] Refer to Subsection XI-10-4.03(B), Residential Zone Special Uses, of this Chapter, for standards.
[3] Licensed nursing home serving more than six persons, except when used primarily for contagious sickness, mental or drug alcohol addict cases.
[4] Refer to Subsection XI-10-13.07, Manufactured Homes, of this Chapter, for standards.
[5] Refer to Subsection XI-10-54.07, Planned Unit Developments, of this Title, for standards.
[6] In conjunction with an existing legal single-family dwelling. Refer to Subsection XI-10-13.08, Second Family Unit, of this Chapter, for standards.
[7] Refer to XI-10-13.13, Special Uses, Single Room Occupancy Residences, of this Chapter
[8] Permitted only in single family dwellings
[9] Permitted only in multi-family dwellings
[10] Except for the raising of animals or fowl for commercial purposes, or the sale of any products at retail on the premises.
[11] Except for driving tee or range, miniature course and similar uses operated for commercial purposes.
[12] Allowed commercial uses to be specified through the Conditional Use Permit process.
[13] Refer to Subsection XI-10-13.11(E), Model Home Complexes and Sales Offices, of this Chapter for temporary tract offices.

Table XI-10-6.02- entitled “Mixed Use Zone Uses” of the Milpitas Municipal Code is amended to read as follows:

Table XI-10-6.02-1
Mixed Use Zone Uses

| Use | MXD | MXD2 | | MXD3 |
|---|---|---|---|---|
| | | Ground Level (Facing Retail street) | Upper Floor | |
| 1. Commercial Uses | | | | |
| Alcohol beverage sales | C | C | C | C |
| Commercial services[1] | MCS | MCS | MCS | MCS |
| Grocery stores (supermarkets) | C | C | C | C |
| Pawnshops[2] | C | C | C | C |
| Pet shops | C | NP | NP | NP |
| Retail stores, general merchandise[3] | MCS | MCS | MCS | MCS |
| Tanning salons | P | P | P | P |
| Thrift shops (used merchandise) | | | | |
| Retail | P | P | P | P |
| With collections | C | C | C | C |
| 2. Entertainment and Recreation | | | | |
| Commercial athletic facilities | P | P | P | P |
| Motion picture theater (see 6 below) | | | | |
| Recreation or entertainment facility | C | C | C | C |
| 3. Health and Veterinarian Uses | | | | |
| Animal grooming (no boarding) | P | P | NP | P |
| Hospitals or sanitariums[4] | C | C | C | C |
| Massage establishment | C | C | C | C |

| | | | | |
|---|---|---|---|---|
| Medical or dental offices and clinics | P | NP | P | P |
| Medical support laboratories | P | P | P | P |
| Optician and optometrist shop | P | P | P | P |
| Pharmacy or drug store | P | P | P | P |
| Veterinarian clinic | P | P | P | P |
| 4. Lodging | | | | |
| Bed and breakfast | P | P | NP | NP |
| Boarding houses (3 or more persons) | C | C | C | C |
| Group dwellings | C | C | C | C |
| Hotels | C | P | P | P |
| Motels | C | C | C | C |
| 5. Professional Offices, Financial Institutions and Related Uses[4] | | | | |
| Financial institutions (banks, savings and loans, etc.) | MCS | NP | MCS | P |
| Offices[3] | MCS | NP | MCS | P |
| 6. Public/Quasi Public and Assembly Uses | | | | |
| Child care | | | | |
| Child care center | C | P | C | P |
| Day care school | C | C | C | |
| Large family child care home | P | P | C | P |
| Small family child care home | P | P | P | P |
| Instruction | | | | |
| Group[13] | P | NP | NP | NP |
| Private | P | P | P | P |
| Park, playground or community center[5] | O | O | O | O |
| Places of assembly[4] | C | C | C | C |
| Public utilities | C | C | C | C |
| Schools, private (elementary, middle and high)[4] | C | C | C | C |
| Theaters (Indoor) | C | C | C | C |
| Trade and vocational schools[4] | C | C | C | C |
| Transportation facilities[2] | C | C | C | C |
| 7. Residential Uses | | | | |
| Multi-family housing[7] | P | NP | P | P |
| Transitional and Supportive Housing[7] | P | NP | P | P |
| 8. Restaurants or Food Service | | | | |
| Bar or nightclub | C | C | C | C |
| Brewery/Eateries[10] | MCS | MCS | NP | MCS |
| Catering establishments | C | C | C | C |
| Restaurants[2] | P/C | P/C | NP | P/C |

| | | | | |
|---|---|---|---|---|
| With dancing and entertainment | C | C | C | C |
| With ancillary on-premise beer & wine with no separate bar | P | P | P | P |
| 9. Unclassified Uses | | | | |
| Artisan Studios & Live-work units, woodworking or glassworking, plumbing or metalworking and sign shops[2] | MCS | MCS | MCS | MCS |
| Lobbies and entries for upper floor uses | P | P | NP | P |
| Model home complex[11] | P | P | P | P |
| Mixed use developments[12] | P | P | P | P |
| Planned Unit Development[13] | P | P | P | P |
| Temporary seasonal sales[14] | P | P | P | P |
| 10. Vehicle-Related Repair, Sales and Services | | | | |
| Auto sales and rental[15] | C | C | C | C |
| Auto broker (wholesale, no vehicles on site)[2] | MCS | MCS | MCS | MCS |
| Vehicle service uses[16] | C | NP | NP | C |

[1] Refer to Subsection XI-10-6.02-1(B), Performance standards for certain uses, of this Chapter, for standards.
[2] Refer to Subsection XI-10-6.02-1, Special Uses, of this Chapter, for standards.
[3] Refer to Subsection XI-10-6.02-1(B) Performance standards for certain uses, of this Chapter.
[4] Refer to Subsection XI-10-6.02-2, Quasi-Public Uses, of this Chapter, for standards.
[5] For parks, playgrounds or community center owned and operated by a government agency or a nonprofit community organization.
[6] Refer to XI-10-13.14, Special Uses, Emergency Shelters, of this Chapter
[7] Ground level residential is prohibited in the Ground Level Commercial Area as shown on the Midtown Specific Plan Land Use Map, Figure 3.1.
[8] Refer to XI-10-13.13, Special Uses, Single Room Occupancy Residences, of this Chapter
[9] Uses serving upper-floor residential uses, such as common gathering space, lobby, and resident services, may be allowed as ground floor uses where residential uses would otherwise not be permitted.
[10] Reserved
[11] Refer to Subsection XI-10-13.11(E), Model Home Complexes and Sales Offices, of this Chapter for temporary tract offices.
[12] Which include only permitted uses.
[13] Refer to Section XI-10-54.07, Planned Unit Developments, of this Chapter, for standards.
[14] Refer to Section XI-10-13.11(D), Temporary Seasonal Sales, of this Chapter.
[15] New and used auto, recreational vehicle and boat sales, excluding commercial vehicles, trucks, buses, vans, and farm equipment, with accessory repairs and services, only allowed if fully enclosed within a building. Bicycle and auto rental agency, excluding commercial vehicles, trucks, buses, vans, boats and RV rentals, only if fully enclosed within a building.
[16] Refer to Subsection XI-10-6.02-2, Special Uses, of this Chapter, for standards. Service stations shall follow the "General development policy: Gasoline service stations, and automotive service centers" adopted by the City Council on December 19, 1995.

**SECTION 4. SEVERABILITY**

The provisions of this Ordinance are separable, and the invalidity of any phrase, clause, provision or part shall not affect the validity of the remainder.

**SECTION 5. EFFECTIVE DATE AND POSTING**

In accordance with Section 36937 of the Government Code of the State of California, this Ordinance shall take effect thirty (30) days from and after the date of its passage. The City Clerk of the City of Milpitas shall cause this Ordinance or a summary thereof to be published in accordance with Section 36933 of the Government Code of the State of California.

*14

**RESOLUTION NO. _____**

**A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF MILPITAS AUTHORIZING THE PURCHASE OF ONE 2015 FORD ESCAPE FROM THE NATIONAL AUTO FLEET GROUP THROUGH A COOPERATIVE PROCUREMENT CONTRACT**

**WHEREAS**, Section I-2-3.08 of the Milpitas Municipal Code authorizes the City Council to award contracts without competition when the purchase is pursuant to a cooperative agreement by another public agency in California that used competitive negotiation or bidding procedures at least as restrictive as those of the City of Milpitas; and

**WHEREAS**, Municipal Code Section I-2-3.08 ("Cooperative Procurement") specifically authorizes the Purchasing Agent to make purchases from the National Joint Powers Alliance; and

**WHEREAS**, the Purchasing Agent, having reviewed all of the documentation from the National Joint Powers Alliance Request for Proposal (RFP) #102811 entitled "Passenger Cars, Light Duty, Medium Duty, and Heavy Duty Trucks with Related Accessories" has determined that the underlying purchase was made using competitive bidding procedures at least as restrictive as those of the City of Milpitas and that the price for this vehicle is the same as that offered in the original agreement.

**NOW, THEREFORE**, the City Council of the City of Milpitas hereby finds, determines, and resolves as follows:

1. The City Council has duly considered the full record before it, which may include but is not limited to such things as the City staff report, testimony by staff and the public, and other materials and evidence submitted or provided to it. Furthermore, the recitals set forth above are found to be true and correct and are incorporated herein by reference.

2. The City Purchasing Agent is authorized to purchase one (1) 2015 Ford Escape for the Police department Under Cover Program from National Auto Fleet Group in a not-to-exceed amount of $24,843.73 through the National Joint Powers Alliance.

PASSED AND ADOPTED this _____ day of _____, 2015, by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

ATTEST:

_____
Mary Lavelle, City Clerk

APPROVED:

_____
Jose S. Esteves, Mayor

APPROVED AS TO FORM:

_____
Michael J. Ogaz, City Attorney

**RESOLUTION NO. _____** *15

**A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF MILPITAS APPROVING THE TEMPORARY STREET CLOSURE ON PIEDMONT ROAD, CALAVERAS ROAD AND ASSOCIATED SIDE STREETS FROM 9:49AM TO 10:57AM ON MAY 12, 2015, FOR THE AMGEN TOUR OF CALIFORNIA EVENT**

**WHEREAS**, the City Council of the City of Milpitas desires to support community events and bring tourism to the City of Milpitas ("City"); and

**WHEREAS**, AEG Cycling, located at 993 Kempton Avenue, Monterey Park, California 91755, is requesting to hold a professional-style bicycle race for the Amgen Tour of California; and

**WHEREAS**, the bicycle race is proposed to take place on Tuesday, May 12, 2015 on Piedmont Road and Calaveras Road and is expected to enter City limits at 10:49 a.m. and leave City limits at 10:57 a.m.;

**WHEREAS**, the temporary closed associated side streets will be Piedmont Road, Calaveras Road, Landess Avenue, Glenview Drive, Greenrock Avenue, Seacliff Drive, Shiloh Avenue, Mesa Verde Drive, Bliss Avenue, Petersburg Drive, Yosemite Drive, Aguilar Court, Uridias Ranch Road, Alviso Adobe Court, Downing Road, and Vista Ridge Road.

**NOW, THEREFORE**, the City Council of the City of Milpitas hereby finds, determines, and resolves as follows:

1. The City Council has considered the full record before it, which may include but is not limited to such things as the staff report, testimony by staff and the public, and other materials and evidence submitted or provided to it. Furthermore, the recitals set forth above are found to be true and correct and are incorporated herein by reference.

2. Subject to all required City permits and approvals, City Council herby authorizes the temporary street closure of the following streets on Tuesday, May 12, 2015, from 9:49 a.m. to 10:57 a.m., provided that the applicant shall, at its sole cost and expense; (i) implement all required conditions of the Special Event Permit, including, but not limited to, traffic control devices, traffic control staffing, security, emergency action plan, and any other conditions deemed necessary by the City; (ii) provide emergency vehicular, personnel, and any other required access on the road closures at all times; and (iii) fully pay all City costs, expenses, and time arising or relating to this event, all subject to City review and approval.

PASSED AND ADOPTED this _____ day of _____, 2015, by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

ATTEST: APPROVED:

_____ _____

Mary Lavelle, City Clerk Jose S. Esteves, Mayor

APPROVED AS TO FORM:

_____

Michael J. Ogaz, City Attorney

**Project Number:**

P-MS15-0012

# SPECIAL EVENT / ACTIVITY
# INFORMATION PACKET & APPLICATION

2015 AMGEN TOUR OF CALIFORNIA - MAY 12, 2015

"Special events and activities" means any temporary event or activity sponsored by a business, shopping center or organization which is held outside the confines of a permanent building.

To apply for a Special Event and Activity, please read the enclosed instructions and then complete this application. Submit your application, including the required attachments, no later than 45 days for a major event or 30 days for a minor event.

For specific references to the Milpitas Municipal Code regarding Special Events and Activities see Section XI-10-13.11

**Approvals:**

Planning: _____ Date: _____

Fire: _____ Date: _____

Police: _____ Date: _____

Engineering: _____ Date: _____

Building: _____ Date: _____

**QUESTION TO GET STARTED**

- **Will the event be held exclusively on private property? If so, you will need to have the property owner sign the application for use of the site.**

*This event will not require off site parking, or the use of public right-of-way (except running/jogging events).*

☐Yes ☑No

*If you answered yes to the question above, your event is considered a "Minor" event. All other events are considered "Major".*

## SECTION 2: EVENT INFORMATION

Please complete all of the following:

| | | |
|---|---|---|
| Setup/Preparation | Date: _____ | |
| Event starts | Date: May 12, 2015 | Time: 10:49am |
| Event ends | Date: May 12, 2015 | Time: 10:57am |
| Dismantle/Tear down | Date: _____ | |
| Anticipated attendance: | Total: 144 | Per day: _____ |

**Street closures**

Will this event require any city streets to be closed? ☑ Yes ☐ No

*If yes, specify which streets or cross streets and include a route site map.*

**Food**

If your event will have food preparations please specify cooking method:

Gas ☐ Electric ☐

Charcoal ☐ Other (specify): _____

*A permit may be required from the Santa Clara County Department of Public Health at (408) 918-3400.*

**Portable restrooms**

*A minimum of one (1) accessible toilet for persons with disabilities is required when multiple toilets are set side by side. If each toilet is scattered throughout the site, then each toilet must be accessible. Exceptions may be considered by the Building Department.*

**Lighting and sound**

Will you be using any amplified sound (i.e. public address system)? ☐ Yes ☑ No

Will this event use any temporary lighting? ☐ Yes ☑ No

*If yes, please describe:*

**SECTION 3: SITE MAP CHECKLIST: City staff is available to help you through this process.**

Provide a site plan/route map for your event on a separate sheet. **Provide six copies of this site plan/map (11" x 17" min size).** The map should include the following information:

- ☑ An outline of the event site, including the names of the streets or areas that are a part of the venue and surrounding area. If the event includes a moving route of any kind (such as a parade), indicate the direction of travel, including the starting location and ending destination. Include north arrow.
- ☑ Any street or lane closures.
- ☐ The locations of fencing, barriers or barricades. Include any removable fencing for emergency access. (include height of barriers)
- ☐ The location of first-aid facilities
- ☐ The location of all stages, platforms, booths, cooking areas, trash containers, tents/canopies, etc. (Include dimensions, such as height and length)
- ☐ The location of any food booths and cooking area configuration including all vendors cooking with flammable gases or barbeque grills. (Include dimensions, such as height and length)
- ☐ Generator locations and/or source of electricity
- ☐ Placement of vehicles or trailers used for the event (include dimensions)
- ☐ Anticipated parking locations and number of parking. Show that parking is available for persons with disabilities. These parking spaces shall be dispersed and located closest to the accessible entrances *to the event.* One in every eight accessible parking spaces, but not less than one accessible parking space shall be Van accessible.
- ☐ Placement of promotional signs or banners
- ☐ Placement of portable toilets/rest room facilities (label accessible or non-accessible for people with disabilities)
- ☐ Exit locations for outdoor events that have fences
- ☐ Location of all other event activities
- ☐ Location of temporary lighting
- ☐ Location of temporary speakers

## SECTION 4: INSURANCE INFORMATION

A public liability and property damage insurance policy issued by an insurance company authorized to do business in California, naming the City of Milpitas, its officers, agents and employees as co-insured may be required. Depending on the scope of the event, a minimum of $1 million or more may be required.

Certificate of insurance will be provided within two weeks. Minimum coverage will be $4M

# CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY): 04/08/2015

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

| | |
|---|---|
| **PRODUCER**<br>MARSH USA INC.<br>1225 17TH STREET, SUITE 1300<br>DENVER, CO 80202-5534<br>Attn: Denver.certrequest@marsh.com<br><br>02220 -TAC-ALL-14/15 | **CONTACT NAME:**<br>**PHONE (A/C, No, Ext):** **FAX (A/C, No):**<br>**E-MAIL ADDRESS:** |
| **INSURED**<br>AEG CYCLING, LLC<br>800 W. OLYMPIC BLVD, SUITE 305<br>LOS ANGELES, CA 90015 | **INSURER(S) AFFORDING COVERAGE** — **NAIC #**<br>**INSURER A :** Greenwich Insurance Company — 22322<br>**INSURER B :** N/A — N/A<br>**INSURER C :** National Union Fire Ins Co Pittsburgh PA — 19445<br>**INSURER D :** N/A — N/A<br>**INSURER E :**<br>**INSURER F :** |

**COVERAGES** **CERTIFICATE NUMBER:** SEA-002321177-25 **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

| INSR LTR | TYPE OF INSURANCE | ADDL INSR | SUBR WVD | POLICY NUMBER | POLICY EFF (MM/DD/YYYY) | POLICY EXP (MM/DD/YYYY) | LIMITS | |
|---|---|---|---|---|---|---|---|---|
| A | **GENERAL LIABILITY**<br>X COMMERCIAL GENERAL LIABILITY<br>CLAIMS-MADE X OCCUR<br>X $100,000 SIR<br>GEN'L AGGREGATE LIMIT APPLIES PER:<br>POLICY PRO-JECT LOC | | | RGO300057300 | 11/15/2014 | 03/01/2016 | EACH OCCURRENCE<br>DAMAGE TO RENTED PREMISES (Ea occurrence)<br>MED EXP (Any one person)<br>PERSONAL & ADV INJURY<br>GENERAL AGGREGATE<br>PRODUCTS - COMP/OP AGG | $ 2,000,000<br>$ 1,000,000<br>$ EXCLUDED<br>$ 2,000,000<br>$ 20,000,000<br>$ 2,000,000 |
| | **AUTOMOBILE LIABILITY**<br>ANY AUTO<br>ALL OWNED AUTOS<br>SCHEDULED AUTOS<br>HIRED AUTOS<br>NON-OWNED AUTOS | | | | | | COMBINED SINGLE LIMIT (Ea accident)<br>BODILY INJURY (Per person)<br>BODILY INJURY (Per accident)<br>PROPERTY DAMAGE (Per accident) | $<br>$<br>$<br>$ |
| C | X **UMBRELLA LIAB** X OCCUR<br>**EXCESS LIAB** CLAIMS-MADE<br>DED X RETENTION $ 10,000 | | | BE66844730 | 11/15/2014 | 03/01/2016 | EACH OCCURRENCE<br>AGGREGATE | $ 2,000,000<br>$ 2,000,000 |
| | **WORKERS COMPENSATION AND EMPLOYERS' LIABILITY**<br>ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? Y / N<br>**(Mandatory in NH)**<br>If yes, describe under DESCRIPTION OF OPERATIONS below | N / A | | | | | WC STATU-TORY LIMITS OTH-ER<br>E.L. EACH ACCIDENT<br>E.L. DISEASE - EA EMPLOYEE<br>E.L. DISEASE - POLICY LIMIT | $<br>$<br>$ |

**DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)**

RE: AMGEN TOUR OF CALIFORNIA AT CITY OF MILPITAS, PIEDMONT AND CALAVERAS ROADS, MILPITAS, CA ON MAY 10-17, 2015

CITY OF MILPITAS, ITS OFFICERS, AGENTS, AND EMPLOYEES ARE NAMED AS ADDITIONAL INSURED ON THE GENERAL LIABILITY IF REQUIRED BY WRITTEN CONTRACT.

**CERTIFICATE HOLDER**

CITY OF MILPITAS
455 EAST CALAVERAS BOULEVARD
MILPITAS, CA 95035

RECEIVED
APR 08 2015
CITY OF MILPITAS
PLANNING DIVISION

**CANCELLATION**

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

**AUTHORIZED REPRESENTATIVE**
of Marsh USA Inc.

Sharon A. Hammer

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AMGEN TOUR of CALIFORNIA

**Event Overview**

The 10th Annual 2015 Amgen Tour of California is a professional style bike race modeled after the Tour de France. The race is governed by the same international cycling federation, we follow the same rules, and we have the same teams and riders as the Tour de France. The principal difference between the two events is that the Amgen Tour of California is a shorter event: 8-days vs. 21- days. The race consists of 18 teams - each with eight riders. The 2015 race will have seven point-to-point road stages and one time trial. Each stage is between 12 and 125 miles in length. The race begins in Sacramento on May 10th and concludes at the Rose Bowl in Pasadena on May 17th.

The 2014 Amgen Tour of California drew over two million spectators along the 750-mile route and quickly became the largest sporting event in the history of California. We will broadcast HD live TV coverage (NBC Sports and NBC Network) on every stage for 2015 to more than 200 countries. We will also being streaming live video on the Internet for the entire race.

The race is self-contained. Aside from the 144 professional racers, we also have approximately 100 vehicles that travel within the race "package". This includes the California Highway Patrol (CHP), team cars, medical support, mechanical support, race officials, motorcycle marshals, TV crews, etc. The entire race moves as one entity at an average speed of approximately 26 MPH. From the lead CHP car to the follow CHP car, the distance is approximately 1.5 miles. It takes the race about five minutes to pass any given spot on the road.

We require total road closures that is managed by the CHP. There are four elements to the closure: cross traffic that flows across the course at an intersection, traffic moving the same direction and ahead of the race, traffic moving the same direction and behind the race, and traffic moving towards the race. CHP/Police will allow cross traffic and traffic turning onto the course and heading away from the race until approximately 5-10 minutes before the race reaches the intersection but will prevent cars from turning onto the road heading into the race. Traffic moving the same direction and ahead of the race will be allowed to flow until the race is approximately 10 minutes behind the traffic. Traffic that is behind the race will not be allowed to pass. Traffic that is moving into the race will be stopped approximately 20 minutes before the race reaches any given point.

Traffic management is variable based on the type of road, the amount of traffic, and the type and number of opportunities where traffic can be pulled off the road for a short period. Where there are roads that are divided by medians, traffic will be allowed to flow on the side opposite the race. It may sound slightly onerous, but it is not as bad as it sounds. CHP has been able to perfect this type of closure and has worked closely with local PD and the sheriffs. For the 2011 event, that took place over eight days and 820 miles of roads, there were very few complaints with the way the traffic was managed.

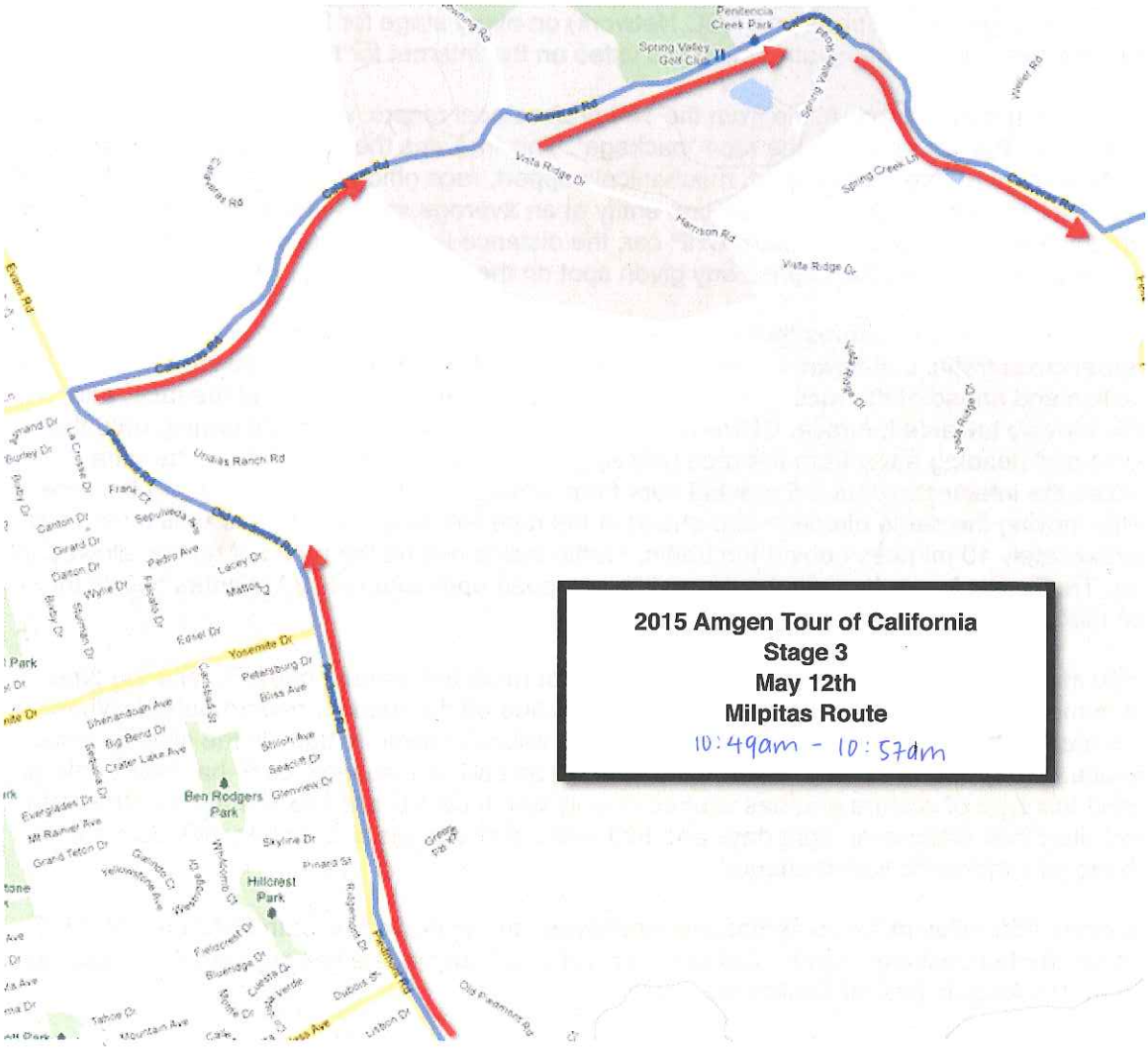
The entire 750 miles of the route has been reviewed and approved by both Caltrans and CHP. As it has for the past eight years, California Travel and Tourism is a key supporter and sponsor of the 2015 Amgen Tour of California.

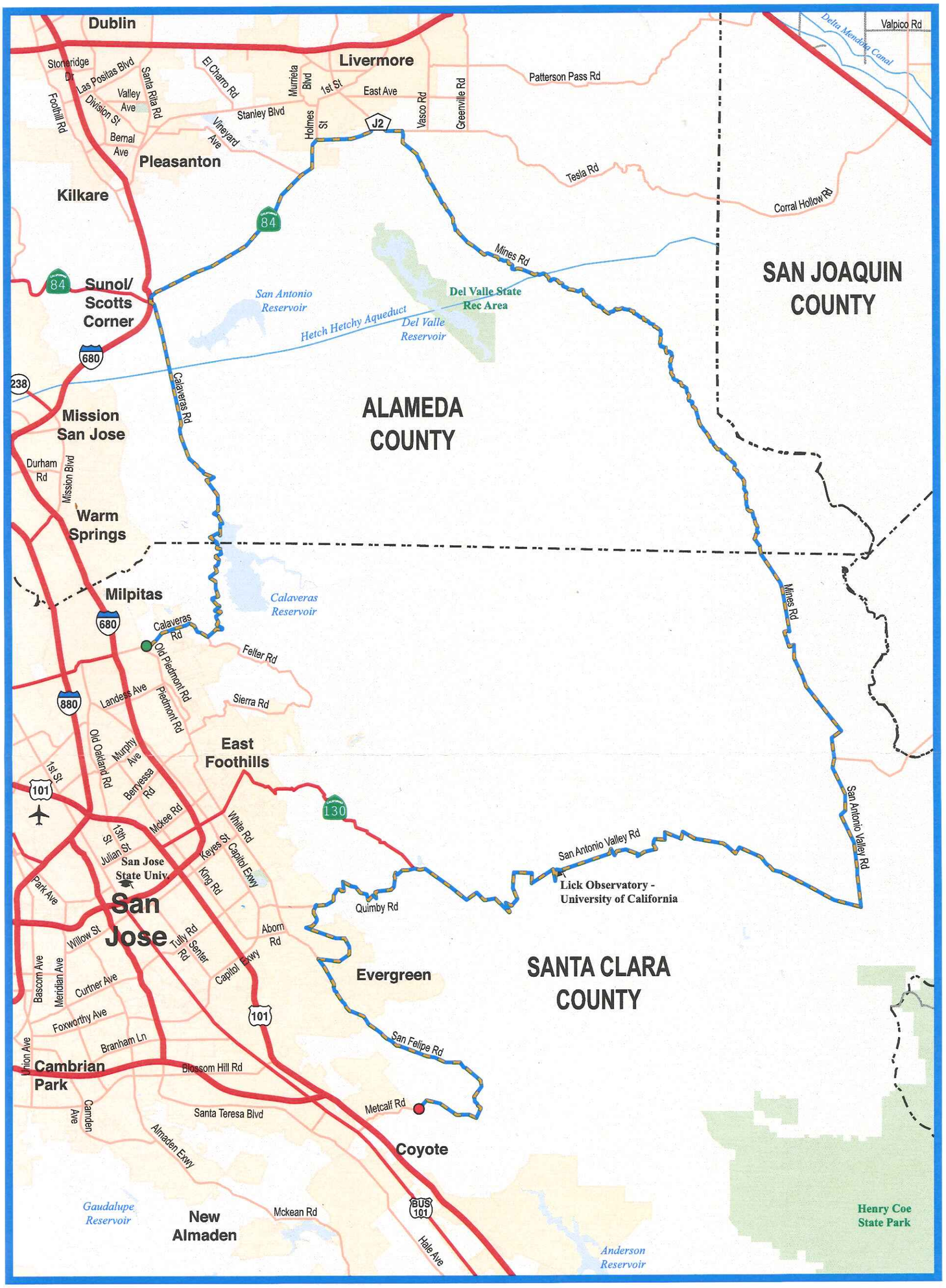
Drawing two million spectators raises a lot of eyebrows...and concerns. The vast majority of these crowds came in three areas: start cities, finish cities, and various long and steep climbs

the riders encountered. Aside from some isolated areas, there are relatively few spectators along the course. Many people would watch from their driveway, but it was rare to find more than a few hundred in one location. We will be utilizing the same road closure and crowd control plans that have been effective the past six years.

We saw little to no trash along the route for the 2014 Amgen Tour of California. The fans along the way were well behaved and took whatever trash they may have generated with them when they left the area they were viewing the race. We also have a crew that follows the race to collect our signs and any obvious trash that was left by a spectator.

The race will enter Milpitas NB on Piedmont Rd at 10:49am and depart EB on Calaveras Rd at 10:57am. Total distance on city roads is approximately three miles that will take nine minutes to complete. All city costs will be covered by the event.






Stage 3 - San Jose to San Jose
Tuesday, May 12, 2015

© AEG Cycling

Revised 1/28/15

**Amgen Tour of California**
**Traffic Management Plan**

**Scope**
The 2015 Amgen Tour of California will be held May 10-17th over 725 miles of California roadways. The race will feature 144 cyclist plus various support vehicles and staff. These athletes and vehicles will travel along the course in a "caravan" ender the escort of the California Highway Patrol (CHP). The "bubble" of this escort is expected to be 10-20 minutes as it moves along roadways. See the attached caravan diagram for more information on the quantity and location of vehicles.

**Course Information**

See the attached course logs and maps for specific route information, including intersection and arrival information.

This log will be updated to show the positions of volunteer marshal locations at intersections along the route.

**Public Information and Notification**

Citizens along the route will be notified through a combination of fixed signage warning of road delays, and a public awareness campaign. The contract public relation company contracted by the event organizers will issue press releases and contact local media in the 2-3 weeks before the event and continue through event day.

## Traffic Control Staffing

**Traveling Marshal**
**(75 total)**

Traveling Marshals receive extensive training and travel with the event throughout the week. These marshals are divided into groups of 8-10 and take positions along smaller side roads to assist law enforcement. In addition these marshals are deployed in areas where there might be a routing or safety concern (turns, entrances to divided sections of road, steep downhills, etc.)

Each marshal group will deploy on a set section of road ahead of the arrival of the race. Immediately after the passage of the race, the marshals will be picked up and leapfrog to another position further down the route using and alternate route. On most cases the marshals will makes two of these jumps per day, effectively doubling their numbers.

Marshals are equipped with cones, safety vests and flags. In addition their vehicles are equipped with brooms, shovels and patch material in case of repairable road conditions. Marshals also receive PR training in order to work with local residents and road users

who may be inconvenienced. While these course marshals are well versed in supporting law enforcement personnel, they have not received traffic control training. Therefore, they will not perform any traffic control duty. Their primary role will be crowd control and "flagging" the riders at any turn along the course. At all of these turns, CHP will be on site and will have already closed the road.

**Motor Marshals**
**(20 total)**

The race's Motorcycle Marshals work closely with the California Highway Patrol to assist with security along the route. The marshals are deployed in teams and assigned to the lead patrol cars. They are responsible for assisting with the closure of any drives or parking lots not manned by any other staff. These marshals have the ability to rapidly deploy and quickly move back into position once the front of the race has passed.

In addition motor marshals are able to communicate to both the command car and other race staff any obstacles or dangerous situations along the route.

**California Highway Patrol – Entourage**
**(10 total)**

The California Highway Patrol (CHP) will be providing a police escort utilizing the same units throughout the event. These units will be deployed both ahead of and behind the race itself as part of the race caravan.

The mobile units will work with fixed-post officers and race marshals to provide security along the route.

Six to seven units will be staggered between five and ten minutes in front of the event. The exact spacing will be determined based on road type and terrain in coordination with local area commanders.

All additional units will be placed at the rear of the entourage to prevent traffic from passing the race. These units will also protect vehicles and competitors who are outside the main group.

See the attached caravan diagram for more information on vehicle locations and functions.

**California Highway Patrol – Motos**
**(Varies by Stage)**

The California Highway Patrol (CHP) will provide 10-15 moto officers 2-3 miles ahead of the race. These units will pull incoming traffic off to the side and instruct them to hold in place until the race passes them.

**California Highway Patrol – Fixed Units**
**(Varies by Stage)**

The California Highway Patrol (CHP) will provide fixed post traffic control ahead of the race. These units will work to secure intersections ahead of the race in conjunction with race marshals and CHP Motos.

## General Traffic Control Guidelines

***Race Marshals***

### Marshal Control

Race marshals are positioned on smaller side roads that do not require the full-time presence of a law enforcement officer. In general these are smaller rural roads and non-signalized intersections. These marshals work with the advance fixed post CHP units to ensure that all roads are controlled as the race passes. Side roads are controlled by Type 1 barricades or a similar device.

The purpose of the marshal is to control traffic once the lead elements of the race reach a position. Once the lead law enforcement unit in the race reaches a location, traffic is not allowed to move towards the race. Depending on location traffic may be allowed to move away from the race or cross the course during this time. While these course marshals are well versed in supporting law enforcement personnel, they have not received traffic control training. Their primary role will be crowd control and "flagging" the riders at any turn along the course. At all of these turns, CHP will be on site and will have already closed the road.

Once the lead elements of the race have passed a location and the race grows closer, traffic at intersection will not be allowed on course until the race passes.

Once the final law enforcement vehicle passes a location, all intersections are reopened and traffic flows as normal.

As the race expands and contracts, law enforcement and marshals vehicles are redeployed to fill any of the small gaps and keep side traffic or traffic pulled off the road from interfering with the race.

### Law Enforcement Control

Law Enforcement will handle traffic control in different ways depending on the terrain and road type.

In the case of short sections of road, traffic at intersections controlled by CHP will not be allowed to advance towards the riders as the race is inbound. This is especially important in areas with no shoulders, steep descents and limited site distances.

In these cases traffic is held or diverted as a race enters the far intersection on a stretch or roadway. This has the advantage of providing the race with a clear path of travel while not forcing people to pull off of on a non-optimal shoulder.

## Contingency Plans

*Weather*

The Amgen Tour of California is generally considered a "Rain or Shine" event; however there are instances that would cause the neutralization, delay or stoppage of the event.

*Delay*

The event start may be delayed due to extreme circumstances, usually in the vicinity of the start area. Although generally avoided due to the careful planning of the timeline it is an option.

*Relocation of Start/Remote Start*

In the case of an incident such as a landslide, riders and staff may transfer via auto around the obstacle and start/restart the race on the other side. This has the advantage of continuing the event. The start would take place at the same time the race would have passed on the original route, thus preserving the timing of the event.

*Detour*

In the case of an incident affecting a short portion of a roadway, the race may be detoured around if a safe and feasible route is available. Many times in these cases the race is neutralized and restarted once on the other side of the obstacle.

*Neutralization*

In the case of a limited closure, the race may be neutralized and restarted once the obstacle has been cleared or the delaying circumstance has passed.

*Cancellation*

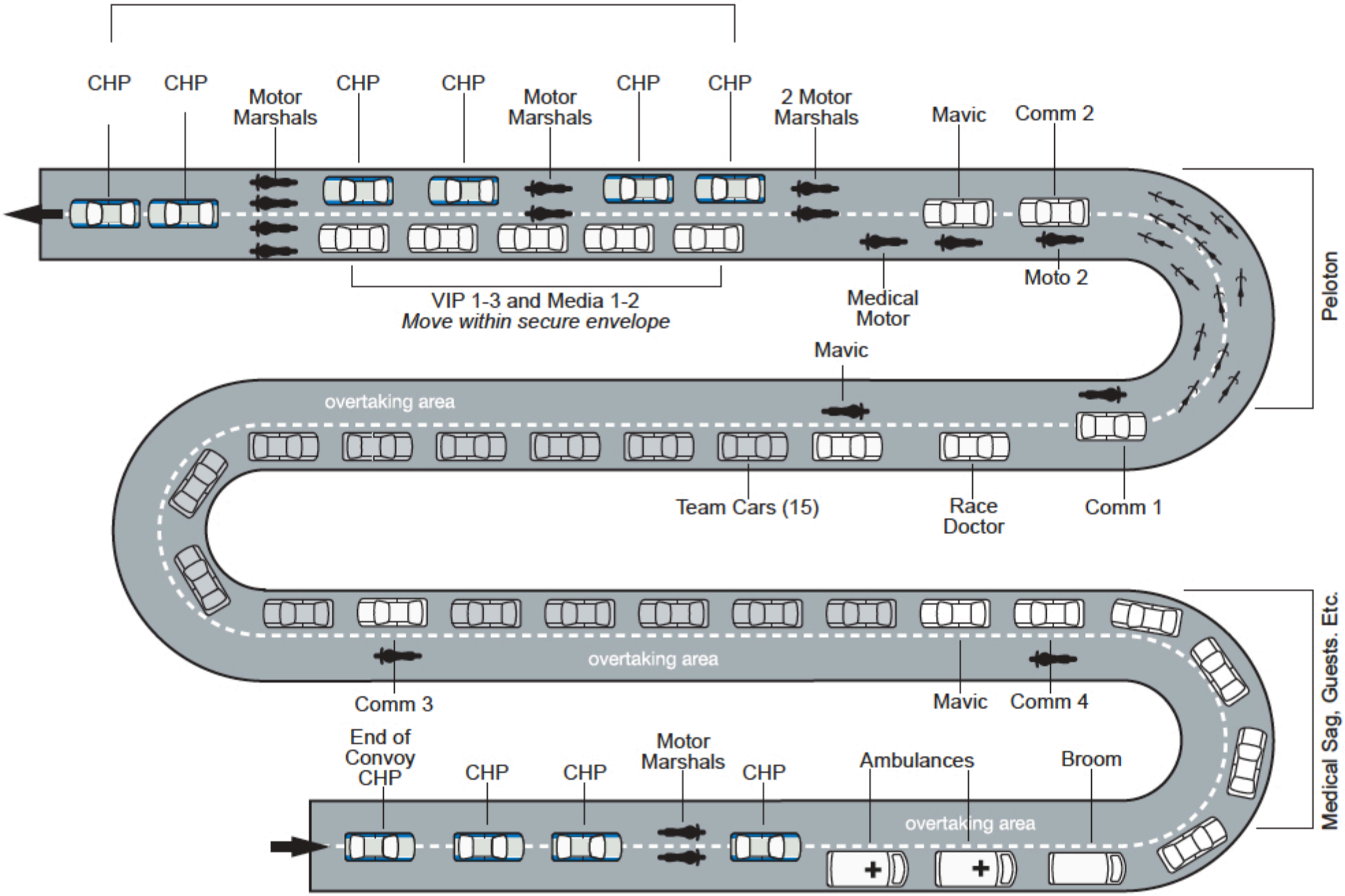
In some cases the safety of the riders and/or staff is so extreme or the damage to roadways and infrastructure is so extreme that the event must be cancelled. This is a last resort option.

Other Emergency Situations

In the case of emergency situations (house fire, medical emergency, etc.) the CHP Incident Commander (IC) should be notified immediately. The CHP IC will consult with event organizers to determine the appropriate course of action.

It may be decided to use the same actions as for a weather emergency with modifications based on the particular situation.

Law enforcement vehicles and motor marshals staggered ahead of the race. Deployment depends on road conditions and race status.



# Event Medical Service Plan
# 2015 Amgen Tour of California

## Overview

Professional cyclists, while able to exert themselves in extremes of weather and terrain, also need special care and treatment. In a multi-day stage race it is critical that athletes receive appropriate treatment from medical professionals in order to remain competitive. In addition, the race medical team is able to provide emergency response to accidents on the race course.

The Medical Provider oversees medical services for the race entourage. Services rendered include:

Coordination of all race medical staff (physicians, trainers, EMTs, etc.)
Coordination with all local EMS agencies and local hospitals
Contact point for all race staff with medical issues

The Medical Provider for the 2015 Amgen Tour of California is the Santa Monica Orthopaedic Group with ambulance services provided by American Medical Response (AMR).

## Areas of Responsibility

### Medical Suite

Based at the Headquarters hotel each night. This suite provides all types of care to athletes and entourage. Examples include: wound care, massage therapy, physical therapy and general medical services.

The medical suite is generally staffed for several hours after the arrival of athletes. After this time a member of the medical staff remains "on call" for other athlete needs.

The medical suite is utilized by athletes for a variety of medical needs. This is especially important for those teams without a team physician. In some cases the medical suite may also serve to support team physicians.

In some cases the suite will be a standalone suite while in other it will be in a room attached to the hotel room of the Chief Medical Officer.

### Caravan Medical

Provides medical service in the race caravan. Vehicles and staff include:

Race Doctors in dedicated car
Medical Motorcycle with medic or ATC
Medical Sag vehicle with ATC

Services are concentrated on emergency medical services (Race Doctor, Medical Motorcycle, Ambulances) as well as preventive medical issues (Medical Sag Vehicle).

Athletes sometime receive treatment out of the Race Doctor's car for conditions such as bee stings, upset stomach or recurring injuries. This treatment is often accomplished "on the go" in the race caravan.

In the case of a severe accident the Race Doctor works with the race EMS crews to provide treatment and/or arrange transport.

Caravan Medical units also coordinate with local EMS jurisdictions to provide additional support and response.

Start/Finish Line Medical

Based at race finish, these staff members provide immediate care to athletes and staff before, during and after the race finish. Examples of treatments include: athlete hydration, wound care, follow up on previous treatment.

The staff at the finish line will often treat injuries that athletes received during the race but were not severe to cause the athlete to drop out. Examples include "road rash" from crashes or exposure to extreme weather conditions.

The finish line medical staff will send more serious cases to the medical suite after initial treatment.

**Staffing**

Number of Physicians

Minimum four physicians.

Ambulances

Two in caravan: ALS and BLS
Support from local EMS for transports if required
Medical Sag

Number of Trainers

4 trainers with 2 support staff

## Operations

Response during Race

First response during the race will be from the Race Doctor, who will stop with any crashes and do an assessment. During the time the caravan passes the doctor will make an assessment on a method of treatment and will alert the race ambulance if it needs to remain on site to assist. Actions that might be taken include the following:

1. Rider needs advanced treatment: The race doctor and ambulance begin treatment immediately and notify the Command Post that a transport will be needed. The local ambulance crew is given an ingress point to the field of play.

   If a neutralization or stoppage of the race needs to take place it is coordinated through the Race Doctor and Technical Director and communicated to the race officials and Command Post.

2. Rider needs minor treatment but cannot continue: The Race Doctor leaves the athletes in the care of the medical sag vehicles. The rider will be transported back to the finish line medical area in the sag or broom vehicle.

Communications

The race medical staff will communicate on the inter-race UHF radio system on all stages. Primary frequency will be the *Medical* simplex frequency with a backup on the *Caravan* repeater frequency in case of a large split in the field.

All announcements to teams will be coordinated through Race Command to *the Radio Tour* frequency.

Each medical asset will be provided with mobile and portable radios as well as a satellite phone.

Coordination with local agencies will be through the *Caravan* frequency to the race representative in the Command Post.

Command Structure

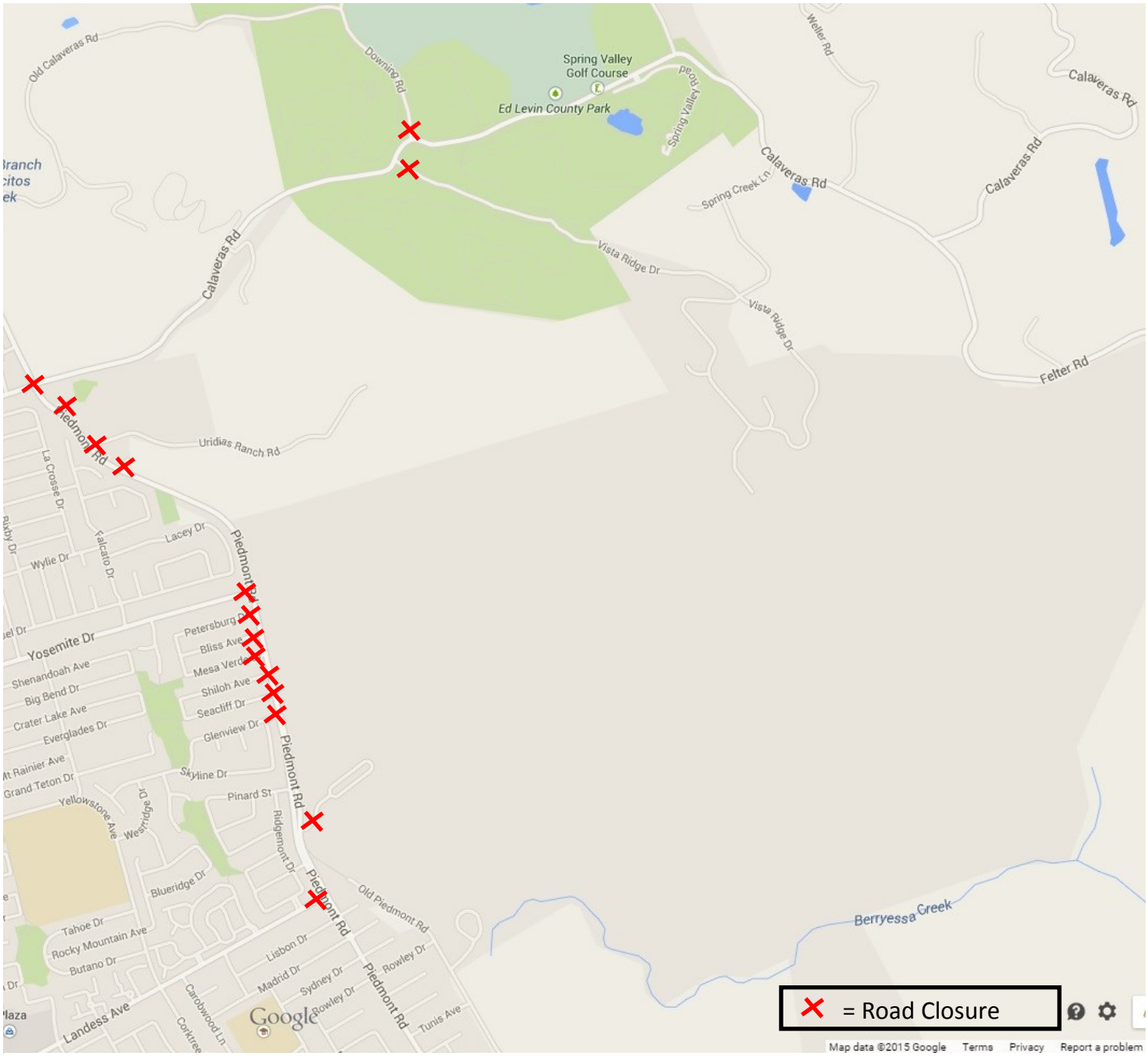
The Race Doctor will make all medical decisions for the race staff and entourage in coordination with the Race Director and Technical Director.

Coordination of caravan assets will be coordinated through Race Command and the Technical Director when on the road.

Communication with local agencies (Police, Fire, EMS, Public Works) will take place through the race representative in the Race Command Post.

In the case of a Public Safety type emergency on course (fire, 911 response, robbery, etc.) the appropriate public safety agency in the Command Post will advise race staff on what action is to be taken through the race representative.

# Road Closure Exhibit



**Project Number:**

P-MS15-0012

# SPECIAL EVENT / ACTIVITY
# INFORMATION PACKET & APPLICATION

2015 AMGEN TOUR OF CALIFORNIA - MAY 12, 2015

"Special events and activities" means any temporary event or activity sponsored by a business, shopping center or organization which is held outside the confines of a permanent building.

To apply for a Special Event and Activity, please read the enclosed instructions and then complete this application. Submit your application, including the required attachments, no later than 45 days for a major event or 30 days for a minor event.

For specific references to the Milpitas Municipal Code regarding Special Events and Activities see Section XI-10-13.11

**Approvals:**

Planning: _____ Date: _____

Fire: _____ Date: _____

Police: _____ Date: _____

Engineering: _____ Date: _____

Building: _____ Date: _____

**QUESTION TO GET STARTED**

- **Will the event be held exclusively on private property? If so, you will need to have the property owner sign the application for use of the site.**

*This event will not require off site parking, or the use of public right-of-way (except running/jogging events).*

☐Yes ☑No

*If you answered yes to the question above, your event is considered a "Minor" event. All other events are considered "Major".*

## SECTION 2: EVENT INFORMATION

Please complete all of the following:

| | | |
|---|---|---|
| Setup/Preparation | Date: _____ | |
| Event starts | Date: May 12, 2015 | Time: 10:49am |
| Event ends | Date: May 12, 2015 | Time: 10:57am |
| Dismantle/Tear down | Date: _____ | |
| Anticipated attendance: | Total: 144 | Per day: _____ |

**Street closures**

Will this event require any city streets to be closed? ☑ Yes ☐ No

*If yes, specify which streets or cross streets and include a route site map.*

**Food**

If your event will have food preparations please specify cooking method:

Gas ☐ Electric ☐

Charcoal ☐ Other (specify): _____

*A permit may be required from the Santa Clara County Department of Public Health at (408) 918-3400.*

**Portable restrooms**

*A minimum of one (1) accessible toilet for persons with disabilities is required when multiple toilets are set side by side. If each toilet is scattered throughout the site, then each toilet must be accessible. Exceptions may be considered by the Building Department.*

**Lighting and sound**

Will you be using any amplified sound (i.e. public address system)? ☐ Yes ☑ No

Will this event use any temporary lighting? ☐ Yes ☑ No

*If yes, please describe:*

**SECTION 3: SITE MAP CHECKLIST: City staff is available to help you through this process.**

Provide a site plan/route map for your event on a separate sheet. **Provide six copies of this site plan/map (11" x 17" min size).** The map should include the following information:

- ☑ An outline of the event site, including the names of the streets or areas that are a part of the venue and surrounding area. If the event includes a moving route of any kind (such as a parade), indicate the direction of travel, including the starting location and ending destination. Include north arrow.
- ☑ Any street or lane closures.
- ☐ The locations of fencing, barriers or barricades. Include any removable fencing for emergency access. (include height of barriers)
- ☐ The location of first-aid facilities
- ☐ The location of all stages, platforms, booths, cooking areas, trash containers, tents/canopies, etc. (Include dimensions, such as height and length)
- ☐ The location of any food booths and cooking area configuration including all vendors cooking with flammable gases or barbeque grills. (Include dimensions, such as height and length)
- ☐ Generator locations and/or source of electricity
- ☐ Placement of vehicles or trailers used for the event (include dimensions)
- ☐ Anticipated parking locations and number of parking. Show that parking is available for persons with disabilities. These parking spaces shall be dispersed and located closest to the accessible entrances *to the event.* One in every eight accessible parking spaces, but not less than one accessible parking space shall be Van accessible.
- ☐ Placement of promotional signs or banners
- ☐ Placement of portable toilets/rest room facilities (label accessible or non-accessible for people with disabilities)
- ☐ Exit locations for outdoor events that have fences
- ☐ Location of all other event activities
- ☐ Location of temporary lighting
- ☐ Location of temporary speakers

## SECTION 4: INSURANCE INFORMATION

A public liability and property damage insurance policy issued by an insurance company authorized to do business in California, naming the City of Milpitas, its officers, agents and employees as co-insured may be required. Depending on the scope of the event, a minimum of $1 million or more may be required.

Certificate of insurance will be provided within two weeks. Minimum coverage will be $4M

# CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY): 04/08/2015

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

| | |
|---|---|
| **PRODUCER**<br>MARSH USA INC.<br>1225 17TH STREET, SUITE 1300<br>DENVER, CO 80202-5534<br>Attn: Denver.certrequest@marsh.com<br><br>02220 -TAC-ALL-14/15 | **CONTACT NAME:**<br>**PHONE (A/C, No, Ext):** **FAX (A/C, No):**<br>**E-MAIL ADDRESS:** |
| **INSURED**<br>AEG CYCLING, LLC<br>800 W. OLYMPIC BLVD, SUITE 305<br>LOS ANGELES, CA 90015 | **INSURER(S) AFFORDING COVERAGE** — **NAIC #**<br>**INSURER A :** Greenwich Insurance Company — 22322<br>**INSURER B :** N/A — N/A<br>**INSURER C :** National Union Fire Ins Co Pittsburgh PA — 19445<br>**INSURER D :** N/A — N/A<br>**INSURER E :**<br>**INSURER F :** |

**COVERAGES** **CERTIFICATE NUMBER:** SEA-002321177-25 **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

| INSR LTR | TYPE OF INSURANCE | ADDL INSR | SUBR WVD | POLICY NUMBER | POLICY EFF (MM/DD/YYYY) | POLICY EXP (MM/DD/YYYY) | LIMITS | |
|---|---|---|---|---|---|---|---|---|
| A | **GENERAL LIABILITY**<br>X COMMERCIAL GENERAL LIABILITY<br>CLAIMS-MADE X OCCUR<br>X $100,000 SIR<br>GEN'L AGGREGATE LIMIT APPLIES PER:<br>POLICY PRO-JECT LOC | | | RGO300057300 | 11/15/2014 | 03/01/2016 | EACH OCCURRENCE<br>DAMAGE TO RENTED PREMISES (Ea occurrence)<br>MED EXP (Any one person)<br>PERSONAL & ADV INJURY<br>GENERAL AGGREGATE<br>PRODUCTS - COMP/OP AGG | $ 2,000,000<br>$ 1,000,000<br>$ EXCLUDED<br>$ 2,000,000<br>$ 20,000,000<br>$ 2,000,000 |
| | **AUTOMOBILE LIABILITY**<br>ANY AUTO<br>ALL OWNED AUTOS<br>SCHEDULED AUTOS<br>HIRED AUTOS<br>NON-OWNED AUTOS | | | | | | COMBINED SINGLE LIMIT (Ea accident)<br>BODILY INJURY (Per person)<br>BODILY INJURY (Per accident)<br>PROPERTY DAMAGE (Per accident) | $<br>$<br>$<br>$ |
| C | X **UMBRELLA LIAB** X OCCUR<br>**EXCESS LIAB** CLAIMS-MADE<br>DED X RETENTION $ 10,000 | | | BE66844730 | 11/15/2014 | 03/01/2016 | EACH OCCURRENCE<br>AGGREGATE | $ 2,000,000<br>$ 2,000,000 |
| | **WORKERS COMPENSATION AND EMPLOYERS' LIABILITY**<br>ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? Y / N<br>**(Mandatory in NH)**<br>If yes, describe under DESCRIPTION OF OPERATIONS below | N / A | | | | | WC STATU-TORY LIMITS OTH-ER<br>E.L. EACH ACCIDENT<br>E.L. DISEASE - EA EMPLOYEE<br>E.L. DISEASE - POLICY LIMIT | $<br>$<br>$ |

**DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)**

RE: AMGEN TOUR OF CALIFORNIA AT CITY OF MILPITAS, PIEDMONT AND CALAVERAS ROADS, MILPITAS, CA ON MAY 10-17, 2015

CITY OF MILPITAS, ITS OFFICERS, AGENTS, AND EMPLOYEES ARE NAMED AS ADDITIONAL INSURED ON THE GENERAL LIABILITY IF REQUIRED BY WRITTEN CONTRACT.

**CERTIFICATE HOLDER**

CITY OF MILPITAS
455 EAST CALAVERAS BOULEVARD
MILPITAS, CA 95035

RECEIVED
APR 08 2015
CITY OF MILPITAS
PLANNING DIVISION

**CANCELLATION**

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

**AUTHORIZED REPRESENTATIVE**
of Marsh USA Inc.

Sharon A. Hammer

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AMGEN TOUR of CALIFORNIA

**Event Overview**

The 10th Annual 2015 Amgen Tour of California is a professional style bike race modeled after the Tour de France. The race is governed by the same international cycling federation, we follow the same rules, and we have the same teams and riders as the Tour de France. The principal difference between the two events is that the Amgen Tour of California is a shorter event: 8-days vs. 21- days. The race consists of 18 teams - each with eight riders. The 2015 race will have seven point-to-point road stages and one time trial. Each stage is between 12 and 125 miles in length. The race begins in Sacramento on May 10th and concludes at the Rose Bowl in Pasadena on May 17th.

The 2014 Amgen Tour of California drew over two million spectators along the 750-mile route and quickly became the largest sporting event in the history of California. We will broadcast HD live TV coverage (NBC Sports and NBC Network) on every stage for 2015 to more than 200 countries. We will also being streaming live video on the Internet for the entire race.

The race is self-contained. Aside from the 144 professional racers, we also have approximately 100 vehicles that travel within the race "package". This includes the California Highway Patrol (CHP), team cars, medical support, mechanical support, race officials, motorcycle marshals, TV crews, etc. The entire race moves as one entity at an average speed of approximately 26 MPH. From the lead CHP car to the follow CHP car, the distance is approximately 1.5 miles. It takes the race about five minutes to pass any given spot on the road.

We require total road closures that is managed by the CHP. There are four elements to the closure: cross traffic that flows across the course at an intersection, traffic moving the same direction and ahead of the race, traffic moving the same direction and behind the race, and traffic moving towards the race. CHP/Police will allow cross traffic and traffic turning onto the course and heading away from the race until approximately 5-10 minutes before the race reaches the intersection but will prevent cars from turning onto the road heading into the race. Traffic moving the same direction and ahead of the race will be allowed to flow until the race is approximately 10 minutes behind the traffic. Traffic that is behind the race will not be allowed to pass. Traffic that is moving into the race will be stopped approximately 20 minutes before the race reaches any given point.

Traffic management is variable based on the type of road, the amount of traffic, and the type and number of opportunities where traffic can be pulled off the road for a short period. Where there are roads that are divided by medians, traffic will be allowed to flow on the side opposite the race. It may sound slightly onerous, but it is not as bad as it sounds. CHP has been able to perfect this type of closure and has worked closely with local PD and the sheriffs. For the 2011 event, that took place over eight days and 820 miles of roads, there were very few complaints with the way the traffic was managed.

The entire 750 miles of the route has been reviewed and approved by both Caltrans and CHP. As it has for the past eight years, California Travel and Tourism is a key supporter and sponsor of the 2015 Amgen Tour of California.

Drawing two million spectators raises a lot of eyebrows...and concerns. The vast majority of these crowds came in three areas: start cities, finish cities, and various long and steep climbs

the riders encountered. Aside from some isolated areas, there are relatively few spectators along the course. Many people would watch from their driveway, but it was rare to find more than a few hundred in one location. We will be utilizing the same road closure and crowd control plans that have been effective the past six years.

We saw little to no trash along the route for the 2014 Amgen Tour of California. The fans along the way were well behaved and took whatever trash they may have generated with them when they left the area they were viewing the race. We also have a crew that follows the race to collect our signs and any obvious trash that was left by a spectator.

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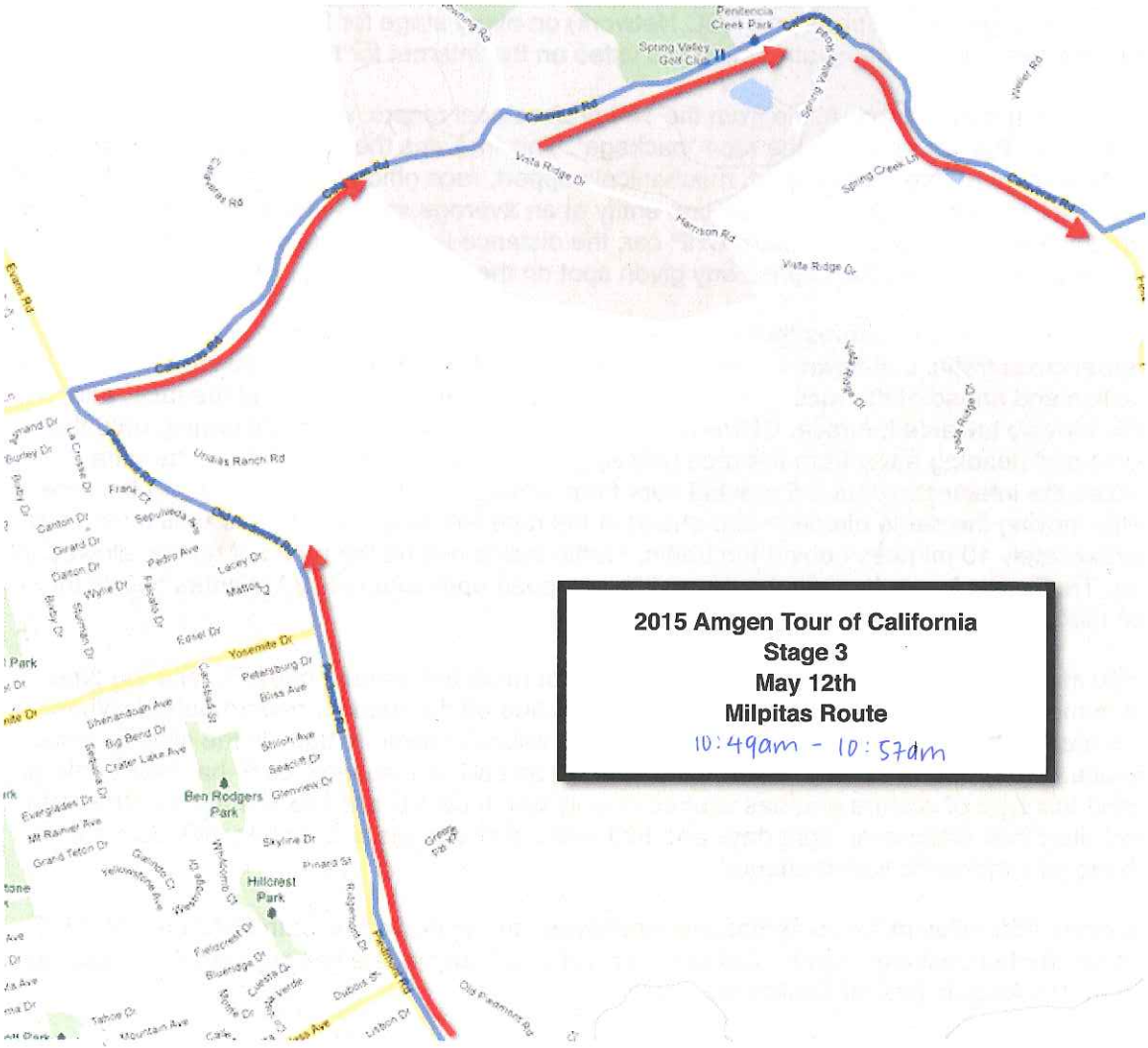

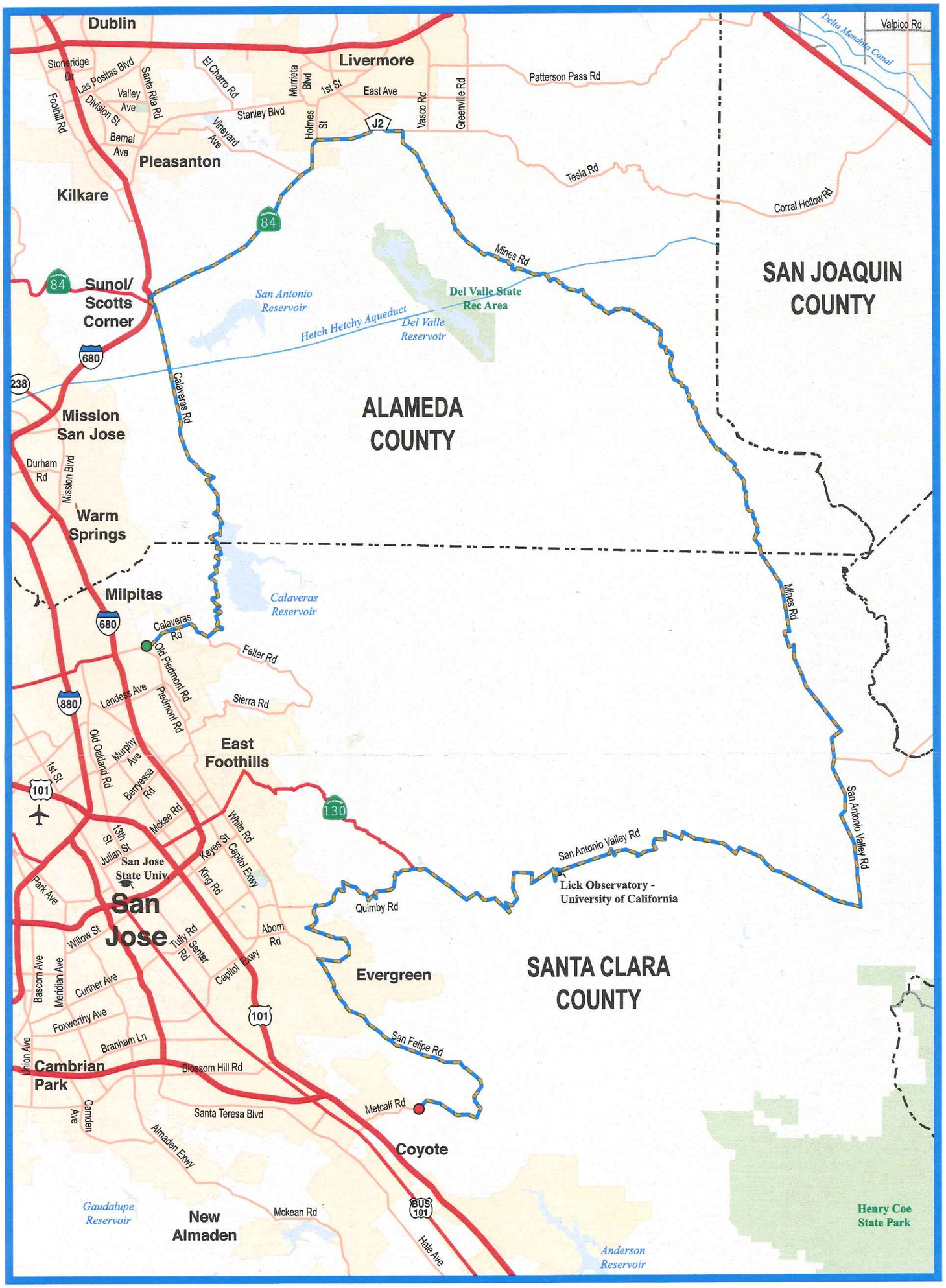


Stage 3 - San Jose to San Jose
Tuesday, May 12, 2015

© AEG Cycling

Revised 1/28/15

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**Traveling Marshal**
**(75 total)**

Traveling Marshals receive extensive training and travel with the event throughout the week. These marshals are divided into groups of 8-10 and take positions along smaller side roads to assist law enforcement. In addition these marshals are deployed in areas where there might be a routing or safety concern (turns, entrances to divided sections of road, steep downhills, etc.)

Each marshal group will deploy on a set section of road ahead of the arrival of the race. Immediately after the passage of the race, the marshals will be picked up and leapfrog to another position further down the route using and alternate route. On most cases the marshals will makes two of these jumps per day, effectively doubling their numbers.

Marshals are equipped with cones, safety vests and flags. In addition their vehicles are equipped with brooms, shovels and patch material in case of repairable road conditions. Marshals also receive PR training in order to work with local residents and road users

who may be inconvenienced. While these course marshals are well versed in supporting law enforcement personnel, they have not received traffic control training. Therefore, they will not perform any traffic control duty. Their primary role will be crowd control and "flagging" the riders at any turn along the course. At all of these turns, CHP will be on site and will have already closed the road.

**Motor Marshals**
**(20 total)**

The race's Motorcycle Marshals work closely with the California Highway Patrol to assist with security along the route. The marshals are deployed in teams and assigned to the lead patrol cars. They are responsible for assisting with the closure of any drives or parking lots not manned by any other staff. These marshals have the ability to rapidly deploy and quickly move back into position once the front of the race has passed.

In addition motor marshals are able to communicate to both the command car and other race staff any obstacles or dangerous situations along the route.

**California Highway Patrol – Entourage**
**(10 total)**

The California Highway Patrol (CHP) will be providing a police escort utilizing the same units throughout the event. These units will be deployed both ahead of and behind the race itself as part of the race caravan.

The mobile units will work with fixed-post officers and race marshals to provide security along the route.

Six to seven units will be staggered between five and ten minutes in front of the event. The exact spacing will be determined based on road type and terrain in coordination with local area commanders.

All additional units will be placed at the rear of the entourage to prevent traffic from passing the race. These units will also protect vehicles and competitors who are outside the main group.

See the attached caravan diagram for more information on vehicle locations and functions.

**California Highway Patrol – Motos**
**(Varies by Stage)**

The California Highway Patrol (CHP) will provide 10-15 moto officers 2-3 miles ahead of the race. These units will pull incoming traffic off to the side and instruct them to hold in place until the race passes them.

**California Highway Patrol – Fixed Units**
**(Varies by Stage)**

The California Highway Patrol (CHP) will provide fixed post traffic control ahead of the race. These units will work to secure intersections ahead of the race in conjunction with race marshals and CHP Motos.

## General Traffic Control Guidelines

***Race Marshals***

### Marshal Control

Race marshals are positioned on smaller side roads that do not require the full-time presence of a law enforcement officer. In general these are smaller rural roads and non-signalized intersections. These marshals work with the advance fixed post CHP units to ensure that all roads are controlled as the race passes. Side roads are controlled by Type 1 barricades or a similar device.

The purpose of the marshal is to control traffic once the lead elements of the race reach a position. Once the lead law enforcement unit in the race reaches a location, traffic is not allowed to move towards the race. Depending on location traffic may be allowed to move away from the race or cross the course during this time. While these course marshals are well versed in supporting law enforcement personnel, they have not received traffic control training. Their primary role will be crowd control and "flagging" the riders at any turn along the course. At all of these turns, CHP will be on site and will have already closed the road.

Once the lead elements of the race have passed a location and the race grows closer, traffic at intersection will not be allowed on course until the race passes.

Once the final law enforcement vehicle passes a location, all intersections are reopened and traffic flows as normal.

As the race expands and contracts, law enforcement and marshals vehicles are redeployed to fill any of the small gaps and keep side traffic or traffic pulled off the road from interfering with the race.

### Law Enforcement Control

Law Enforcement will handle traffic control in different ways depending on the terrain and road type.

In the case of short sections of road, traffic at intersections controlled by CHP will not be allowed to advance towards the riders as the race is inbound. This is especially important in areas with no shoulders, steep descents and limited site distances.

In these cases traffic is held or diverted as a race enters the far intersection on a stretch or roadway. This has the advantage of providing the race with a clear path of travel while not forcing people to pull off of on a non-optimal shoulder.

## Contingency Plans

*Weather*

The Amgen Tour of California is generally considered a "Rain or Shine" event; however there are instances that would cause the neutralization, delay or stoppage of the event.

*Delay*

The event start may be delayed due to extreme circumstances, usually in the vicinity of the start area. Although generally avoided due to the careful planning of the timeline it is an option.

*Relocation of Start/Remote Start*

In the case of an incident such as a landslide, riders and staff may transfer via auto around the obstacle and start/restart the race on the other side. This has the advantage of continuing the event. The start would take place at the same time the race would have passed on the original route, thus preserving the timing of the event.

*Detour*

In the case of an incident affecting a short portion of a roadway, the race may be detoured around if a safe and feasible route is available. Many times in these cases the race is neutralized and restarted once on the other side of the obstacle.

*Neutralization*

In the case of a limited closure, the race may be neutralized and restarted once the obstacle has been cleared or the delaying circumstance has passed.

*Cancellation*

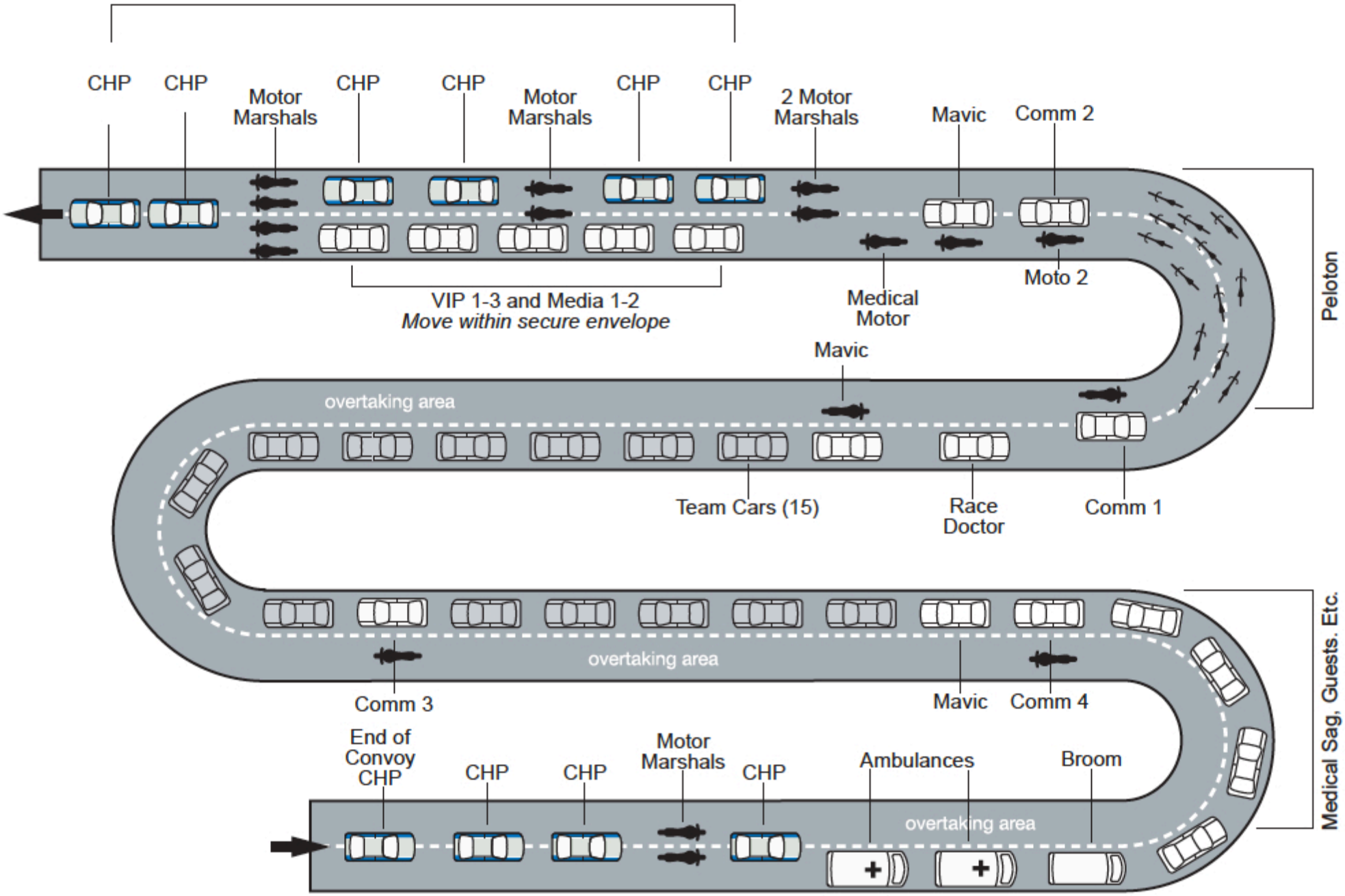
In some cases the safety of the riders and/or staff is so extreme or the damage to roadways and infrastructure is so extreme that the event must be cancelled. This is a last resort option.

Other Emergency Situations

In the case of emergency situations (house fire, medical emergency, etc.) the CHP Incident Commander (IC) should be notified immediately. The CHP IC will consult with event organizers to determine the appropriate course of action.

It may be decided to use the same actions as for a weather emergency with modifications based on the particular situation.

Law enforcement vehicles and motor marshals staggered ahead of the race. Deployment depends on road conditions and race status.



# Event Medical Service Plan
# 2015 Amgen Tour of California

## Overview

Professional cyclists, while able to exert themselves in extremes of weather and terrain, also need special care and treatment. In a multi-day stage race it is critical that athletes receive appropriate treatment from medical professionals in order to remain competitive. In addition, the race medical team is able to provide emergency response to accidents on the race course.

The Medical Provider oversees medical services for the race entourage. Services rendered include:

Coordination of all race medical staff (physicians, trainers, EMTs, etc.)
Coordination with all local EMS agencies and local hospitals
Contact point for all race staff with medical issues

The Medical Provider for the 2015 Amgen Tour of California is the Santa Monica Orthopaedic Group with ambulance services provided by American Medical Response (AMR).

## Areas of Responsibility

### Medical Suite

Based at the Headquarters hotel each night. This suite provides all types of care to athletes and entourage. Examples include: wound care, massage therapy, physical therapy and general medical services.

The medical suite is generally staffed for several hours after the arrival of athletes. After this time a member of the medical staff remains "on call" for other athlete needs.

The medical suite is utilized by athletes for a variety of medical needs. This is especially important for those teams without a team physician. In some cases the medical suite may also serve to support team physicians.

In some cases the suite will be a standalone suite while in other it will be in a room attached to the hotel room of the Chief Medical Officer.

### Caravan Medical

Provides medical service in the race caravan. Vehicles and staff include:

Race Doctors in dedicated car
Medical Motorcycle with medic or ATC
Medical Sag vehicle with ATC

Services are concentrated on emergency medical services (Race Doctor, Medical Motorcycle, Ambulances) as well as preventive medical issues (Medical Sag Vehicle).

Athletes sometime receive treatment out of the Race Doctor's car for conditions such as bee stings, upset stomach or recurring injuries. This treatment is often accomplished "on the go" in the race caravan.

In the case of a severe accident the Race Doctor works with the race EMS crews to provide treatment and/or arrange transport.

Caravan Medical units also coordinate with local EMS jurisdictions to provide additional support and response.

Start/Finish Line Medical

Based at race finish, these staff members provide immediate care to athletes and staff before, during and after the race finish. Examples of treatments include: athlete hydration, wound care, follow up on previous treatment.

The staff at the finish line will often treat injuries that athletes received during the race but were not severe to cause the athlete to drop out. Examples include "road rash" from crashes or exposure to extreme weather conditions.

The finish line medical staff will send more serious cases to the medical suite after initial treatment.

**Staffing**

Number of Physicians

Minimum four physicians.

Ambulances

Two in caravan: ALS and BLS
Support from local EMS for transports if required
Medical Sag

Number of Trainers

4 trainers with 2 support staff

## Operations

Response during Race

First response during the race will be from the Race Doctor, who will stop with any crashes and do an assessment. During the time the caravan passes the doctor will make an assessment on a method of treatment and will alert the race ambulance if it needs to remain on site to assist. Actions that might be taken include the following:

1. Rider needs advanced treatment: The race doctor and ambulance begin treatment immediately and notify the Command Post that a transport will be needed. The local ambulance crew is given an ingress point to the field of play.

   If a neutralization or stoppage of the race needs to take place it is coordinated through the Race Doctor and Technical Director and communicated to the race officials and Command Post.

2. Rider needs minor treatment but cannot continue: The Race Doctor leaves the athletes in the care of the medical sag vehicles. The rider will be transported back to the finish line medical area in the sag or broom vehicle.

Communications

The race medical staff will communicate on the inter-race UHF radio system on all stages. Primary frequency will be the *Medical* simplex frequency with a backup on the *Caravan* repeater frequency in case of a large split in the field.

All announcements to teams will be coordinated through Race Command to *the Radio Tour* frequency.

Each medical asset will be provided with mobile and portable radios as well as a satellite phone.

Coordination with local agencies will be through the *Caravan* frequency to the race representative in the Command Post.

Command Structure

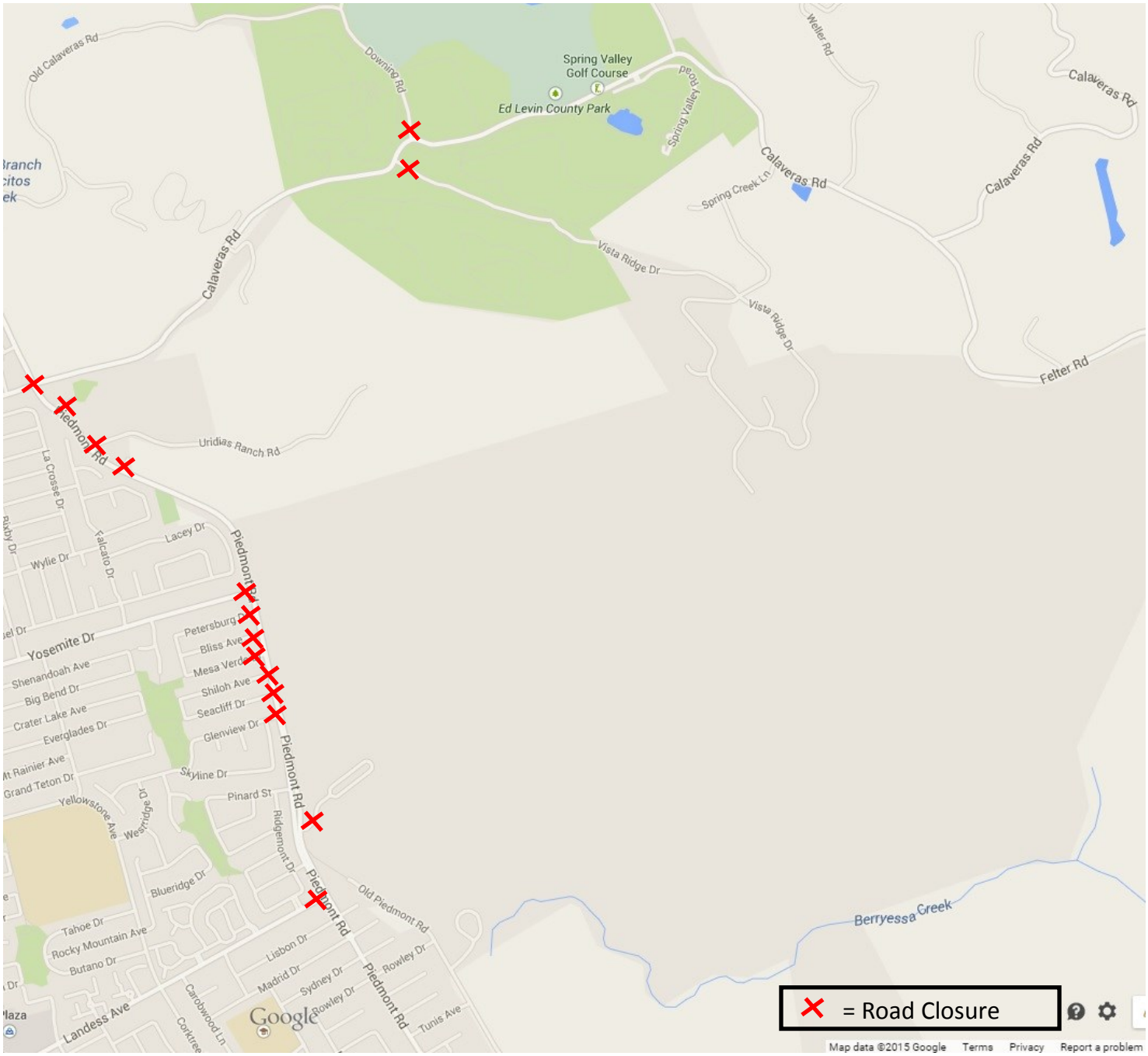
The Race Doctor will make all medical decisions for the race staff and entourage in coordination with the Race Director and Technical Director.

Coordination of caravan assets will be coordinated through Race Command and the Technical Director when on the road.

Communication with local agencies (Police, Fire, EMS, Public Works) will take place through the race representative in the Race Command Post.

In the case of a Public Safety type emergency on course (fire, 911 response, robbery, etc.) the appropriate public safety agency in the Command Post will advise race staff on what action is to be taken through the race representative.

# Road Closure Exhibit



**RESOLUTION NO. _____** *16

**A RESOLUTION OF THE CITY OF MILPITAS INITIATING PROCEEDINGS FOR THE ANNUAL LEVY AND COLLECTION OF ASSESSMENTS AND ORDERING THE PREPARATION OF THE ANNUAL ENGINEER'S REPORT FOR LANDSCAPING AND LIGHTING MAINTENANCE ASSESSMENT DISTRICT NO. 95-1 FOR FISCAL YEAR 2015/16**

**WHEREAS**, on May 2, 1995, the City Council ordered the formation of and levied the first assessment within the City of Milpitas, Landscaping and Lighting Maintenance Assessment District No. 95-1 (the "Maintenance District"), pursuant to the Landscaping and Lighting Act of 1972 (commencing at Section 22500 of the California Streets and Highways Code) (hereinafter "the Act"); and

**WHEREAS**, Section 22620, *et seq*. of the Act provide for the levy of annual assessments after formation of the Maintenance District; and

**WHEREAS,** the City has retained NBS Government Finance Group, a California Corporation, for the purpose of assisting with the annual levy of the Maintenance District and to prepare and file an annual report; and

**WHEREAS,** the City Council wishes to initiate proceedings to provide for the levy of assessments for Fiscal Year 2015/16 in order to provide for the necessary costs and expenses pertaining to the maintenance of the improvements within the Maintenance District.

**NOW, THEREFORE**, the City Council hereby finds, determines, and resolves as follows:

1. The City Council has considered the full record before it, which may include but is not limited to such things as the staff report, testimony by staff and the public, and other materials and evidence submitted or provided to it. Furthermore, the recitals set forth above are found to be true and correct and are incorporated herein by reference.

2. Within the Maintenance District, the existing and proposed improvements and any substantial changes proposed to be made to the existing improvements are generally as described on Exhibit "A" attached hereto and by this reference made a part of this Resolution.

3. The City Council hereby orders the City Engineer to work with NBS Government Finance Group, a California Corporation, the designated Assessment Engineer, to prepare and file an annual report in accordance with Section 22565, *et seq*., of the Act.

PASSED AND ADOPTED this _____ day of _____, 2015, by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

ATTEST:

_____
Mary Lavelle, City Clerk

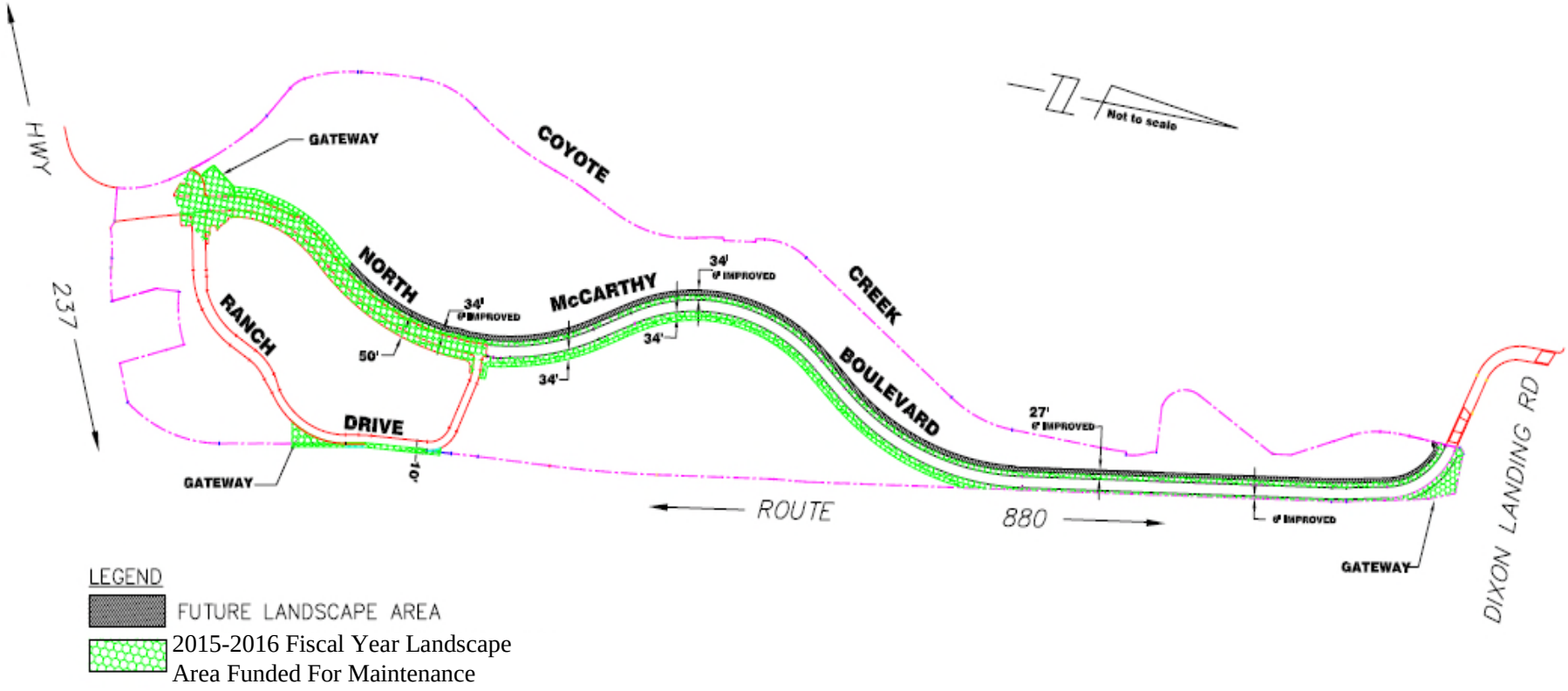
APPROVED:

_____
Jose S. Esteves, Mayor

APPROVED AS TO FORM:

_____
Michael J. Ogaz, City Attorney

# Landscape and Lighting Maintenance Assessment District NO. 95-1




## Exhibit A

PART G – VICINITY MAP
LANDSCAPING & LIGHTING MAINTENANCE
ASSESSMENT DISTRICT NO. 95–1
CITY OF MILPITAS
COUNTY OF SANTA CLARA –STATE OF CALIFORNIA

**RESOLUTION NO. _____** *17

**A RESOLUTION OF THE CITY OF MILPITAS INITIATING PROCEEDINGS FOR THE ANNUAL LEVY AND COLLECTION OF ASSESSMENTS AND ORDERING THE PREPARATION OF THE ANNUAL ENGINEER'S REPORT FOR LANDSCAPING AND LIGHTING MAINTENANCE ASSESSMENT DISTRICT NO. 98-1 FOR FISCAL YEAR 2015/16**

**WHEREAS**, on June 16, 1998, the City Council ordered the formation of and levied the first assessment within the City of Milpitas, Landscaping and Lighting Maintenance Assessment District No. 98-1 (the "Maintenance District"), pursuant to the Landscaping and Lighting Act of 1972 (commencing at Section 22500 of the California Streets and Highways Code) (hereinafter "the Act"); and

**WHEREAS**, Section 22620, *et seq*., of the Act provide for the levy of annual assessments after formation of the Maintenance District; and

**WHEREAS**, the City has retained NBS Government Finance Group, a California Corporation, for the purpose of assisting with the annual levy of the Maintenance District, and to prepare and file an annual report; and

**WHEREAS**, the City Council wishes to initiate proceedings to provide for the levy of assessments for Fiscal Year 2015/16 in order to provide for the necessary costs and expenses pertaining to the maintenance of the improvements within the Maintenance District.

**NOW, THEREFORE**, the City Council hereby finds, determines, and resolves as follows:

1. The City Council has considered the full record before it, which may include but is not limited to such things as the staff report, testimony by staff and the public, and other materials and evidence submitted or provided to it. Furthermore, the recitals set forth above are found to be true and correct and are incorporated herein by reference.

2. Within the Maintenance District, the existing and proposed improvements and any substantial changes proposed to be made to the existing improvements are generally as described on Exhibit "A" attached hereto and by this reference made a part of this Resolution.

3. The City Council hereby orders the City Engineer to work with NBS Government Finance Group, a California Corporation, the designated Assessment Engineer, to prepare and file an annual engineer's report in accordance with Section 22565, *et seq*., of the Act.

PASSED AND ADOPTED this _____ day of _____, 2015, by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

ATTEST:

_____
Mary Lavelle, City Clerk

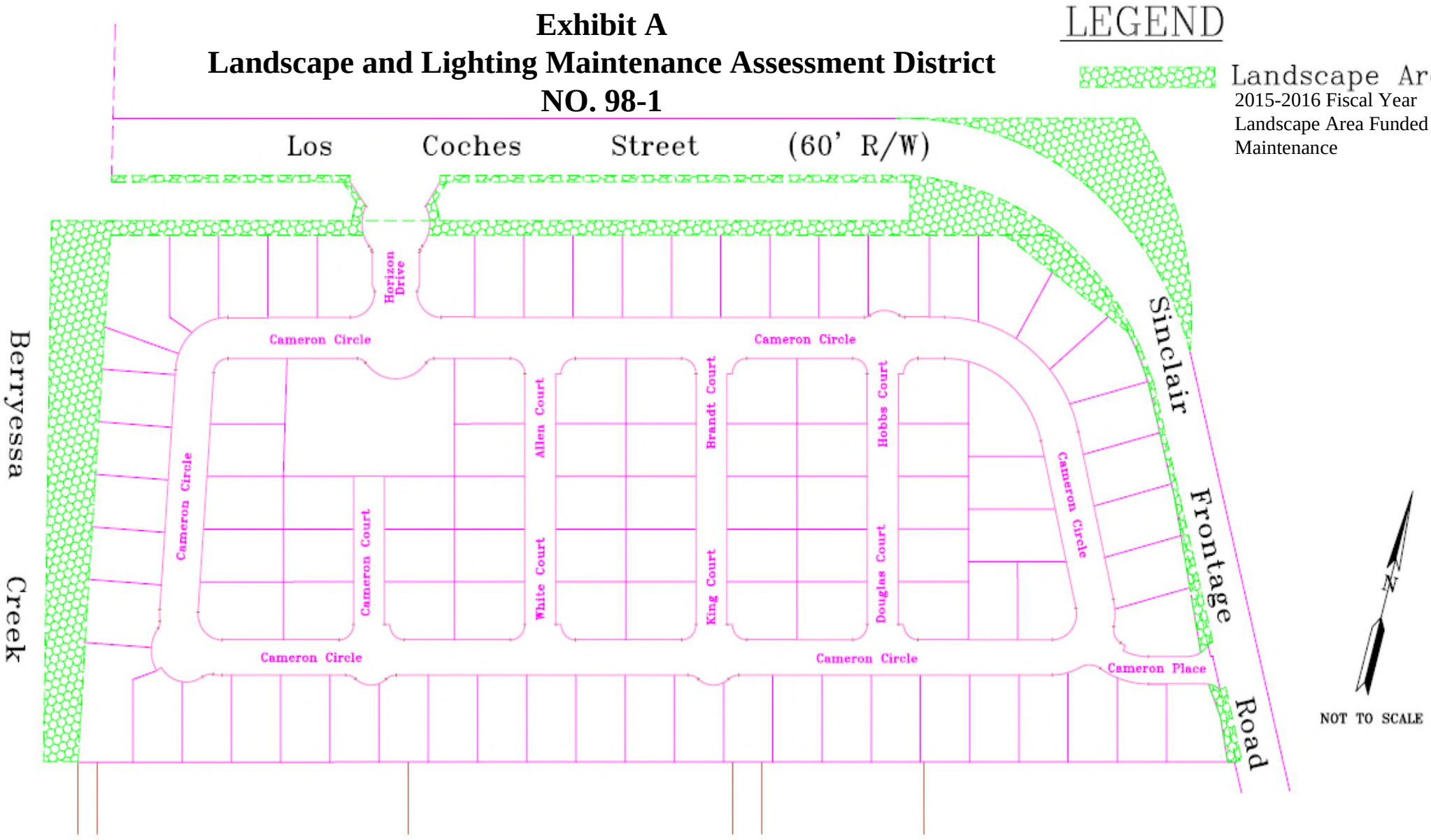
APPROVED:

_____
Jose S. Esteves, Mayor

APPROVED AS TO FORM:

_____
Michael J. Ogaz, City Attorney

# Exhibit A
# Landscape and Lighting Maintenance Assessment District NO. 98-1




| VICINITY MAP | Landscaping and Lighting Maintenance Assessment District No. 98-1<br>MILPITAS, SANTA CLARA COUNTY, CALIFORNIA | Not to Scale |
|---|---|---|

# List of Attachments for Item 18

# District 1 Building 1 Development Development, Project No. 1134

## Attachments:

18A – Resolution for Summary Vacation of a portion of Old Capitol Avenue ("White Hole")

18B – Purchase and Sale Agreement for "White Hole" Property

18C – Resolution for Annexation of Real Properties located within Final Tract Map No. 10140 into Community Facility District 2008-1

18D – Subdivision Improvement Agreement between City of Milpitas and Milpitas-District 1 Associates, LLC for public improvements associated with District 1, Building 1

18E – Final Tract Map No. 10140 (District 1, Building 1) and Public Improvement Plans 2-1192 (construction documents for associated public improvements)

**RESOLUTION NO. _____**

**A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF MILPITAS SUMMARILY VACATING A PORTION OF OLD CAPITAL AVENUE PUBLIC RIGHT-OF-WAY (KNOWN AS "WHITE HOLE")**

**WHEREAS**, California Streets and Highways Code Section 8331 authorizes the City Council to summarily vacate a street if both of the following conditions exist: (i) for a period of five consecutive years, the street has been impassable for vehicular travel, and (ii) no public money was expended for maintenance on the street during such period.

**WHEREAS**, California Streets and Highways Code Section 8334 also authorizes the City Council to summarily vacate a street if an excess right-of-way of a street is not required for street purposes.

**WHEREAS**, the City Council intends to summarily vacate a portion of old Capitol Avenue Right-Of-Way (known as "White Hole"), as depicted on **Exhibit A** (Legal Description) and on **Exhibit B** (Legal Depiction) attached to this Resolution, pursuant to California Streets and Highways Code Sections 8331 and 8334.

**WHEREAS**, on November 13, 2013, the Planning Commission of the City of Milpitas adopted Resolution No. 13-035, finding that the summarily vacation and disposition of the "White Hole" is in conformance with the Transit Area Specific Plan and General Plan.

NOW THERFORE, the City Council of the City of Milpitas hereby finds, determines and resolves as follows:

1. The City Council has duly considered the full record before it, which may include but is not limited to such things as the City staff report, testimony by staff and the public, and other materials and evidence submitted or provided to the City Council. Furthermore, the recitals set forth above are found to be true and correct and are incorporated herein by reference.

2. Based on the foregoing, the City Council hearby makes the following findings:

    a. The portion of Old Capitol Avenue Right-Of-Way described and depicted in **Exhibits A** and **B**, is an excess right-of-way of a prior street and not required now or in the future for public street right-of-way purposes. The area to be vacated is unimproved and is not necessary now or in the future for the proper functioning of the involved streets as the remaining public street right-of-way is sufficient to accommodate the roadway which in its current condition meets City standards.

    b. The portion of Old Capitol Avenue Right-Of-Way described and depicted in **Exhibits A** and **B** has been for a period of five consecutive years impassable for vehicular travel, and no public money was expended for maintenance on the street during such period.

3. Based upon the findings made in this Resolution and the provisions of California Strrets and Highways Code Sections 8331 and 8334, the City Council does hereby order that the desrcibed portion of Old Capitol Avenue Right-Of-Way (known as "White Hole"), as described and depicted in **Exhibits A** and **B**, is Summarily Vacated.

4. The City Clerk is hereby directed to record with the Santa Clara County Recorder's Office this Resolution, including **Exhibits A** and **B** hereto.

5. The Excess Street Right-Of-Way vacated herein as described and depicted in **Exhibits A** and **B** will no longer constitute a public street or public right-of-way, provided the City reserves a public service and utility easement, from and after the date of recordation of this Resolution, for all existing and future utilities.

PASSED AND ADOPTED this _____ day of _____, 2015, by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

ATTEST:

_____
Mary Lavelle, City Clerk

APPROVED:

_____
Jose S. Esteves, Mayor

APPROVED AS TO FORM:

_____
Michael J. Ogaz, City Attorney

**"EXHIBIT A"**
**LEGAL DESCRIPTION**
**RIGHT-OF-WAY PURCHASE AREA**

All that real property situated in the City of Milpitas, County of Santa Clara, State of California, being a portion of Capitol Avenue as shown on the Record of Survey filed January 17, 1975 in Book 350 of Maps, at Page 33, Records of Santa Clara County, California, being more particularly described as follows:

**Beginning** at the northwest corner of "Parcel 7", as shown on the Map entitled "Parcel Map, McCandless Technology Park", filed December 5, 1984 in Book 536 of Maps, at Pages 41 through 43, Records of Santa Clara County, California, said point being the beginning of a curve to the left, of which the radius point lies S82°46'31"W, a radial distance of 5,832.33 feet; thence northerly along the arc, through a central angle of 00°03'37", a distance of 6.14 feet; thence N80°14'12"W, a distance of 76.34 feet to the beginning of a non tangent curve to the left, of which the radius point lies S82°29'32"W, a radial distance of 5,759.33 feet; thence northerly along said curve, through a central angle of 01°41'17", a distance of 169.69 feet; thence N88°23'49"E, a distance of 7.98 feet to the beginning of a non tangent curve to the right, of which the radius point lies S03°15'29"W, a radial distance of 52.02 feet; thence easterly along said curve, through a central angle of 16°38'48", a distance of 15.11 feet; thence S58°08'47"E, a distance of 34.45 feet to the beginning of a non tangent curve to the left, of which the radius point lies N37°11'36"E, a radial distance of 4,029.21 feet; thence southeasterly along said curve, through a central angle of 03°50'35", a distance of 270.26 feet; thence S57°06'02"E, a distance of 50.04 feet; thence S66°33'48"E, a distance of 60.37 feet; thence S57°13'28"E, a distance of 47.20 feet; to a tangent curve to the right having a radius of 14.00 feet; thence southeasterly along said curve, through a central angle of 42°42'48", a distance of 10.44 feet to a reverse curve to the left having a radius of 10.00 feet; thence southeasterly along said curve, through a central angle of 49°33'07", a distance of 8.65 feet to the north line of said "Parcel 7", and the point of cusp of curve to the left, of which the radius point lies S25°56'13"W, a radial distance of 657.96 feet; thence along said north line, westerly along said curve, through a central angle of 16°09'15", a distance of 185.51 feet; thence continuing along said north line, N80°13'02"W, a distance of 146.46 feet to the **Point of Beginning**.

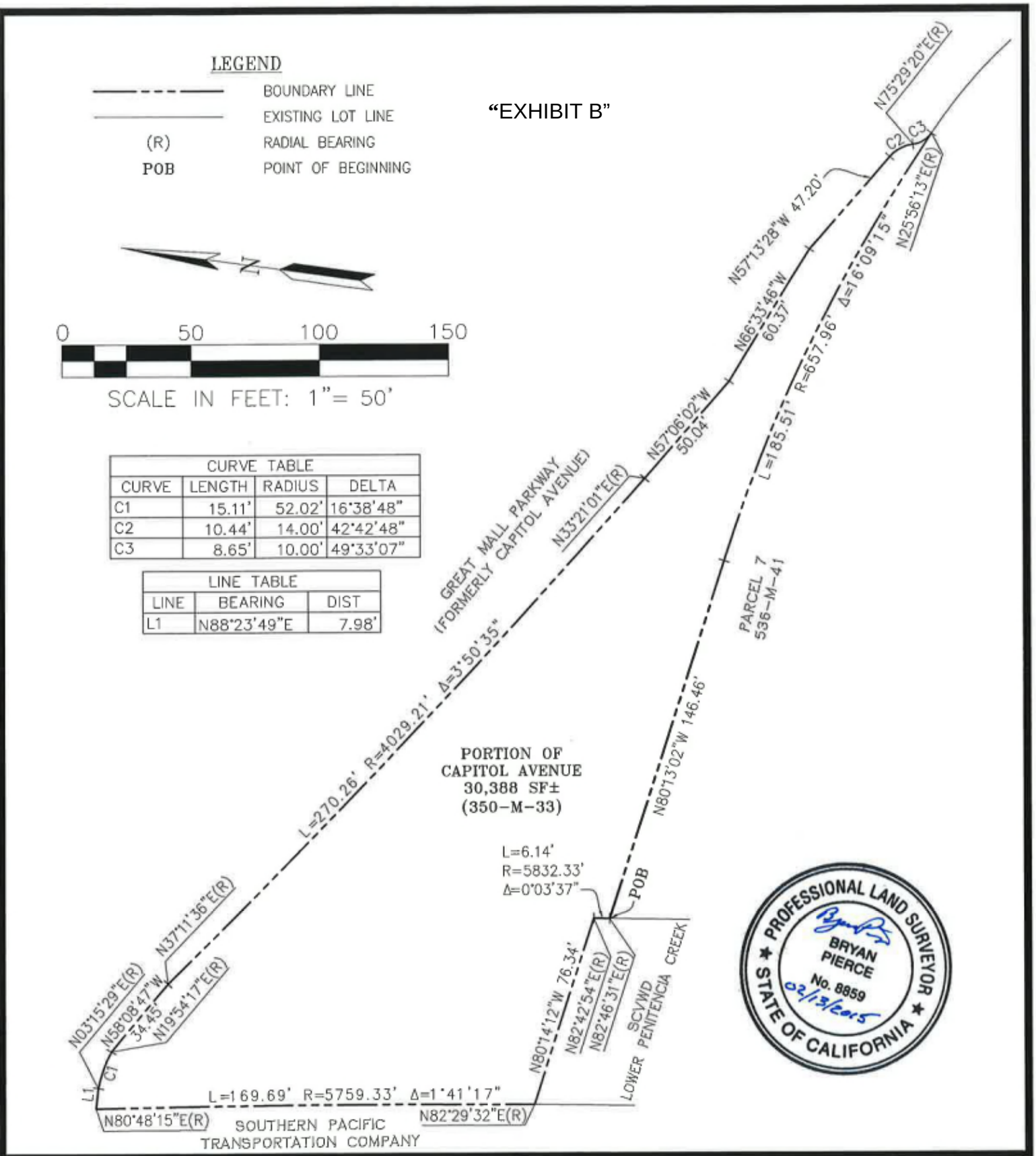
Containing 30,388 square feet or 0.698 acres, more or less.
As shown on "Exhibit B", attached hereto and made a part hereof.

END OF DESCRIPTION.

This description was prepared by me or under my direction pursuant to the requirements of the Professional Land Surveyor's Act.

02/13/2015

Bryan Pierce, PLS 8859 Date
Expires: 12/31/2015




# "EXHIBIT B"

PLAT TO ACCOMPANY DESCRIPTION

A PORTION OF CAPITOL AVENUE, AS SHOWN ON THE RECORD OF SURVEY FILED JANUARY 17, 1975 IN BOOK 350 OF MAPS, AT PAGE 33, RECORDS OF SANTA CLARA COUNTY, CALIFORNIA

MILPITAS, CA

RJA
RUGGERI-JENSEN-AZAR
ENGINEERS • PLANNERS • SURVEYORS
8055 CAMINO ARROYO GILROY, CA 95020
PHONE: (408) 848-0300 FAX: (408) 848-0302

| SCALE: | DATE: | JOB NO.: |
|---|---|---|
| 1"=50' | 02/13/2015 | 072030 |

**AGREEMENT FOR SALE OF REAL PROPERTY BETWEEN THE CITY OF MILPITAS AND MILPITAS – DISTRICT 1 ASSOCIATES, LLC FOR REAL PROPERTY ADJACENT TO GREAT MALL PARKWAY AND SOUTH MAIN STREET COMMONLY CALLED "THE WHITE HOLE" AREA**

THIS AGREEMENT is made and entered into by and between the CITY OF MILPITAS, a California municipal corporation of the State of California (hereinafter "SELLER") and MILPITAS – DISTRICT 1 ASSOCIATES, LLC, a Delaware limited liability company (hereinafter "BUYER") upon execution by SELLER (hereinafter "Effective Date").

W I T N E S S E T H:

**WHEREAS**, SELLER is the owner of that certain real property consisting of approximately .7 acres of undeveloped land located in the City of Milpitas, County of Santa Clara, State of California, more particularly described in **EXHIBIT "A"** and depicted in **EXHIBIT "B"** (hereinafter "PROPERTY") attached hereto and incorporated herein, which PROPERTY is adjacent to certain property owned by BUYER (the "BUYER PROPERTY"); and

**WHEREAS**, on March 20, 2012, the City Council of the City of Milpitas adopted Resolution No. 8165 approving Site Development Permit No. SD11-0001, Major Tentative Map No. TM11-0002, Conditional Use Permit No. UP11-0037, for the McCandless Mixed Use Project including the development of approximately Three Hundred and Seventy-One (371) residential units and Fifty Two Thousand Four Hundred (52,400) square feet of commercial space on Lot 1 of the project known as "District 1" located on BUYER PROPERTY; and

**WHEREAS**, BUYER desires to subdivide certain land in the CITY in accordance with a final map filed with the Milpitas City Council, marked and designated as Tract No.

10140 McCandless District 1, to construct a mixed-used residential building (the "Project") on BUYER PROPERTY; and

**WHEREAS**, BUYER requires the use of a portion of old Capitol Avenue right of way known as the "White Hole" and previously described as the PROPERTY at the southeast corner of South Main Street at Great Mall Parkway east of Union Pacific Railroad for the fulfillment of certain development parking requirements; and

**WHEREAS**, SELLER desires to sell the PROPERTY to BUYER and BUYER desires to purchase the PROPERTY from SELLER on the terms and conditions set forth below.

**NOW, THEREFORE**, in consideration of their mutual promises, covenants and conditions hereinafter set forth, the parties hereto do hereby agree as follows:

**1. Property to be Conveyed.**

Subject to the provisions of this Agreement, SELLER shall transfer and convey to BUYER by Quitclaim Deed in substantially the same form as **Exhibit "C"**, and BUYER shall purchase and take from SELLER, all of SELLER's right, title and interest in and to the PROPERTY.

**2. Purchase Price.**

BUYER shall pay to SELLER, in consideration of SELLER's conveyance to BUYER of said PROPERTY a purchase price amount as determined pursuant to this Section 2. The Purchase Price for the PROPERTY shall be determined by SELLER and BUYER prior to issuance by the CITY of the first certificate of occupancy (temporary or final) for the Project, and shall be paid by BUYER to CITY at the Closing (as defined herein). The Purchase Price shall be established by mutual agreed upon

appraised or otherwise determined value of the PROPERTY. Said sum shall hereinafter be referred to as the "Purchase Price".

**3. Tender and Acceptance of Payment.**

BUYER shall immediately open escrow upon full execution of this Agreement with the Escrow Holder as defined in this Section 3. BUYER shall deposit the amount of Fifty Thousand Dollars ($50,000) with Chicago Title Company, located at 12156 Saratoga-Sunnyvale Road, Saratoga, CA 95070, (408) 973-1900 (Phone) (408) 973-8778 (Fax), Attention: Lori Young, Escrow Branch Mgr., e-mail younglo@ctt.com (the "Escrow Holder") no later than two (2) business days after the open of escrow. By its execution of this AGREEMENT, SELLER accepts the Purchase Price as full compensation for the PROPERTY. BUYER shall deposit the remaining amount of the Purchase Price with Escrow Holder at least two (2) business days prior to Closing (as defined herein).

**4. Additional Fees and Charges.**

BUYER shall be responsible for the full payment of all title insurance, escrow, recording fees, documentary transfer taxes, broker commission and other fees and charges associated with this transaction. BUYER shall indemnify, defend and hold SELLER harmless from and against, and SELLER shall have no liability or responsibility for any such fees, costs, taxes, or expenses.

**5. Delivery and Recording of Deed and Real Property Taxes.**

No later than thirty (30) days from the Effective Date, SELLER shall deliver, to the office of the Escrow Holder, a Quitclaim Deed executed by SELLER. SELLER and BUYER shall deliver any such additional documents and instruments as Escrow Holder may reasonably require in order to close escrow. The SELLER and BUYER shall provide Escrow Holder with any separate instructions for closing escrow consistent with

the terms of this AGREEMENT. The Escrow Holder will close the escrow and record the Quitclaim Deed no later than five (5) business days following (1) written notice from SELLER that BUYER has satisfied the Closing Construction Conditions set forth in subclauses (A), (B) and (C) below (as defined below), (2) Escrow Holder confirms that Closing Construction Condition set forth in subclause (D) below has been satisfied, and (3) written notice from Buyer that it is ready to consummate the Closing (hereinafter, the "Closing Date"), or such earlier or later date mutually agreed upon and as directed by both BUYER and SELLER in their escrow instructions. Real property taxes and assessments, if any, shall be payable by BUYER for the period from and after the Effective Date of this Agreement.

For purposes hereof, "Closing Construction Condition" means (A) the completion of foundation component of the retail building to be constructed on the BUYER PROPERTY; (B) the initial commencement of constructing the above ground component retail shell of such retail building (as evidenced by first inspection of such retail shell component); (C) the parties have agreed upon the Purchase Price as set forth in Section 2 of this Agreement; and (D) BUYER has deposited with Escrow Holder the full amount of the Purchase Price as set forth in Section 3 of this Agreement.

In the event the Closing Date does not occur on or prior to the date upon which the Certificate of Occupancy (temporary or final) for the One Hundred Eighty Seventh ($187^{th}$) residential unit is issued by the City, subject to delay as further described below (the "Outside Closing Date"), through no fault of Seller, then Seller shall have no obligation to close on the Sale of the Property and may terminate escrow upon written notice to Escrow Holder and Buyer. Additionally, City shall have no obligation to issue any Certificate of Occupancy (temporary or final) after the One Hundred Eighty Seventh ($187^{th}$) residential unit if the Closing Date does not occur prior to the Outside Closing Date. Notwithstanding the foregoing, the Outside Closing Date shall be extended on a day-for-day basis in the event of a delay by BUYER in satisfying the Closing Condition that is out of Buyer's reasonable control, including delays caused by to strikes or other labor disputes, severe weather disruptions or other natural disasters or acts of God; fires, riots, war or other emergencies; for hazardous materials or toxic substances at the BUYER PROPERTY; or for the actions or inaction of governmental agencies.

UPON SUCH TERMINATION, ESCROW HOLDER SHALL DELIVER $50,000 (THE "RELEASED AMOUNT") OF THE PURCHASE PRICE TO SELLER AS LIQUIDATED DAMAGES TO RECOMPENSE SELLER FOR TIME SPENT, LABOR AND SERVICES PERFORMED, AND THE LOSS OF ITS BARGAIN; AND THE REMAINDER OF THE PURCHASE PRICE, PLUS ANY INTEREST ACCRUED THEREON, SHALL BE DISBURSED TO BUYER. BUYER AND SELLER AGREE THAT IT WOULD BE IMPRACTICABLE OR EXTREMELY DIFFICULT TO AFFIX DAMAGES IF PURCHASER SO DEFAULTS AND THAT SUCH RELEASED AMOUNT TO SELLER REPRESENTS A REASONABLE ESTIMATE OF SELLER'S DAMAGES. SELLER AGREES TO ACCEPT SUCH RELEASED AMOUNT AS SELLER'S SOLE REMEDY IF BUYER DEFAULTS IN ITS OBLIGATION PURCHASE THE PROPERTY PURSUANT TO THIS AGREEMENT. THE FOREGOING IS NOT INTENDED TO LIMIT BUYER'S INDEMNITY OBLIGATIONS HEREUNDER NOR DOES IT IN ANY WAY LIMITS THE CITY'S RIGHTS TO ENFORCE, SUSPEND, REVOKE OR TAKE ANY OTHER ACTIONS RELATING TO ANY PERMITS OR APPROVALS ON THE PROJECT OR TO WITHHOLD CERTIFICATE OF OCCUPANY AS SET FORTH IN THE PARAGRAPH ABOVE.

**6. Title Insurance.**

BUYER, at its sole cost and expense, may obtain any title insurance it deems necessary for the Property.

**7. Condition of Title.**

SELLER's right, title and interest in and to the PROPERTY shall be delivered by SELLER hereunder subject to all exceptions, encumbrances, liens and restrictions of record and not of record, as of the Closing Date.

**8. AS-IS Property Condition/BUYER's Due Diligence**.

BUYER agrees that: i) it is purchasing the PROPERTY "as is" and in reliance on BUYER's own investigation, which it has had the opportunity to conduct to its satisfaction prior to the Effective Date, ii) no representations or warranties of any kind whatsoever, express or implied, have been made by SELLER regarding the PROPERTY or the legal or physical condition thereof, including without limitation any zoning regulations or other governmental requirements, the existence of "Hazardous Substances" (as defined in Section 9, below) or other site conditions, or any other matters affecting the use, value or condition of the PROPERTY, and iii) it shall take the PROPERTY in the condition that it is in at the Closing Date. To the extent that SELLER has provided to BUYER information or reports regarding the PROPERTY, SELLER makes no representations or warranties with respect to the accuracy or completeness thereof.

**9. Indemnification and Hold Harmless.**

BUYER agrees to protect, defend, indemnify and hold harmless, SELLER, its officers, employees, or agents, from and against all claims, response costs, losses, demands, debts, liens, liabilities, causes of action, suits, legal or administrative proceedings, interest, fines, charges, penalties and expenses (collectively, "Claims") of any kind whatsoever paid, incurred, suffered or asserted, or related to, on or after the close of escrow directly or indirectly arising from or attributable to conditions on or BUYER's use of the PROPERTY (including BUYER's use of the PROPERTY before the Effective Date), including without limitation any repair, cleanup or detoxification, or preparation and implementation of any removal, remedial, response, closure or other plan concerning any Hazardous Substance on, under or about the PROPERTY, regardless of whether undertaken due to governmental action. The foregoing hold harmless and indemnification provision and following release provision shall apply to the fullest extent permitted by law, including where such Claim is the result of the act or omission of SELLER, its officers, agents or employees. Without limiting the generality

of this indemnity and hold harmless provision in any way, this provision is intended to operate as an Agreement pursuant to 42 U.S.C. Section 9607(e) and California Health and Safety Code Section 25364 in order to indemnify, defend, protect and hold harmless SELLER, its officers, agents or employees for any liability pursuant to such sections. SELLER and BUYER agree that for purposes of this Agreement, the term "Hazardous Substance" shall have the definition set forth in **EXHIBIT "D"**, which is attached to this AGREEMENT and incorporated by reference. BUYER, for itself, its legal representatives and assigns, releases SELLER, its officers, agents or employees from any and all Claims that it had, now has, or claims to have, or that any person claiming through them may have, or claim to have, arising out of any use of, or conditions on, the PROPERTY (including, without limitation, uses of or conditions on the Property undertaken or caused by BUYER's prior to the Effective Date).

**10. <u>General Release</u>.**

BUYER acknowledges that it has read and understood the following statutory language of Civil Code Section 1542:

> **A general release does not extend to a claim, which the creditor does not know or suspect to exist in his favor at the time of executing the release, which if known by him must have materially affected his settlement with the debtor.**

Having been so apprised, to the fullest extent permitted by law, BUYER, elects to assume all risk for claims heretofore or hereafter, known or unknown, arising from the subject of this release, and BUYER knowingly and voluntarily expressly release the SELLER, its officers, agents or employees from all Claims, unknown or unsuspected, arising out of any use of, or conditions on, the PROPERTY. The provisions of Sections 4, 6, 8, 9 and 10 shall survive the close of escrow or earlier termination of this AGREEMENT.

**11. Binding on Successors.**

This AGREEMENT inures to the benefit of and is binding on the parties, their respective heirs, personal representatives, successors and assigns. Buyer shall not have the right to assign this Agreement without the written consent of City, provided that Seller shall not unreasonably withhold its consent to an assignment by Buyer to an entity that is owned and controlled by Buyer.

**12. Merger; Entire Agreement.**

This AGREEMENT supersedes any prior agreements, negotiations and communications, oral or written, and contains the entire agreement between SELLER and BUYER relating to the subject matter hereof. No subsequent agreement, representation, or promise made by either party hereto, or by or to any employee, officer, agent or representative of either party shall be of any effect unless it is in writing and executed by the party to be bound thereby. The terms of this AGREEMENT shall not be modified or amended except by an instrument in writing executed by each of the parties hereto.

**13. Notices.**

Any notice which is required to be given hereunder, or which either party may desire to give to the other, shall be in writing and may be personally delivered or given by mailing the same by registered or certified mail, postage prepaid, addressed as follows:

To the BUYER: Milpitas – District 1 Associates, LLC
4901 Birch Street
Newport Beach, CA 92600
Attention: Frank T. Suryan, Jr.
Telephone: 949-252-9101
Facsimile: 949-252-9202

or to such other place as BUYER may designate by written notice.

With copies to: Lyon Communities
4901 Birch Street
Newport Beach, CA 92660
Attention: Michael Barmettler, Esq.
Telephone: (949) 838-1235
Facsimile: (949) 252-9202
E-mail: mb@lyon1.com

To the SELLER: City of Milpitas
455 East Calaveras Boulevard
Milpitas, CA 95035
Attention: Thomas C. Williams, City Manager
Telephone: (408) 586-3050
Facsimile: (408) 586-3056
E-Mail: twilliams@ci.milpitas.ca.gov

or to such other place as SELLER may designate by written notice.

**14. Miscellaneous.**

a. Whenever the singular number is used in this AGREEMENT and when required by the context, the same shall include the plural and the masculine gender shall include the feminine and neuter genders.

b. If there be more than one entity designated in or signatory to this AGREEMENT, the obligations hereunder imposed upon BUYER shall be joint and several; and the term BUYER as used herein shall refer to each and every of said signatory parties, severally as well as jointly.

c. Time is and shall be of the essence of each term and provision of this AGREEMENT.

d. Each and every term, condition, covenant and provision of this AGREEMENT is and shall be deemed to be a material part of the consideration for SELLER's entry into this AGREEMENT, and any breach hereof by BUYER shall be deemed to be a material breach. Each term and provision of this AGREEMENT performable by BUYER shall be construed to be both a covenant and a condition.

e. This AGREEMENT shall be deemed to have been made in, and be construed in accordance with the laws of the State of California. Venue for any proceeding to enforce the provisions of this AGREEMENT shall be in the County of Santa Clara.

f. The headings of the several paragraphs and sections of this AGREEMENT are inserted only as a matter of convenience and for reference and in no way define, limit or describe the scope or intent of any provisions of this AGREEMENT and shall not be construed to affect in any manner the terms and provisions hereof or the interpretation or construction thereof.

g. In the event any covenant, condition or provision herein contained is held to be invalid by a court of competent jurisdiction, the invalidity of any such covenant, condition or provision shall in no way affect any other covenant, condition or provision herein contained, provided the invalidity of any such covenant, condition or provision does not materially prejudice either BUYER or SELLER in its respective rights and obligations contained in the valid covenants, conditions and provisions of this AGREEMENT.

h. All exhibits and addenda referred to herein, and any exhibits or schedules which may from time to time be referred to in any duly executed amendment hereto, are by such reference incorporated herein and shall

be deemed a part of this AGREEMENT as if set forth fully herein. The exhibits to this AGREEMENT are as follows:

Exhibit A – Legal Description of PROPERTY
Exhibit B – Plat of PROPERTY
Exhibit C – Form of Quitclaim Deed
Exhibit D – Hazardous Substances

i. This AGREEMENT shall be interpreted and construed only by the contents hereof, and there shall be no presumption or standard of construction in favor of or against either party.

j. Days, unless otherwise specified, shall mean calendar days.

k. The signatories to this Agreement is authorized to execute, on behalf of SELLER and BUYER, deeds and all other documents as may be necessary to effectuate this Agreement and the transfer of the property rights herein.

l. The SELLER and BUYER shall enter in to a separate right of entry agreement for the use of the PROPERTY by Buyer and its representatives for access, improvement, and construction prior to conveyance.

[Signatures on following page]

**WITNESS THE EXECUTION HEREOF** on the date of execution by SELLER as written below:

"SELLER"

CITY OF MILPITAS,
a California municipal corporation

By: _____
Name: _____
Title: _____

Date of Execution: _____

"BUYER"

APPROVED AS TO FORM:

MILPITAS – DISTRICT 1 ASSOCIATES, LLC, a Delaware limited liability company

_____
Michael J. Ogaz
City Attorney

By: _____
Name: _____
Title: _____

Date of Execution: _____

# EXHIBIT A

# DESCRIPTION OF PROPERTY

## "EXHIBIT A"
## LEGAL DESCRIPTION
## RIGHT-OF-WAY PURCHASE AREA

All that real property situated in the City of Milpitas, County of Santa Clara, State of California, being a portion of Capitol Avenue as shown on the Record of Survey filed January 17, 1975 in Book 350 of Maps, at Page 33, Records of Santa Clara County, California, being more particularly described as follows:

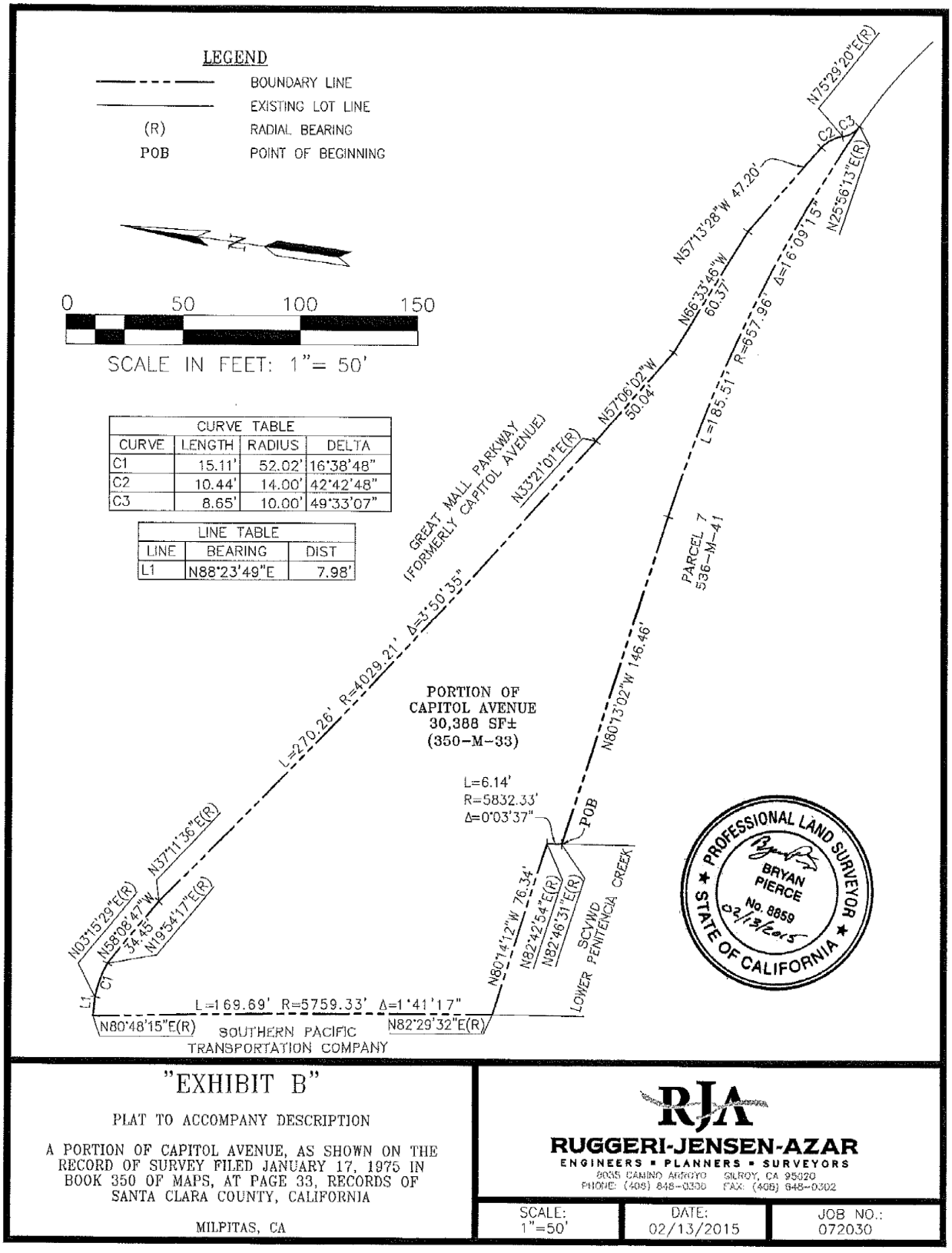
**Beginning** at the northwest corner of "Parcel 7", as shown on the Map entitled "Parcel Map, McCandless Technology Park", filed December 5, 1984 in Book 536 of Maps, at Pages 41 through 43, Records of Santa Clara County, California, said point being the beginning of a curve to the left, of which the radius point lies S82°46'31"W, a radial distance of 5,832.33 feet; thence northerly along the arc, through a central angle of 00°03'37", a distance of 6.14 feet; thence N80°14'12"W, a distance of 76.34 feet to the beginning of a non tangent curve to the left, of which the radius point lies S82°29'32"W, a radial distance of 5,759.33 feet; thence northerly along said curve, through a central angle of 01°41'17", a distance of 169.69 feet; thence N88°23'49"E, a distance of 7.98 feet to the beginning of a non tangent curve to the right, of which the radius point lies S03°15'29"W, a radial distance of 52.02 feet; thence easterly along said curve, through a central angle of 16°38'48", a distance of 15.11 feet; thence S58°08'47"E, a distance of 34.45 feet to the beginning of a non tangent curve to the left, of which the radius point lies N37°11'36"E, a radial distance of 4,029.21 feet; thence southeasterly along said curve, through a central angle of 03°50'35", a distance of 270.26 feet; thence S57°06'02"E, a distance of 50.04 feet; thence S66°33'46"E, a distance of 60.37 feet; thence S57°13'28"E, a distance of 47.20 feet; to a tangent curve to the right having a radius of 14.00 feet; thence southeasterly along said curve, through a central angle of 42°42'48", a distance of 10.44 feet to a reverse curve to the left having a radius of 10.00 feet; thence southeasterly along said curve, through a central angle of 49°33'07", a distance of 8.65 feet to the north line of said "Parcel 7", and the point of cusp of curve to the left, of which the radius point lies S25°56'13"W, a radial distance of 657.96 feet; thence along said north line, westerly along said curve, through a central angle of 16°09'15", a distance of 185.51 feet; thence continuing along said north line, N80°13'02"W, a distance of 146.46 feet to the **Point of Beginning**.

Containing 30,388 square feet or 0.698 acres, more or less.
As shown on "Exhibit B", attached hereto and made a part hereof.

END OF DESCRIPTION.

# EXHIBIT "B"

# PLAT OF PROPERTY




"EXHIBIT B"

PLAT TO ACCOMPANY DESCRIPTION

A PORTION OF CAPITOL AVENUE, AS SHOWN ON THE RECORD OF SURVEY FILED JANUARY 17, 1975 IN BOOK 350 OF MAPS, AT PAGE 33, RECORDS OF SANTA CLARA COUNTY, CALIFORNIA

MILPITAS, CA


RJA
RUGGERI-JENSEN-AZAR
ENGINEERS ▪ PLANNERS ▪ SURVEYORS
8035 CAMINO ARROYO GILROY, CA 95020
PHONE: (408) 848-0333 FAX: (408) 848-0302


| SCALE: | DATE: | JOB NO.: |
|---|---|---|
| 1"=50' | 02/13/2015 | 072030 |

# EXHIBIT "C"

# QUITCLAIM DEED

**RECORDING REQUESTED BY**

_____

**WHEN RECORDED MAIL TO**:

With a copy to:
_____
_____
_____
_____

MAIL TAX STATEMENTS TO:

(space above for recorder's use only)
*Document transfer tax is* _____
*Computed on full value of property conveyed*
*City Transfer tax is* _____

_____
***Signature of declarant***

## QUITCLAIM DEED

The CITY OF MILPITAS, a California municipal corporation of the State of California**,** hereby REMISES, RELEASES AND FOREVER QUITCLAIMS to MILPITAS – DISTRICT 1 ASSOCIATES, LLC, a Delaware limited liability company, any and all right, title or interest in the real property located in the City of Milpitas, County of Santa Clara, State of California, described in the attached Exhibit A, incorporated by reference to this document, and depicted in the attached Exhibit B, incorporated by reference to this document.

IN WITNESS WHEREOF, the Quitclaimor has caused this instrument to be executed as of this _____ day of _____, 201_.

_____, a _____

By:_____
Name:_____
Title:_____

# EXHIBITS A and B TO QUITCLAIM DEED

# DESCRIPTION AND DEPICTION OF PROPERTY

## "EXHIBIT A"
## LEGAL DESCRIPTION
## RIGHT-OF-WAY PURCHASE AREA

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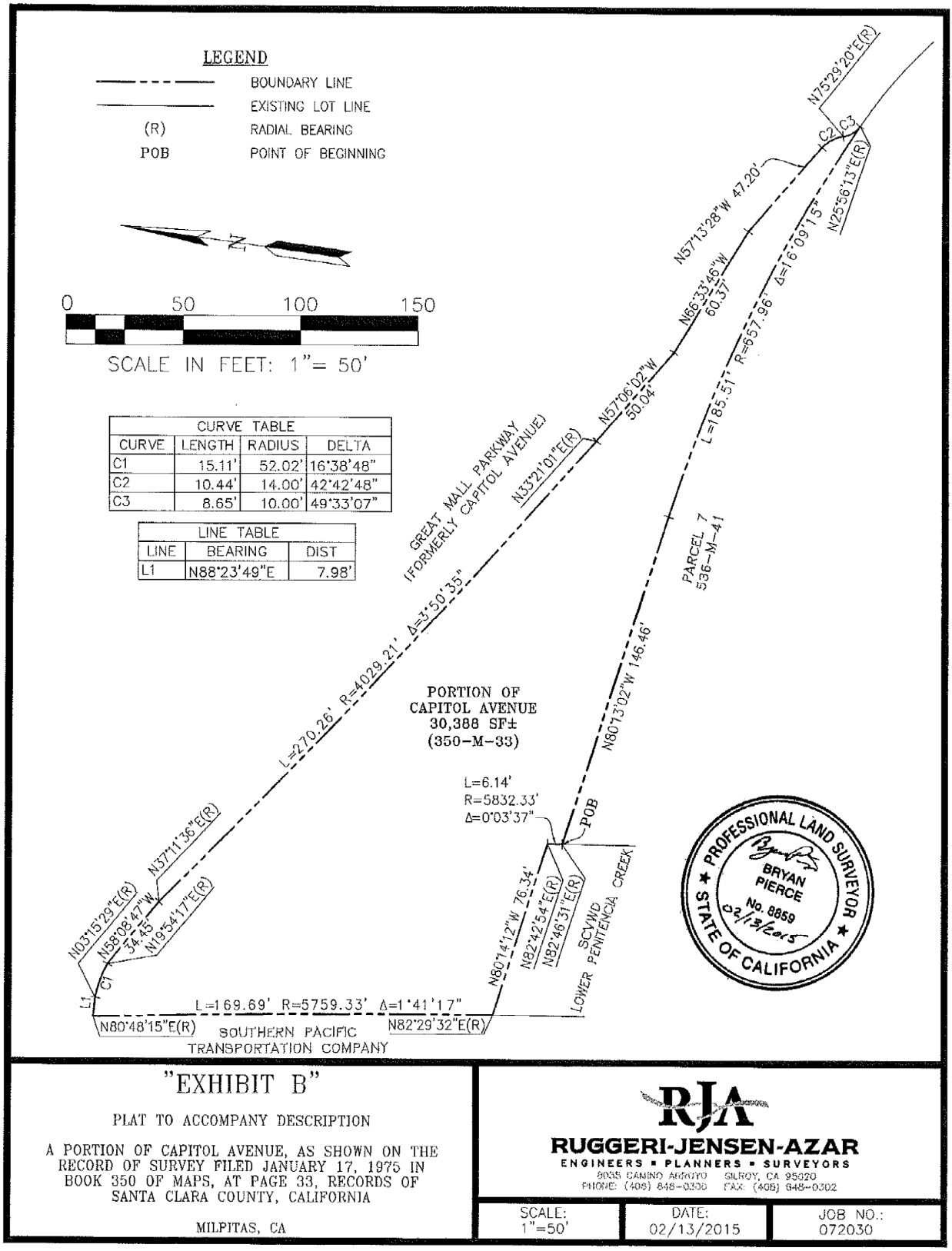
Containing 30,388 square feet or 0.698 acres, more or less.
As shown on "Exhibit B", attached hereto and made a part hereof.

END OF DESCRIPTION.




"EXHIBIT B"

PLAT TO ACCOMPANY DESCRIPTION

A PORTION OF CAPITOL AVENUE, AS SHOWN ON THE RECORD OF SURVEY FILED JANUARY 17, 1975 IN BOOK 350 OF MAPS, AT PAGE 33, RECORDS OF SANTA CLARA COUNTY, CALIFORNIA

MILPITAS, CA

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PHONE: (408) 848-0300 FAX: (408) 848-0302

| SCALE: | DATE: | JOB NO.: |
|---|---|---|
| 1"=50' | 02/13/2015 | 072030 |

**EXHIBIT "D"**

**Hazardous Substances**

For the purpose of this Agreement, **"HAZARDOUS MATERIALS"** shall mean any and all: (a) substances, products, by-products, waste, or other materials of any nature or kind whatsoever which is or becomes listed, regulated or addressed under any Environmental Laws; (b) materials, substances, products, by-products, waste, or other materials of any nature or kind whatsoever whose presence in and of itself or in combination with other materials, substances, products, by-products, or waste may give rise to liability under any Environmental Law or any statutory or common law theory based on negligence, trespass, intentional tort, nuisance, strict or absolute liability or under any reported decisions of any state or federal court; and, (c) substances, products, by-products, wastes or other materials which may be hazardous or harmful to the air, water, soil, environment or affect industrial hygiene, occupational, health, safety and/or general welfare conditions, including without limitation, petroleum and/or asbestos materials, products, by-products, or waste.

For the purposes of this Agreement, **"ENVIRONMENTAL LAWS"** shall mean and include all federal, state, and local laws, statutes, ordinances, regulations, resolutions, decrees, and/or rules now or hereinafter in effect, as may be amended from time to time, and all implementing regulations, directives, orders, guidelines, and federal or state court decisions, interpreting, relating to, regulating or imposing liability (including, but not limited to, response, removal, remediation and damage costs) or standards of conduct or performance relating to industrial hygiene, occupational, health, and/or safety conditions, environmental conditions, or exposure to, contamination by, or clean-up of, any and all Hazardous Materials, including without limitation, all federal or state superlien or environmental clean-up.

*18C

**RESOLUTION NO. _____**

**A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF MILPITAS ANNEXING CERTAIN REAL PROPERTY COMMONLY KNOWN AS TRACTS 10140 ("DISTRICT 1 BUILDING 1") INTO CITY OF MILPITAS COMMUNITY FACILITIES DISTRICT NO. 2008-1 ANNEXATION NO. 7**

**WHEREAS**, Milpitas – District 1 Associates, LLC, a Delaware Limited Liability Company is the owner of certain real property commonly known as Tract 10140 (APN No. 086-33-092), more specifically described in the annexation map attached as **Exhibit 1.A** to this Resolution; and

**WHEREAS**, on September 7, 2010, the City Council approved a Tentative Map and Conditional Use Permit (Resolution No. 8029) for the construction of two mixed use buildings and six residential buildings by Integral Communities, LLC on 23 acres ("District 1" and "District 2" Project) located at 1315-1600 McCandless Drive. On March 20, 2012, the City Council subsequently approved a Major Tentative Map, Site Development Permit, and Conditional Use Permit (Resolution No. 8165) to amend the original tentative map and allow the construction of four mixed use buildings (934 dwelling units and 87,023 square feet commercial on 13 acres called "District 1" and 200 residential townhome units on 10 acres called "District 2" located at 1315-1600 McCandless Drive, with ancillary lots for private streets and public streets; and

**WHEREAS**, the District 2 project is under construction and next phase of the development involves a District 1 mixed-use building ("Building 1") with 371 residential units and 44,943 square feet of commercial space on 5.71 acres located on 1315 McCandless Drive, as further identified as Lot 1 on the tentative map; and

**WHEREAS**, on January 6, 2009, the City Council adopted Resolution Nos. 7815 and 7816, and on January 29, 2009, the City Council adopted Ordinance No. 278 creating the City of Milpitas Community Facilities District No. 2008-1 ("CFD 2008-1") pursuant to the Mello-Roos Community Facilities Act of 1982, California Government Code Section 53311 *et seq*. Each fiscal year, a special tax is levied on all assessor's parcels of residential property in CFD 2008-1 in an amount determined by the Council, as described in the attached **Exhibit 1.B** to this Resolution; and

**WHEREAS**, pursuant to the Mello-Roos Community Facilities Act, the City Council also established a procedure to allow and provide for the annexation of parcels within the boundaries of CFD 2008-1 in the future without additional hearings, upon the unanimous approval of the owner or owners of each parcel or parcels at the time that parcel or those parcels are annexed, pursuant to Government Code Section 53339.7; and

**WHEREAS**, Milpitas – District 1 Associates, LLC, a Delaware Limited Liability Company, now voluntarily seeks to annex its property to CFD 2008-1 and to be subject to the levy of a special tax thereunder.

**NOW, THEREFORE**, the City Council of the City of Milpitas hereby finds, determines, and resolves as follows:

1. The City Council has considered the full record before it, which may include but is not limited to such things as the staff report, testimony by staff and the public, and other materials and evidence submitted or provided to it. Furthermore, the recitals set forth above are found to be true and correct and are incorporated herein by reference.

2. Legally valid and unanimous consent to the annexation of real property identified as Assessor's Parcel No. 086-33-092 into CFD 2008-1 has been given, as set forth in the Consent and Election to Annex Real Property To an Existing Community Facilities District, attached hereto as **Exhibit 1**. All prior proceedings and actions taken by the City Council pursuant to the Mello-Roos Community Facilities Act and this Resolution were and are valid and in conformity with State and local law.

3. The City Council hereby declares and determines that the territory comprising Annexation No. 7, as described in **Exhibit 1.A** is now added to and becomes a part of CFD 2008-1. City staff is hereby directed to include the property in the annual assessment. In no event shall the annual per-lot

assessment exceed the maximum amount authorized by the engineer's report for the CFD 2008-1 in any given fiscal year. **Exhibit 2** attached hereto is provided to show all parcels that have been annexed to the CFD 2008-1.

4. The City Clerk is hereby directed to record an amendment to the Notice of Special Tax Lien within fifteen (15) days of the adoption of this resolution in the Office of the County Recorder. The City Clerk is further directed to file a certified copy of the map, attached as Exhibit 2, within fifteen (15) days of the adoption of this resolution in the Office of the County Recorder.

5. The City Clerk shall certify the adoption of this Resolution.

6. This Resolution shall take effect immediately upon adoption.

PASSED AND ADOPTED this _____ day of _____, 2015 by the City Council by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

ATTEST:

_____
Mary Lavelle, City Clerk

APPROVED:

_____
Jose S. Esteves, Mayor

APPROVED AS TO FORM:

_____
Michael J. Ogaz, City Attorney

**EXHIBIT 1**

**CONSENT AND ELECTION TO ANNEX REAL PROPERTY TO AN EXISTING COMMUNITY FACILITIES DISTRICT CITY OF MILPITAS COMMUNITY FACILITIES DISTRICT NO. 2008-1 (PUBLIC SERVICES)**

TO: CITY COUNCIL OF THE CITY OF MILPITAS IN ITS CAPACITY AS THE LEGISLATIVE BODY OF THE ABOVE ENTITLED COMMUNITY FACILITIES DISTRICT:

1. The undersigned is the owner (the "Owner"), or the duly authorized representative of the Owner, of the real property as described in **Exhibit 1.A** attached hereto and incorporated herein by reference (the "Property"), and in such capacity, possesses all legal authority necessary to execute this Consent and Election as and on behalf of the Owner in connection with the annexation of the Property to the District (as defined below).

The Owner is:

**MILPITAS – DISTRICT 1 ASSOCIATES, LLC, A DELAWARE LIMITED LIABILITY COMPANY**

2. The Owner is aware of and understands the following:

A. The City of Milpitas has conducted proceedings pursuant to the "Mello-Roos Community Facilities Act of 1982", (Government Code Section 53311 and following) (the "Act") to form a community facilities district known and designated as COMMUNITY FACILITIES DISTRICT NO. 2008-1 (PUBLIC SERVICES) (the "District") to finance the increased demand for public services (the "Services") resulting from new development within the District. The services to be financed by the CFD comprise services ("Services") authorized to be financed pursuant to Section 53313 and 53313.5 of the Government Code. CFD 2008-01 shall finance Services only to the extent they are in addition to those provided in the territory of CFD 2008-1 before the CFD was created and such Services may not supplant services already available within CFD 2008-1 when the CFD was created.
For a full and complete description of the public services, reference is made to the final CFD Report, a copy of which is on file in the Office of the City Clerk. For all particulars, reference is made to said CFD Report.

B. The City has also undertaken proceedings pursuant to Article 3.5 of the Act to provide for the future annexation of certain territory, including the Property, to the District. On January 6, 2009, the City held a public hearing as required by the Act, to consider the future annexation of such territory, including the Property, to the District. Notice of such hearing was given in the form and manner as required by law. A protest to such future annexation was not received from 50% or more of the registered voters, or six registered voters, whichever is more, residing in the territory proposed to be annexed in the future or the owners of one-half or more of the area of land in the territory proposed to be annexed in the future. At the conclusion of such public hearing, the legislative body of the City did approve and provide for the annexation in the future upon the unanimous approval of the owner or owners of each parcel or parcels at the time that

such parcel or parcels are annexed, without additional hearings.

**THE UNDERSIGNED DOES HEREBY CERTIFY UNDER PENALTY OF PERJURY AS FOLLOWS:**

3. The Owner consents and elects to and expressly approves annexation of the Property to the District and the authorization for the levy of the Special Tax within the Property without further public hearing and without an election conducted pursuant to the provisions of Government Code Section 53339.7 and Article 2 of the Act and the Elections Code of the State of California. Owner agrees and intends that such consent and approval constitutes Owner's election to annex the Property to the District and to approve the authorization for the levy of the Special Tax within the Property.

4. The Owner waives any right, which the Owner may have to make any protest or complaint or undertake any legal action challenging the validity of the proceedings of the City or the District to authorize the future annexation of the Property to the District or the authorization for the levy of the Special Tax within the Property, any necessity, requirement, right or entitlement for further public hearing or election pertaining to the annexation of the Property to the District and the levy of the Special Tax within the Property.

5. The Owner specifically authorizes the levy of the Special Tax on the Property pursuant to the rate and method of apportionment set forth in **Exhibit 1.B** to pay for the authorized Public Services.

EXECUTED this 3rd day of March, 2015, in Newport Beach, California.

**Milpitas – District 1 Associates, LLC, a Delaware Limited Liability Company**

By: _____

**By: Michael Barmettler
Name: Michael Barmettler
Title: Secretary of Managing Member

Note:

1. Signatures of property owner(s) or representatives must be notarized.
2. Proof of Authorization to sign is required for Corporations, Partnerships, Limited Liability Companies, Trusts, etc.

**CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT** **CIVIL CODE § 1189**

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California )
County of Orange )

On March 3, 2015 before me, Monica Fajardo, Notary Public,
*Date* *Here Insert Name and Title of the Officer*

personally appeared Michael Barnettler
*Name(s) of Signer(s)*

who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

MONICA FAJARDO
Commission # 2072491
Notary Public - California
Orange County
My Comm. Expires Jun 24, 2018

Signature _____
*Signature of Notary Public*

*Place Notary Seal Above*

**OPTIONAL**

*Though this section is optional, completing this information can deter alteration of the document or fraudulent reattachment of this form to an unintended document.*

**Description of Attached Document**

Title or Type of Document: Consent and Election to Annex Document Date: _____

Number of Pages: _____ Signer(s) Other Than Named Above: _____

**Capacity(ies) Claimed by Signer(s)**

Signer's Name: _____
☐ Corporate Officer — Title(s): _____
☐ Partner — ☐ Limited ☐ General
☐ Individual ☐ Attorney in Fact
☐ Trustee ☐ Guardian or Conservator
☐ Other: _____
Signer Is Representing: _____

Signer's Name: _____
☐ Corporate Officer — Title(s): _____
☐ Partner — ☐ Limited ☐ General
☐ Individual ☐ Attorney in Fact
☐ Trustee ☐ Guardian or Conservator
☐ Other: _____
Signer Is Representing: _____

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**EXHIBIT 1.A**

CONSENT AND ELECTION TO ANNEX REAL PROPERTY
TO AN EXISTING COMMUNITY FACILITIES DISTRICT
CITY OF MILPITAS COMMUNITY FACILITIES
DISTRICT NO. 2008-1 (PUBLIC SERVICES)

**ANNEXATION No. 7**

| Assessor Parcel No. | Owner |
|---|---|
| 086-33-092 | Milpitas – District 1 Associates, LLC, a Delaware Limited Liability Company |

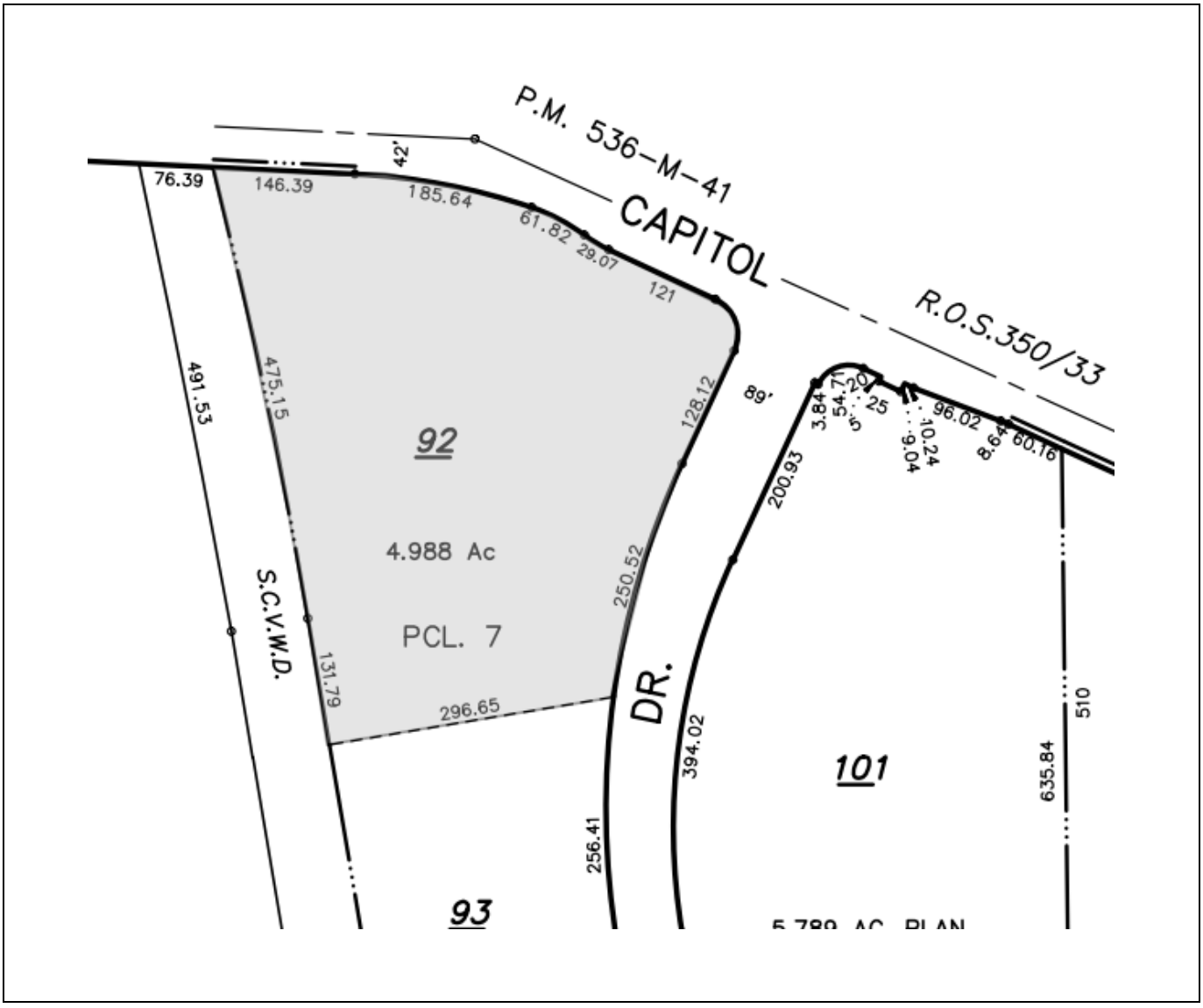


**EXHIBIT 1.B**

# CONSENT AND ELECTION TO ANNEX REAL PROPERTY TO AN EXISTING COMMUNITY FACILITIES DISTRICT CITY OF MILPITAS COMMUNITY FACILITIES DISTRICT NO. 2008-1 (PUBLIC SERVICES)

## RATE AND METHOD OF APPORTIONMENT OF SPECIAL TAX

A Special Tax as hereinafter defined shall be levied on all Assessor's Parcels of Residential Property in City of Milpitas Community Facilities District No. 2008-1 (Public Services) ("CFD No. 2008-1"), and collected each Fiscal Year commencing after adoption of CFD 2008-1, in an amount determined by the Council through the application of the appropriate Special Tax, as described below. All of the real property in CFD No. 2008-1, unless exempted by law or by the provisions hereof, shall be taxed for the purposes, to the extent and in the manner herein provided.

### A. DEFINITIONS

The terms hereinafter set forth have the following meanings:

**"Act"** means the Mello-Roos Community Facilities Act of 1982, as amended, being Chapter 2.5, Division 2 of Title 5 of the Government Code of the State of California.

**"Administrative Expenses"** means the following actual or reasonably estimated costs directly related to the administration of CFD No. 2008-1: the costs of computing the Special Taxes and preparing the annual Special Tax collection schedules (whether by the City or any designee thereof or both); the costs of collecting the Special Taxes (whether by the City or otherwise); the costs to the City, CFD No. 2008-1 or any designee thereof of complying with City, CFD No. 2008-1 or obligated persons disclosure requirements associated with the Act; the costs associated with preparing Special Tax disclosure statements and responding to public inquiries regarding the Special Taxes; the costs of the City, CFD No. 2008-1 or any designee thereof related to an appeal of the Special Tax; and the City's annual administration fees and third party expenses. Administrative Expenses shall also include amounts estimated or advanced by the City or CFD No. 2008-1 for any other administrative purposes of CFD No. 2008-1, including attorney's fees and other costs related to commencing and pursuing to completion any foreclosure of delinquent Special Taxes.

**"Affordable Housing"** means any Dwelling Units located on Residential Property that are subject to deed restrictions, resale restrictions and/or regulatory agreements recorded on the property that provide housing for persons that meet the Low, Very Low, and/or Extremely Very Low income levels pursuant to, as applicable, California Health & Safety Code Sections 50093, 50079.5, 50105, or 50106. The Fiscal Year after the January 1 following the termination of the

agreement containing covenants or similar instrument, a Dwelling Unit shall no longer be considered Affordable Housing.

**"Annexation Parcel"** means any parcel that is annexed to the CFD after it is formed.

**"Annual Costs"** means for each Fiscal Year, the total of 1) Authorized Services 2) Administrative Expenses; and 3) any amounts needed to cure actual or estimated delinquencies in Special Taxes for the current or previous Fiscal Year.

**"Authorized Services"** mean those services, as listed in the resolution forming the CFD.

**"Assessor's Parcel"** means a lot or parcel shown on an Assessor's Parcel Map with an assigned Assessor's Parcel number.

**"Assessor's Parcel Map"** means an official map of the Assessor of the County designating parcels by Assessor's Parcel number.

**"Base Year"** means the Fiscal Year beginning July 1, 2009 and ending June 30, 2010.

**"Certificate of Occupancy"** means a certificate issued by the City that authorizing the occupancy of a Dwelling Unit.

**"CFD Administrator"** means an official of the City, or any designee thereof, responsible for determining the Special Tax Requirement and providing for the levy and collection of the Special Taxes.

**"CFD"** means City of Milpitas Community Facilities District No. 2008-1 (Public Services) of the City.

**"City"** means the City of Milpitas.

**"Consumer Price Index"** means, for each Fiscal Year, the Consumer Price Index published by the U.S. Bureau of Labor Statistics for All Urban Consumers in the San Francisco-Oakland-San Jose Area, measured as of the month of February in the calendar year that ends in the previous Fiscal Year. In the event this index ceases to be published, the Consumer Price Index shall be another index as determined by the CFD Administrator that is reasonably comparable to the Consumer Price Index for the San Francisco-Oakland-San Jose Area.

**"Council"** means the City Council of the City, acting as the legislative body of CFD No. 2008-1.

**"County"** means the County of Santa Clara.

**"County Median Income"** means the current median income for the County of Santa Clara as determined by the U.S. Department of Housing and Urban Development.

**"Developed Property"** means, for each Fiscal Year, all Assessor's Parcels of Residential and Non-Residential Property for which a Certificate of Occupancy, or equivalent certificate, was issued before February 1 of the prior Fiscal Year, but not earlier than January 1, 2009.

**"Dwelling Unit"** means a building or portion thereof designed for and occupied in whole or part as a residence or sleeping place, either permanently or temporarily, by one family and its guests, with sanitary facilities and one kitchen provided within the unit. Boarding or lodging houses, dormitories, and hotels shall not be defined as Dwelling Units unless the land use permit specifies a residential use.

**"Extremely Low-Income Affordable Housing"** means Affordable Housing suitable for households with incomes at or below 30% of the County Median Income.

**"Fiscal Year"** means the period starting July 1 and ending on the following June 30.

**"Land Use Class"** means the land use class into which an Assessor's Parcel of Residential Property has been assigned.

**"Low-Income Affordable Housing"** means Affordable Housing suitable for households with incomes at or below 80% of the County Median Income.

**"Maximum Special Tax"** means, for each Fiscal Year, the maximum Special Tax, determined in accordance with Section C, below, that can be levied on any Assessor's Parcel of Residential Property.

**"Market-Priced Residential Property"** means Residential Property not classified as Affordable Housing.

**"Non-Residential Property"** means, for each Fiscal Year, any Assessor's Parcel of Developed Property which is not a Residential Property.

**"Property Owner Association Property"** means, for each Fiscal Year, any Assessor's Parcel within the boundaries of CFD No. 2008-1 that is owned by or irrevocably offered for dedication to a property owner association, including any master or sub-association.

**"Proportionately"** means that the ratio of the actual annual Special Tax levy to the Maximum Special Tax is equal for all Assessor's Parcels of Residential Property.

**"Public Property"** means, for each Fiscal Year, (i) any property within the boundaries of CFD No. 2008-1 that is owned by or irrevocably offered for dedication to the federal government, the State, the City or any other public agency; provided however that any property leased by a public agency to a private entity and subject to taxation under Section 53340.1 of the Act, as such section may be amended or replaced, shall be taxed and classified in accordance with its use; or (ii) any property within the boundaries of CFD No. 2008-1 that is encumbered by an unmanned utility easement making impractical its utilization for other than the purpose set forth in the easement.

**"Residential Property"** means, for each Fiscal Year, any Assessor's Parcel of Developed Property for which a Certificate of Occupancy has been issued for purposes of allowing residents to inhabit one or more residential Dwelling Units.

**"Second Family Unit"** means an attached or detached additional residential dwelling unit on a single-family residential Developed Parcel. The Second-Family Unit is not considered a Dwelling Unit in terms of assigning the Maximum Annual Special Tax.

**"Services"** means services that CFD No. 2008-1 is authorized to fund. These services may include: a) police protection services, criminal justice services-jails, detention facilities and juvenile halls, b) fire protection & suppression services and ambulance & paramedic services, c) maintenance and lighting of parks, parkways, streets, roads, street landscaping and open space, d) flood and storm protection services-operation and maintenance of storm drainage systems, and e) services related to removal and remedial action for cleanup of any hazardous environmental substances.

**"Special Tax"** means the special tax to be levied in each Fiscal Year on each Assessor's Parcel of Residential Property to fund the Special Tax Requirement.

**"Special Tax Requirement"** means that amount to be collected in any Fiscal Year for CFD No. 2008-1 to pay for certain costs as required to meet the needs of CFD No. 2008-1 in that Fiscal Year. The costs to be covered shall be the costs of (i) Services, and (ii) Administrative Expenses; less (iii) a credit for funds available to reduce the annual Special Tax levy, if any, as determined by the CFD Administrator.

**"State"** means the State of California.

**"Tax Category"** means the four categories of housing Dwelling Units shown in Table 1.

**"Tax Collection Schedule"** means the document prepared by the Administrator for the County Auditor-Controller to use in levying and collecting the Special Taxes each Fiscal Year.

**"Tax Escalation Factor"** means an annual percentage increase in the Maximum Annual Special Tax Rate per Unit based upon the Consumer Price Index (CPI) (as of February, San Francisco, All Urban Consumers (CPI-U) Index), the CPI (prior calendar year annual average, San Francisco, All Urban Wage Earners and Clerical Workers), or 2 percent, whichever is greater. The Tax Escalation Factor is applied each Fiscal Year following the Base Year.

**"Taxable Parcel"** means any Parcel that is not a Tax-Exempt Parcel

**"Tax-Exempt Parcel"** means a Parcel not subject to the Special Tax. Tax-Exempt Parcels are Public Parcels (subject to the limitations set forth below), Undeveloped Parcels, and nonresidential use parcels, such as commercial, office, industrial, etc.

**"Undeveloped Property"** means, for each Fiscal Year, all property not classified as Residential Property, Non-Residential Property, Public Property, or Property Owner Association Property.

**"Very Low-Income Affordable Housing"** means Affordable Housing suitable for households with incomes at or below 50% of the County Median Income.

## B. ASSIGNMENT TO LAND USE CATEGORIES

Each Fiscal Year, all Assessor's Parcels, as applicable within CFD No. 2008-1, shall be classified as Residential Property, Non-Residential Property, Undeveloped Property, Public Property, or Property Owner Association Property. However, only Residential Property shall be subject to annual Special Taxes in accordance with the rate and method of apportionment determined pursuant to Sections C and D below. Residential Property shall be assigned to Land Use Classes 1-4, as listed in Table 1, below.

## C. MAXIMUM SPECIAL TAX RATE

### 1. Developed Property

a. Maximum Special Tax

The Maximum Special Taxes for Residential Property are shown below in Table 1, based on the Land Use Class in which such Residential Property has been assigned. Under no circumstances shall a Special Tax be levied on Non-Residential Property, or for renovations to an existing Dwelling Unit located on Residential Property.

**TABLE 1**

**Maximum Special Taxes for Developed Property for Base Year 2009-10**
**Community Facilities District No. 2008-1**

| Land Use Class | Land Use Type | Maximum Special Tax Per Dwelling Unit |
|---|---|---|
| 1 | Market-Priced Residential Property | $510.00 |
| 2 | Low- Income Affordable Housing (80% of Market) | $408.00 |
| 3 | Very Low-Income Affordable Housing (50% of Market) | $255.00 |
| 4 | Extremely Low-Income Affordable Housing | $0.00 |

b. Increase in the Maximum Special Tax

On each July 1, commencing on July 1, 2010, the Maximum Special Taxes set forth above shall be increased annually by the greater of the change in the San Francisco-Oakland-San Jose Area Urban Consumer Price Index during the twelve months prior to February of the previous Fiscal Year, or two percent (2%).

### 2. Undeveloped Property, Non-Residential Property, Public Property or Property Owner Association Property

No Special Taxes shall be levied on Undeveloped Property, Non-Residential Property, Property Owner Association Property, Public Property or Residential Property assigned to Land Use Class 4.

## D. METHOD OF APPORTIONMENT OF THE SPECIAL TAX

Commencing with Fiscal Year 2010-11 and for each following Fiscal Year, the Council or its designee shall levy the annual Special Tax Proportionately for each Assessor's Parcel of Residential Property at up to 100% of the applicable Maximum Special Tax, until the amount of Special Taxes equals the Special Tax Requirement.

## E. EXEMPTIONS

No Special Tax shall be levied on Undeveloped Property, Non-Residential Property, Public Property, Property Owner Association Property or Residential Property assigned to Land Use Class 4. However, should an Assessor's Parcel no longer be classified as Non-Residential Property, Public Property, Property Owner Association Property, or Residential Property assigned to Land Use Class 4, such Assessor's Parcel, if reclassified as Residential Property assigned to Land Use Classes 1, 2 or 3, shall be subject to the Special Tax. Furthermore, an Assessor's Parcel of Residential Property assigned to Land Use Classes 1, 2 or 3, if reclassified as belonging to a different Land Use Class, shall be subject to the Special Tax associated with its new Land Use Class.

## F. APPEALS AND INTERPRETATIONS

Any landowner or resident may file a written appeal of the Special Tax on his/her property with the CFD Administrator, provided that the appellant is current in his/her payments of Special Taxes. During the pendency of an appeal, all Special Taxes previously levied must be paid on or before the payment date established when the levy was made. The appeal must specify the reasons why the appellant claims the Special Tax is in error. The CFD Administrator shall review the appeal, meet with the appellant if the CFD Administrator deems necessary, and advise the appellant of its determination. If the CFD Administrator agrees with the appellant, the CFD Administrator shall eliminate or reduce the Special Tax on the appellant's property and/or provide a refund to the appellant. If the CFD Administrator disagrees with the appellant and the appellant is dissatisfied with the determination, the appellant then has 30 days in which to appeal to the Council by filing a written notice of appeal with the City Clerk, provided that the appellant is current in his/her payments of Special Taxes. The second appeal must specify the reasons for the appellant's disagreement with the CFD Administrator's determination. The decision by the Council shall be final. The CFD Administrator may charge the appellant a reasonable fee for processing the appeal.

Interpretations may be made by the Council by ordinance or resolution for purposes of clarifying any vagueness or ambiguity in this Rate and Method of Apportionment.

## G. MANNER OF COLLECTION

The annual Special Tax shall be collected in the same manner and at the same time as ordinary *ad valorem* property taxes; provided, however, that CFD No. 2008-1 may directly bill the Special Tax, may collect Special Taxes at a different time or in a different manner if necessary to meet its financial obligations. In particular, the Special Tax for Affordable Housing may be collected off of the tax roll, to facilitate payment of the Special Tax by a party other than the property owner.

## H. TERM OF SPECIAL TAX

The Special Tax shall be levied in perpetuity as necessary to meet the Special Tax Requirement.

**CERTIFICATION OF ADEQUACY OF CONSENT AND ELECTION TO ANNEX REAL PROPERTY TO AN EXISTING COMMUNITY FACILITIES DISTRICT**

**CITY OF MILPITAS**

**COMMUNITY FACILITIES DISTRICT No. 2008-1**
**(PUBLIC SERVICES)**

**ANNEXATION NO. 7**

The undersigned is the duly appointed CITY CLERK for the proceedings relating to the annexation of property to the District.

On the _____ day of _____, 2015, at MILPITAS, California.

_____
CITY CLERK
CITY OF MILPITAS
STATE OF CALIFORNIA

SHEET 1 OF 1

# EXHIBIT 2

## ANNEXATION MAP NO. 7 AND UPDATE OF ANNEXATION MAP NO. 6 OF CITY OF MILPITAS COMMUNITY FACILITIES DISTRICT NO. 2008-1 (PUBLIC SERVICES), COUNTY OF SANTA CLARA STATE OF CALIFORNIA AS RECORDED IN BOOK 44 PAGE 30 OF MAPS OF ASSESSMENT AND COMMUNITY FACILITIES DISTRICTS, O.R., SANTA CLARA COUNTY

Filed in the office of the City Clerk of the City of Milpitas this ____ day of _____, 2015.

_____
City Clerk, City of Milpitas

I hereby certify Annexation Map No. 7 as shown within the boundaries of City of Milpitas Community Facilities District No. 2008-1 (Public Services) as originally recorded of maps of assessment and community Book 44 Page 30 Facilities District, O.R. , County of Santa Clara, State of California, was approved by the City Council of the City of Milpitas at a regular meeting thereof, held on the ____ day of _____, 2015, by its Resolution No._____.

_____
City Clerk, City of Milpitas

Filed this ____ day of _____, 2015, at the hour of _____ o'clock __.m., in Book _____ of Maps of Assessment and Community Facilities Districts at Page _____ in the office of the County Recorder in the County of Santa Clara, State of California.

_____
County Recorder,
County of Santa Clara

The boundary of Community Facilities District No. 2008-1 is co-terminous with the boundary of the City of Milpitas in _____, 2015.

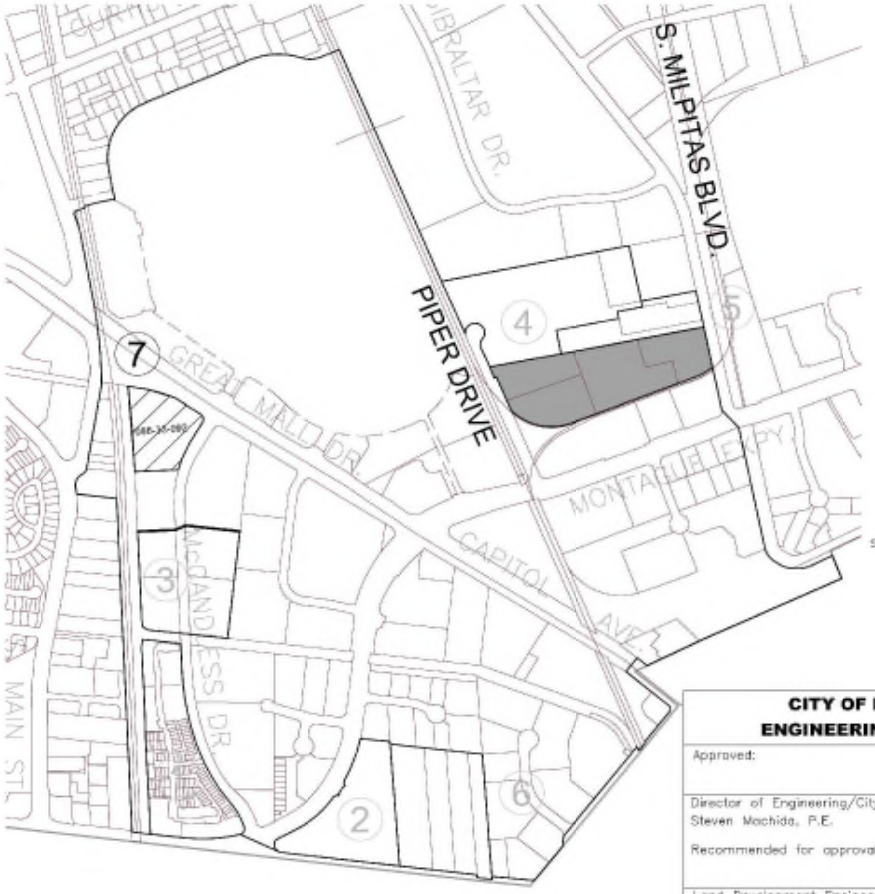
Reference is hereby made to the Assessor maps of the County of Santa Clara for an exact description of the lines and dimensions of each lot and parcel.

The territory included in the Community Facilities District shall include only Santa Clara County Assessor's for the following Annexation Maps :
Initial formation CFD 2008-1 : 08632033, 08632034, 08632035, 0832036
Map No. 1: 08641020, 08641021, 08641022
Map No. 2: 08636043
Map No. 3: 08633094, 08633095, 08633098, 08633099
Map No. 4: 08632044
Map No. 5: 08632039, 08632045, 08632046
Map No. 6: 08636003, 08636004, 08636005, 08636006
Map No. 7: 08633092

and all publicly owned areas in the City of Milpitas landscaped or capable of being landscaped, such as parks, parkways, street medians, interchange areas, light rail areas, open space and all similar areas. All other areas depicted on this map indicate territory that may be annexed to the Community Facilities District in the future.

Legend

- Location of Initial Formation (Assessor Parcel No. 08632033, 08632034, 08632035, 08632036)
- Boundary of CFD 2008-1
- ① Annexation No.




**CITY OF MILPITAS**
**ENGINEERING DIVISION**

Approved:

Director of Engineering/City Engineer Date
Steven Machida, P.E.

Recommended for approval:

Land Development Engineer Date
Ahmed Aly, P.E.

Drawn By: A.A. File No. CFD 2008-1 Sheet 1 of 1

*18D

Subdivider: Milpitas – District 1 Associates, LLC

Project Name: District 1, Lot 1, Building 1

File No. : 100.01.230
Private Job Account No.: 1134
Improvement Plan No.: 2-1192
Tract Map No.: 10140
Council Approval Date: 5/5/15

**CITY OF MILPITAS**

**SUBDIVISION IMPROVEMENT AGREEMENT**

THIS AGREEMENT, executed this ___ day of _____ 2015, at Milpitas, California, by and between the CITY OF MILPITAS, a municipal corporation of the State of California, (hereafter referred to as "CITY"); and

**Milpitas – District 1 Associates, LLC, a Delaware Limited Liability Company** (hereafter referred to as "SUBDIVIDER"):

**R E C I T A L S**

A. SUBDIVIDER desires to subdivide certain land in the CITY in accordance with a final map filed with the Milpitas City Council, marked and designated as Tract No. 10140 Integral Communities, to construct a mixed-used residential building (the "Project").

B. Said map shows certain easements which are offered for dedication for public use.

C. SUBDIVIDER requires the use of a portion of old Capitol Avenue right of way known as the "White Hole" at southeast corner of South Main Street at Great Mall Parkway east of Union Pacific Railroad (hereinafter "White Hole") for the fulfillment of certain development parking requirements.

D. CITY has agreed to vacate and convey the "White Hole" property to the Developer for a valuable consideration simultaneously with the approval of this AGREEMEMT under a separate Purchase and Sale Agreement between the parties.

NOW, THEREFORE, in consideration of the mutual covenants terms and conditions herein contained, and for other valuable consideration, the receipt of which is hereby acknowledged, the parties do hereby agree as follows:

1. SUBDIVIDER agrees that it will construct at its sole cost and expense, all those certain improvements listed in **Improvement Plan No. 2-1192** and specifications, which includes setting survey monuments and identified by Project Fund Account No. 1134 (and any subsequent accounts created for this Project, hereby referred to and made a part hereof the same as if set forth at length herein), and as set forth in the conditions of approval for the Project. SUBDIVIDER agrees that any design changes to the Improvement Plan may necessitate lot line adjustments or other CITY approval.

2. SUBDIVIDER, at its sole cost and expense, agrees to all of the following subject to the sole satisfaction of the CITY:

a. Simultaneously with the execution of this Agreement, SUBDIVIDER shall enter into a Purchase Sale Agreement with the CITY for the purchase of the "White Hole" property as further described in the Purchase and Sale Agreement. SUBDIVIDER shall comply with all terms, conditions, and obligations of the separate Purchase and Sale Agreement.

b. Simultaneously with the execution of this Agreement, SUBDIVIDER shall enter into a Right of Entry Agreement for the use of the White Hole Property prior to conveyance of the White Hole Property from the CITY to SUBDIVIDER. SUBDIVIDER shall not occupy or use the White Hole property in any manner prior to the full execution of a Right of Entry Agreement.

c. SUBDIVIDER shall design and construct approximately 320 lineal feet of new 12" water ductile iron pipe and associated work and improve the area within the "White Hole" property pursuant to approved plans to the satisfaction of the City Engineer and Planning Director as shown in **Exhibit A**. SUBDIVIDER shall obtain an encroachment permit or other approval for any work on said area as required by CITY.

d. SUBDIVIDER shall fully construct the build-out of the retail and commercial component of the Project to a "cold dark shell" state pursuant to approved plans to the satisfaction of the City Engineer and Planning Director prior to the issuance of any Certificate of Occupancy (temporary or final) for the One Hundred and Eighty-Seventh (187) residential unit in the Project. No Certificate of Occupancy (temporary or final) shall be issued for any residential unit in the Project after the One Hundred and Eighty-Seventh (187) residential unit, unless SUBDIVIDER has provided to the CITY evidence of a written lease agreement for the tenant improvements and operation of a grocery store located within the Project, to the reasonable satisfaction of the City.

e. SUBDIVIDER shall construct all frontage improvements along both sides of McCandless Drive from Great Mall Parkway to the boundary of District 1 pursuant to approved plans and to the satisfaction of the City Engineer and the Planning Director.

f. SUBDIVIDER shall relocate and adjust to grade the existing joint trench and all associated facilities including vaults, boxes, cabinets, etc. All above ground structures such as vaults, boxes, cabinets, etc. shall be lowered to match the sidewalk grade for a six foot wide sidewalk consistent with the approved tentative tract map to the satisfaction of the City Engineer and the Planning Director.

g. SUBDIVIDER agrees to convey to the adjacent property owner (identified as Lot 2, Building 2 on Project Tentative Map) all necessary easements for access for emergency vehicles, solid waste collection, and the maintenance of certain private utilities and operations in accordance with the approved entitlement. Subdivider shall submit a record of survey prior to the issuance of any Certificate of Occupancy (temporary or final) for the Project to document all easements and property rights created with this Project.

h. SUBDIVIDER shall install a 15 foot wide onsite emergency vehicle access pursuant to approved plans, subject to the approval of the City Engineer and Fire Marshall, which will be sufficient for issuance of certificates of occupancy, provided all other requirements for certificates of occupancy are satisfied.

3. No improvement work shall be undertaken by SUBDIVIDER until all plans and specifications have been submitted to the City Engineer and have been approved by him/her in writing nor shall any change be made in said plans and specifications or in the work of improvement to be done under them without the prior written approval of CITY.

4. SUBDIVIDER agrees that said improvements will be constructed under and subject to the inspection of and to the satisfaction of the CITY pursuant to approved plans.

5. SUBDIVIDER agrees that it will construct said improvements in accordance with the requirements set forth in said "Improvement Plans and Specifications" referred to above, all applicable local, state, and federal codes, ordinances, resolutions and orders of CITY enacted or adopted by said City Council as amended or revised as of the date hereof, and governing statutes of the State of California or of the United States of America.

6. SUBDIVIDER agrees that it will carry out and shall cause its contractors to carry out construction of the said improvements in conformity with all applicable laws and regulations, including without limitation, all applicable federal and state labor laws and standards. To the extent applicable to Subdivider and its subcontractors and agents, shall comply with California Labor Code Section 1720 et seq. and regulations adopted pursuant thereto **("Prevailing Wage Laws")** and shall be responsible for carrying out the requirements of such provisions.

   SUBDIVIDER shall, and hereby agrees to indemnify, defend (with counsel approved by CITY), protect and hold harmless the Indemnitees from and against any and all Claims whether known or unknown, and which directly or indirectly, in whole or in part, are caused by, arise from, or relate to, or are alleged to be caused by, arise from, or relate to, the payment or requirement of payment of prevailing wages, the failure to comply with any state or federal labor laws, regulations or standards in connection with this Agreement, including but not limited to the Prevailing Wage Laws, or any act or omission of CITY or Developer related to this Agreement with respect to the payment or requirement of payment of prevailing wages, whether or not any insurance policies shall have been determined to be applicable to any such Claims. It is further agreed that CITY does not, and shall not, waive any rights against Developer which they may have by reason of this indemnity and hold harmless agreement because of the acceptance by CITY, or Developer's deposit with CITY of any of the insurance policies described in this Agreement.

7. All public improvements to be constructed hereunder shall be completed and ready for final inspection by the CITY **within 36 months** of the date of execution of this Agreement or prior to first Certificate of Occupancy (temporary or final) for the Project, whichever comes first. If SUBDIVIDER shall fail to complete the work required by this Agreement within same time, CITY may, at its option, and after giving ten (10) days written notice thereof to SUBDIVIDER, complete the same and recover the full cost and expense thereof from SUBDIVIDER. Additionally, CITY may contact the surety bond companies and seek enforcement of any bonds securing this AGREEMENT.

8. Upon the execution of this Agreement, SUBDIVIDER shall file and submit security to CITY as obligee in the penal sum of **One Million Dollars ($1,000,000.00)**, conditioned upon the full and faithful performance of each of the terms, covenants, and conditions of this Agreement and conditioned upon the full and faithful performance of any and all public improvement work required hereunder.

9. In the event that SUBDIVIDER fails to perform any obligation on its part to be performed hereunder, SUBDIVIDER agrees to pay all costs and expenses incurred by CITY in securing

performance of such obligation, and if suit be brought by CITY to enforce this Agreement, SUBDIVIDER, agrees to pay costs of suit and reasonable attorney's fees to be fixed by the Court.

10. Upon the execution of this Agreement, SUBDIVIDER shall file and submit security to CITY, as obligee, in the penal sum of **One Million Dollars ($1,000,000.00)**, inuring to the benefit of any contractor, his subcontractors and to persons renting equipment or furnishing labor or materials to them for the cost of labor and materials furnished in connection with any and all improvement work required hereunder.

11. SUBDIVIDER agrees to pay all costs for labor or materials in connection with the work of improvement hereunder.

12. Any faithful performance security required hereunder shall be reduced to ten percent (10%) of the security's original value for one (1) year after the date of final completion and initial acceptance of said work to fulfill the one-year maintenance guarantee period for said improvements.

13. Prior to commencing any work, SUBDIVIDER, agrees to obtain an Encroachment Permit from the Engineering Division and at SUBDIVIDER's sole cost and expense, provide CITY with a duplicate public general liability and automobile liability insurance policy with endorsements showing the CITY as additional insured which insures CITY, its officers and employees against liability for injuries to persons or property (with minimum coverage of $1,000,000 for each person and $1,000,000 for each occurrence and $1,000,000 for property damage for each occurrence) in connection with work performed by, for or on behalf of SUBDIVIDER. Said Policy shall: (a) be issued by an insurance company approved to transact business in the State of California; (b) be written on the Standard General Liability ISO Policy Form which includes, but not limited to property damage, and bodily injury; (c) be written on an occurrence basis; (d) require thirty (30) days prior written notice to CITY of cancellation or coverage reduction; (e) provide that it is full primary coverage so that if said CITY, its officers and employees have other insurance covered by said policy, said other insurance shall be excess insurance; (f) provide that said CITY; its officers and employees shall not be precluded from claim against other insured parties thereunder; (g) be maintained in effect until final acceptance of SUBDIVIDER's improvements. If SUBDIVIDER does not comply with the provisions of this paragraph, CITY may (at its election and in addition to other legal remedies) take out the necessary insurance, and SUBDIVIDER shall forthwith repay CITY the premium therefor.

14. SUBDIVIDER agrees that any general contractor engaged by the SUBDIVIDER for any work of improvement under this Agreement will have:

    a. In full force and effect, a Worker's Compensation Insurance as shown by a Certificate of Worker's Compensation Insurance issued by an admitted insurer. Said Certificate shall state that there is in existence a valid policy of Worker's Compensation Insurance in a form approved by the California Insurance Commissioner. The certificate shall show the expiration date of the policy, that the full deposit premium on the policy has been paid and that the insurer will give CITY at least thirty (30) days prior written notice of the cancellation or coverage reduction of the policy.

    or

    b. In full force and effect, a Certificate of Consent to Self-Insure issued by the Director of Industrial Relations and certified by him to be current, together with a Declaration under penalty of perjury in a form satisfactory to the City Attorney that said Certificate is in

full force and effect and that the SUBDIVIDER or its general contractor shall immediately notify the CITY in writing in the event of its cancellation or coverage reduction at any time prior to the completion of all work of improvement.

15. SUBDIVIDER agrees to indemnify and save harmless CITY, City Council, City Engineer or any other officer or employee or agent of CITY from any and all costs, expenses, claims, liabilities or damages, known or unknown, to persons or property heretofore or hereafter arising out of or in any way connected with the act, omission or negligence of SUBDIVIDER, its officers, agents, employees, contractors or subcontractors or any officer, agent or employee thereof.

16. SUBDIVIDER agrees to comply with all conditions and notes of approval for this development, pay all fees, and costs and expenses incurred by CITY in connection with said subdivision (including, but not limited to: office check of maps and improvement plans, field checking, staking and inspection of street monuments, construction water, wet taps, testing and inspection of improvement). SUBDIVIDER shall maintain Project/Private Job Account No. 1134 (and any subsequent accounts created for this project) for this purpose with additional deposits as required by CITY.

A. Estimated Fees to be paid upon execution of this Agreement are as follows:

| | **Type of Fees and Deposits** | **City Account No.** | Calculated Fee |
|---|---|---|---|
| 1 | Plan Review, Map Review and Inspection Deposit (10% of Engineers Estimate) | P3222-13-2500 | $100,000.00 |
| 2 | Improvement Reimbursement Fee | 310-3614-xx70 | N/A |
| 3 | Other Fees/Deposits | xxxx-xx-xxx | N/A |
| | | **Total =** | **$100,000.00** |

B. Estimated Fees to be paid at the time of building permit issuance:

| | Type of Fee | City Account No. | Calculated Fee |
|---|---|---|---|
| 1 | Water Connection Fee: *$431,844 (371 units @ $1,164 per unit; $30,548.49 for 44,943 SF of retail (5,117 gpd @ $5.97 gpd))* | 402-3715 | $462,392.49 |
| 2 | Water Connection Fee Credit: *a credit for previous use)* | | <$81,927.50> |
| 3 | Sewer Connection Fee: *$521,626 (371 units @ $1,406 per unit; $10,138.00 for 44,943 SF of retail (1,190 gpd @ $8.52))* | 452-3715 | $531,764.80 |
| 4 | Sewer Connection Fee Credit: *a credit for previous use)* | | <$116,921.66> |
| 5 | Storm Drain Connection Fee *(5.718 acres @ $21,562 per acre)* | 340-3711 | $123,291.52 |
| 6 | Transit Area Specific Plan Impact Fees (Residential) *(371 units @ $32,781 per unit)* | 350-3718 | $12,161,751.00 |
| 7 | Transit Area Specific Plan Impact Fees (Retail) *(44,943 SF @ $22.80 per SF)* | 350-3718 | $1,024,700.40 |
| 8 | Potable Water Meter Fee | 400-3662 | N/A |
| 9 | Recycled Water Meter Fee | 406-3622 | N/A |
| | **Sub-total** | | **$14,105,051.05** |
| 10 | Permit Automation Fee (2.5% of total fees above) | 505-3601 | $352,626.28 |
| | | **Total =** | **$14,457,677.32** |

The above fees set forth in Section 16.A and Section 16.B are estimates only. The amount of fee to be paid in Section 16.A and Section 16.B shall be the amount in effect as approved by the City Council, at the time that full payment is made to the City at time of building permit issuance. There is no vesting of any fees or charges with execution of this Agreement.

17. Upon completion of the work and before City Initial Acceptance of the work thereof, SUBDIVIDER shall provide the City a complete original mylar of "Record Drawing" showing all the changes from the original plan.

18. Any easement or right-of-way necessary for the completion of any of the improvements required of SUBDIVIDER shall be acquired by SUBDIVIDER at its sole cost and expense. In the event that eminent domain proceedings are necessary for the acquisition of any easement or right-of-way, SUBDIVIDER agrees that it will pay all engineering fees and costs, legal fees and costs, and other incidental costs sustained by CITY in connection with said eminent domain proceedings and any condemnation award and damages (including all costs awarded in said eminent domain proceedings). SUBDIVIDER further agrees that prior to the institution of any eminent domain proceedings and upon ten (10) days written notice from CITY. SUBDIVIDER will deposit such sums as are determined by City Council to be necessary to defray said fees, costs, awards, and damages.

19. CITY will accept on behalf of the public, the dedication of the streets, and easements offered for dedication, and will supply water for sale to and within said subdivision, provided however, that as a condition precedent to said initial acceptance and to supplying water, SUBDIVIDER shall perform the covenants, terms and conditions of this Agreement.

20. SUBDIVIDER shall provide an approved Letter of Map Revision (LOMR) and a complete elevation certificate (or floodproofing certificate if applicable) based on finished construction, prior to every issuance of Certificate of Occupancy.

21. SUBDIVIDER shall have a City-approved Storm Water Control Plan (SWCP), including an Operation and Maintenance Plan (O&M Plan), prior to issuance of first building permit. SUBDIVIDER agrees to execute an

Operation and Maintenance Agreement (O&M Agreement) and establish a Project/Private Job Account in accordance with the O&M Agreement.

22. SUBDIVIDER hereby irrevocably offers to convey title of the water mains and lines, and appurtenances constructed in or for said subdivision for public use to CITY. Upon final acceptance of said improvements by CITY, said title will be deemed to be accepted by CITY in the event that title has not previously passed to CITY by operation by law.

23. SUBDIVIDER agrees to comply with all requirements set forth on Exhibit "B" (attached hereto, hereby referred to and made a part hereof).

24. This Agreement shall be deemed to include any final conditions imposed by CITY upon the approval of the tentative and final maps related to public improvements of said subdivision.

25. SUBDIVIDER agrees that, upon ten (10) days written notice from CITY, it will immediately remedy, restore, repair or replace, at its sole expense and to the satisfaction of City Engineer, all defects, damages or imperfections due to or arising from faulty materials or workmanship appearing within a period of one-year after the date of initial acceptance of all said improvements. If SUBDIVIDER shall fail to remedy, restore, repair, or replace said defects, damages or imperfections as herein required, CITY may at its option, do so and recover the full cost and expense thereof from SUBDIVIDER.

26. This Agreement shall bind the heirs, administrators, executors, successors, assigns and transferees of SUBDIVIDER. It is agreed and understood that the covenants in this Agreement shall run with the land and are for the benefit of the other lands in the CITY OF MILPITAS, and are made by SUBDIVIDER expressly, its heirs, administrators, executors, successors, assigns and transferees and to the CITY, its successors and assigns.

27. Nothing contained in this Agreement shall be construed to be a waiver, release or extension of any provision heretofore required by ordinance, resolution or order of the City Council of the CITY.

28. Time shall be of the essence of this Agreement. All covenants herein contained shall be deemed to be conditions. The singular shall include the plural; the masculine gender shall include the feminine and neuter gender. All comments presented by SUBDIVIDER hereunder shall be subject to approval of the City Attorney as to form.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement, the day and year first above written.

*Signed and Sealed this _____ day of _____, 2015.

CITY OF MILPITAS

By:_____
Thomas C. Williams, City Manager

SUBDIVIDER:

Milpitas – District 1 Associates, LLC, a Delaware limited liability company

**By: _____
Name: Frank T. Suryan, Jr.
Title: President of Managing Member

APPROVED AS TO FORM THIS

_____ day of _____, 2015

By:_____
Michael J. Ogaz, City Attorney

APPROVED AS TO SUFFICIENCY THIS

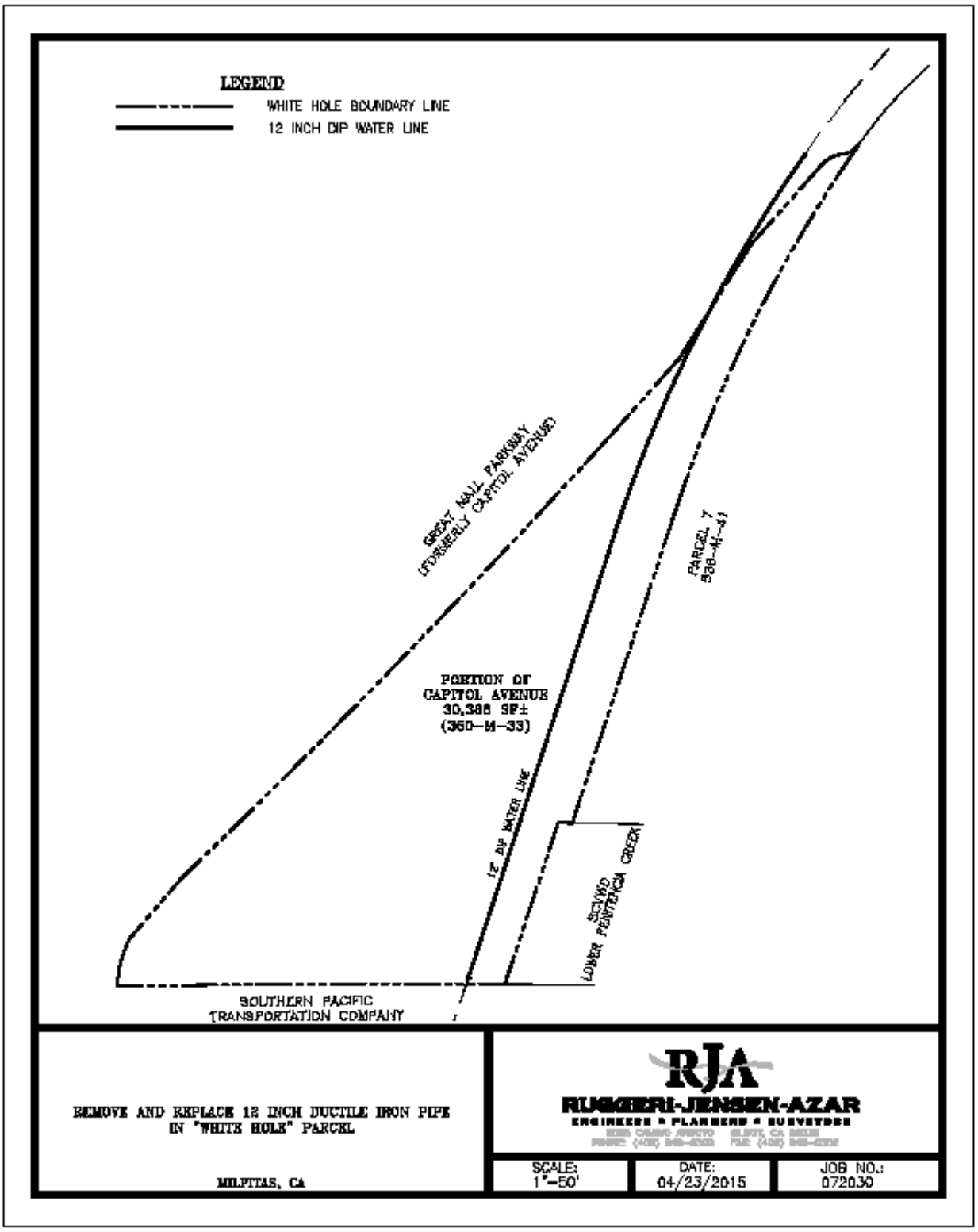
_____ day of _____, 2015

By:_____
City Engineer

* Date should be same as date on Page 1 of 6.

** It is essential that the signatures be acknowledged before a California Notary Public and attach proper acknowledgment.

**EXHIBIT "A"**


LEGEND
WHITE HOLE BOUNDARY LINE
12 INCH DIP WATER LINE
GREAT MALL PARKWAY
(FORMERLY CAPITOL AVENUE)
PARCEL 7
538-M-4)
PORTION OF
CAPITOL AVENUE
30,386 SF±
(360-M-33)
12" DIP WATER LINE
SCOTT'S
LOWER PENITENCIA CREEK
SOUTHERN PACIFIC
TRANSPORTATION COMPANY
REMOVE AND REPLACE 12 INCH DUCTILE IRON PIPE
IN "WHITE HOLE" PARCEL
MILPITAS, CA
RJA
RUGGERI-JENSEN-AZAR
ENGINEERS • PLANNERS • SURVEYORS
SCALE:
1"=50'
DATE:
04/23/2015
JOB NO.:
072030

## EXHIBIT "B"

1. Subdivider agrees to complete and execute necessary Water Service Agreements, and pay the connection fees prior to any Building Permit issuance.

2. Subdivider agrees to execute a petition to annex and establish, with respect to the property, the Special taxes levied by a Community Facility District (CFD) 2008-1 for the purpose of maintaining the public services, upon execution of this Agreement. Subdivider will not be required to annex into Community Facility District (CFD) 2005-1.

3. Pursuant to Section 2.b. of this Agreement, Subdivider agrees to enter into a Right of Entry Agreement with the City for construction and future maintenance of the project-related surface and subsurface improvements within the City's vacated right-of-way at the northwest corner of the project site as shown in Exhibit A of the Right of Entry Agreement.

4. Subdivider agrees to pay the City 2.5% Permit Automation Fee for the applicable fees.

5. Subdivider agrees to comply with all Conditions of Approval, special conditions and notes of approval for this Subdivision.

Principal: Milpitas – District 1 Associates, LLC
Project Name: District 1, Building 1

Project No. PJ1134
Bond No. _____

**CITY OF MILPITAS**
**FAITHFUL PERFORMANCE BOND**

WHEREAS, the Principal has entered into a contract with the City of Milpitas to perform the following work, to wit:_____

WHEREAS, said contract (and any City approved plans and specifications in connection therewith) is hereby referred to and made a part hereof, with like force an effect as it herein at length set forth:

NOW, THEREFORE, we the Principal and _____, as surety, are held and firmly bound unto the City of Milpitas, California, in the penal sum of **One Million Dollars ($1,000,000.00),** lawful money of the United States, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, successors, executors and administrators, jointly and severally, firmly by these presents.

The condition of this obligation is such that if the above bonded principal, it heirs, executors, administrators, successors or assigns, shall well and truly keep and perform the covenants, conditions, and provisions in said agreement and any alteration thereof on his or their part, to be kept and performed, at the time and in the manner therein specified, and shall indemnify and save harmless the City of Milpitas, its officers, agents and employees as therein stipulated, then this obligation shall become null and void; otherwise it shall be and remain in full force and effect.

As part of the obligation secured hereby and in addition to the face amount specified therefor, there shall be included costs and reasonable expenses and fees, including reasonable attorney's fees, incurred by City in successfully enforcing such obligation, all to be taxed as costs and included in any judgment rendered.

The surety hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the agreement or to the work to be performed thereunder or the specifications accompanying the same shall in any way affect its obligations on this bond, and it does hereby waive notice of any such change, extension of time, alteration or addition.

IN WITNESS WHEREOF, this instrument has been duly executed by the principal and surety above named on __ _____, 2015.

NOTE: BE SURE BOND DATE DOES NOT PRE-DATE CONTRACT.

SUBDIVIDER:_____ SURETY:_____

BY:_____ BY:_____
(write name) (write name)

BY:_____ BY:_____
(type name and office) (type name and office)

Address of Surety:_____
_____

**VERIFICATION**

I declare under the penalty of perjury that I have authority to execute this bond on behalf of the above-named surety.

Executed at _____, California, on the _____ day of _____, 2015.

_____
(Name)

_____
(Type Name)

Address: _____

_____

Subscribed and sworn to before me, a Notary Public, this _____ day of _____, 2015. )

THIS JURAT MUST BE COMPLETED BY A NOTARY IF THE VERIFICATION IS EXECUTED OUTSIDE OF CALIFORNIA

_____
(Sign)

_____
(Type)

**ACKNOWLEDGMENT**

NOTE: A Notary acknowledgment must be completed for signatures of both principal and surety. Use correct form. A power of attorney is not enough.

Form Approved:

_____

Principal: Milpitas – District 1 Associates, LLC
Project Name: District 1, Building 1

Project No. PJ1134
Bond No. _____

**CITY OF MILPITAS**
**LABOR AND MATERIALS BOND**

WHEREAS, the Principal has entered into a contract with the City of Milpitas to perform the following work, to wit:

WHEREAS, said contract (and any City approved plans and specifications in connection therewith) is hereby referred to and made a part hereof, with like force and effect as it herein at length set forth:

NOW, THEREFORE, said Principal and the undersigned as corporate surety, their heirs, successors, executors and administrators, are held firmly bound, jointly and severally, unto the City of Milpitas California, and all contractors, subcontractors, laborers, materialmen, and other persons employed in the performance of the aforesaid agreement in the sum of **One Million Dollars ($1,000,000.00),** for materials furnished or labor thereon of any kind, or for amounts due under the Unemployment Insurance Act with respect to such work or labor, that said surety will pay the same in an amount not exceeding the amount hereinabove set forth, and also in case suit is brought upon this bond, will pay, in addition to the fact amount thereof, costs and reasonable expenses and fees, including reasonable attorney's fees, incurred by City in successfully enforcing such obligation, to be awarded and fixed by the Court, and to be taxed as costs and to be included in the judgment therein rendered.

It is hereby expressly stipulated and agreed that this bond shall inure to the benefit of any and all persons, companies and corporations entitled to file claims under Title 15 (commencing with Section 3082) of Part 4 of Division 3 of the Civil Code, so as to give a right of action to them or their assigns in any suit brought upon this bond.

Should the condition of this bond be fully performed, then this obligation shall become null and void, otherwise it shall be and remain in full force and effect.

The surety hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of said agreement or to the work to be performed thereunder or the specifications accompanying the same shall in any manner affect its obligations on this bond, and it does hereby waive notice of any such change, extension, alteration or addition.

IN WITNESS WHEREOF, this instrument has been duly executed by the principal and surety above named on __ _____, 2015.

NOTE: BE SURE BOND DATE DOES NOT PRE-DATE CONTRACT.

SUBDIVIDER:_____ SURETY:_____

BY:_____ BY:_____
(write name) (write name)

BY:_____ BY:_____
(type name and office) (type name and office)

Address of Surety:_____

## VERIFICATION

I declare under the penalty of perjury that I have authority to execute this bond on behalf of the above-named surety.

Executed at _____, California, on the _____ day of _____, 2015.

_____
(Name)

_____
(Type Name)

Address: _____

_____

Subscribed and sworn to before me, a Notary Public, this _____ day of _____, 2015. )

THIS JURAT MUST BE COMPLETED BY A NOTARY IF THE VERIFICATION IS EXECUTED OUTSIDE OF CALIFORNIA

_____
(Sign)

_____
(Type)

## ACKNOWLEDGMENT

NOTE: A Notary acknowledgment must be completed for signatures of both principal and surety. Use correct form. A power of attorney is not enough.

Form Approved:

_____

Principal: Milpitas – District 1 Associates, LLC
Project Name: District 1, Building 1

Project No. PJ 1134
Bond No. _____

**CITY OF MILPITAS**
**SURVEY MONUMENTATION BOND**

WHEREAS, the Principal has entered into a contract with the City of Milpitas to install and complete certain designated public improvements, including setting of survey monuments by an engineer or surveyor prior to a certain date.

WHEREAS, said contract (and any City approved plans and specifications in connection therewith) is hereby referred to and made a part hereof, with like force an effect as it herein at length set forth:

NOW, THEREFORE, we the Principal and _____, as surety, are held and firmly bound unto the City of Milpitas, California, and that Engineer or Surveyor, who set said survey monuments in the penal sum of Ten Thousand Dollars ($10,000.00), lawful money of the United States, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, successors, executors and administrators, jointly and severally, firmly by these presents.

The condition of this obligation is such that if the above bonded principal, it heirs, executors, administrators, successors or assigns, shall well and truly keep and perform the covenants, conditions, and provisions in said agreement and any alteration thereof on his or their part, to be kept and performed, at the time and in the manner therein specified, and shall indemnify and save harmless the City of Milpitas, its officers, agents and employees as therein stipulated, then this obligation shall become null and void; otherwise it shall be and remain in full force and effect.

As part of the obligation secured hereby and in addition to the face amount specified therefor, there shall be included costs and reasonable expenses and fees, including reasonable attorney's fees, incurred by City in successfully enforcing such obligation, all to be taxed as costs and included in any judgment rendered.

The surety hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the agreement or to the work to be performed thereunder or the specifications accompanying the same shall in any way affect its obligations on this bond, and it does hereby waive notice of any such change, extension of time, alteration or addition.

IN WITNESS WHEREOF, this instrument has been duly executed by the principal and surety above named on _____, 2015.

NOTE: BE SURE BOND DATE DOES NOT PRE-DATE CONTRACT.

SUBDIVIDER:_____ SURETY:_____

BY:_____ BY:_____
(write name) (write name)

BY:_____ BY:_____
(type name and office) (type name and office)

Address of Surety: _____

## VERIFICATION

I declare under the penalty of perjury that I have authority to execute this bond on behalf of the above-named surety.

Executed at _____, California, on the _____ day of _____, 2015.

_____
(Name)

_____
(Type Name)

Address: _____

_____

Subscribed and sworn to before me, a )
Notary Public, this _____ day of )
_____, 2015. ) THIS JURAT MUST BE COMPLETED
) BY A NOTARY IF THE VERIFICATION
) IS EXECUTED OUTSIDE OF CALIFORNIA
)
)

_____
(Sign)

_____
(Type)

## ACKNOWLEDGMENT

NOTE: A Notary acknowledgment must be completed for signatures of both principal and surety. Use correct form. A power of attorney is not enough.

Form Approved:

_____

**CITY OF MILPITAS**

**CERTIFICATE RELATING TO WORKER'S COMPENSATION**
**INSURANCE PURSUANT TO LABOR CODE SECTION 3800**

(Subdivision)

I, THE UNDERSIGNED, HEREBY CERTIFY that at all times during the performance of any work of improvement under agreement with the City of Milpitas. (Check one of the following):

_____ Any general contractor engaged by me for said work will have in full force and effect Worker's Compensation Insurance pursuant to the attached certificate of Worker's Compensation Insurance issued by an admitted insurer. Said Certificate shall state that there is in existence a valid policy of Worker's Compensation Insurance in a form approved by the California Insurance Commissioner. The certificate shall show the expiration date of the policy, that the full deposit premium on the policy has been paid and that the insurer will give City at least ten days advance notice of the cancellation of the policy (an exact copy or duplicate of the Certificate of Worker's Compensation Insurance certified by the Director of Industrial Relations or the insurer may be attached).

_____ Or has in full force and effect and have attached hereto a Certificate of Consent to Self-insure issued by the Director of Industrial Relations or the insurer may be attached).

I declare under penalty of perjury that the foregoing is true and correct and executed on _____ at _____.
(Date) (City)

By: _____

_____
Official Title

On behalf of: _____
Contractor

NOTE: YOUR CERTIFICATE OF WORKER'S COMPENSATION INSURANCE MUST BE ATTACHED AND MUST MEET THE REQUIREMENTS SET FORTH ABOVE.

PLEASE NOTE THAT IF YOU HAVE ANYONE WORKING FOR OR WITH YOU, YOU MAY BE REQUIRED TO HAVE WORKER'S COMPENSATION INSURANCE. FOR FURTHER INFORMATION, CONTACT THE OFFICE OF THE DIRECTOR OF INDUSTRIAL RELATIONS.

**CITY OF MILPITAS**
**CERTIFICATE OF WORKER'S COMPENSATION INSURANCE**

Pursuant to California Labor Code Section 3800, the undersigned Insurer certifies that it is an admitted Worker's Compensation Insurer, that it has issued a valid policy of Worker's Compensation Insurance in a form approved by the California Insurance Commissioner (bearing policy number _____) to _____ _____ in connection with the above project, title and subdivider. Said policy is now in full force and effect and the full deposit premium has been paid. At least 10 days advance notice of the cancellation of said policy will be given to the City of Milpitas. The expiration date on said policy is _____.

Dated: _____

_____ _____
INSURANCE COMPANY AUTHORIZED REPRESENTATIVE (Signature)

Address: _____ _____
AUTHORIZED REPRESENTATIVE (Type Name)

_____ Address: _____

_____

---

**VERIFICATION**

I declare under the penalty of perjury that I am authorized to sign this Certificate on behalf of the above-named insurer. Executed at _____, California, on the _____ day of _____, 2015. **

_____
Authorized Signatory (Sign)

_____
(Type Name)

SUBSCRIBED AND SWORN TO BEFORE ME, a Notary Public, this _____ day of _____, 2015.

_____
(Sign)

_____
(Type Name)

Subdivider: Milpitas – District 1 Associates, LLC Project No. PJ 1134
Project Name: District 1, Building 1

**CERTIFICATE OF GENERAL LIABILITY AND AUTOMOBILE LIABILITY INSURANCE**

The undersigned insurance company certifies to the City of Milpitas, California, that it has issued a general public liability insurance policy, policy number _____ to _____ _____in connection with a work of improvement generally described as Street and underground improvement on _____. The policy names the City of Milpitas, its officers and employees (as additional insured) and insures said City, officers and employees against liability arising out of activities, including but not limited to, coverage for all work performed by or on behalf of permittee, products and completed operations of the permittee; the premises owned, occupied or used by the permittee; or automobiles owned, leased, hired or borrowed by the permittee in the following minimum amounts and for the following periods:

| COVERAGE | POLICY NUMBER | POLICY PERIOD | MINIMUM LIMITS OF LIABILITY |
|---|---|---|---|
| (1) Bodily Injury | | | $1,000,000 each person ) |
| | | | $1,000,000 each occurrence ) |
| | | | ) * |
| (2) Property Damage | | | $1,000,000 each occurrence ) |
| | | | $1,000,000 aggregate ) |

**This policy provides**: (1) primary coverage for additional insured parties; if said additional insured have other insurance against loss covered by this policy, the other insurance shall be excess insurance only; (2) that said additional insured parties are not precluded from claim under this policy against other insured parties; and (3) each insurance policy required by this clause shall be endorsed to state that coverage shall not be suspended, voided, canceled by either party, reduced in coverage or in limits except after thirty (30) days prior written notice by certified mail, return receipt requested, has been given to the City Clerk.

_____ Address of Signatory:
Insurance Company

_____ _____
Authorized Signature (Sign)

_____ _____
Authorized Signature (Type)

* If project involves less than $50,000, City will accept $300,000/$50,000

---

**VERIFICATION**

I declare under the penalty of perjury that I am authorized to sign this Certificate on behalf of the above-named insurer. Executed at _____, California, on the _____ day of _____, 2014. **

_____
Authorized Signatory (Sign)

_____
(Type Name)

SUBSCRIBED AND SWORN TO BEFORE ME, a Notary Public, this _____ day of _____, 2015.

_____ _____
(Sign) (Type Name)

** If this certificate is executed outside of California, it must be sworn to before a Notary Public.

FORM APPROVED:_____, 2015, by_____

*18E

# OFFSITE IMPROVEMENT PLANS

## PROJECT NAME: DISTRICT 1 - BUILDING 1

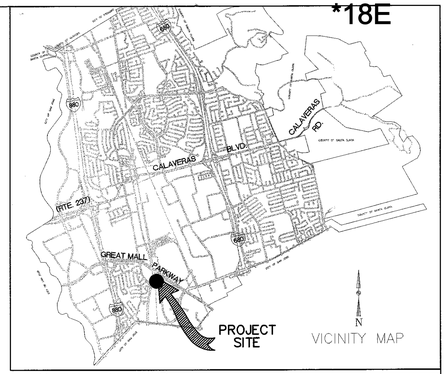
## LOT NO. 1 & 2, PARCEL MAP/TRACT NO.10140

## CITY OF MILPITAS ENCROACHMENT PERMIT NO. E-EN15-0013

CITY OF MILPITAS
INCORPORATED JANUARY 26, 1954

**CITY OF MILPITAS**

**ENGINEERING DIVISION**




## IMPROVEMENT PLANS GENERAL NOTES

### GENERAL

1. All work and materials shall comply with standard specifications, construction details, and standard drawings (listed on sheet 1) of the City of Milpitas available in the City Engineer's office. It is the responsibility of the contractor to obtain permits necessary to perform the improvements in these plans from the appropriate agencies and to comply with the agencies' requirements. All plans shall be prepared on City's Improvements Title Block. The contractor must comply with all applicable national, state and local laws.
2. Plans used for construction of public facilities purposes must be signed by the City Engineer or his representative. Any subsequent changes shall be approved by the City Engineer or his representative prior to their construction.
3. The official copy of these plans are on file in the office of the City Engineer in Milpitas.
4. This plan is subject to review and subsequent approval in the event the work has not commenced within six (6) months of the date of plan approval.
5. All utilities and improvements that become damaged during construction shall be completely restored to the satisfaction of the City Engineer.
6. A $2000 deposit shall be made to the City of Milpitas and a construction water meter shall be obtained for incidental water used during grading and roadway construction. Water meter(s) shall be installed for incidental water use during building(s) construction and pressure test of water line within the building(s).
7. The Contractor shall notify Underground Service Alert (U.S.A.) at (800) 227–2600 48 hours prior to any construction activities, and obtain a reference number.
8. Prior to any construction or installation of public facilities, the developer's engineer shall arrange a pre–construction conference between the contractors and the City Public Works Inspector. This shall take place a minimum of seven (7) days prior to the scheduled start of work. At the conference, the developer's engineer shall present the Public Works Inspector with a certified copy of a material list and specifications for installation. Prior to the installation, approval by the City Engineer is required of any non–standard materials. Any non–standard materials shall be demonstrated by the developer's engineer and contractor to equal or exceed City standards.
9. The contractor shall call City of Milpitas Public Works Facilities Inspection at (408) 586–2884 to schedule inspections, 48 hours prior to the start of construction.
10. Prior to any work, the contractor shall obtain a City Business license and a Public Works Construction or Encroachment Permit.
11. The Contractor is responsible for the preservation and/or perpetuation of all existing monuments and stakes within the Contractor's area of work. The Contractor shall not disturb or remove any monuments or stakes without the permission of the City Engineer, and he shall bear the expense of resetting any monuments or stakes which may be disturbed or removed with or without permission. The Contractor shall provide a minimum of 15 Working days notice to the City Engineer prior to disturbance or removal of existing monuments or stakes. The Contractor shall utilize the services of a California Licensed Land Surveyor to reset all disturbed or removed monuments and stakes or provide witness monuments, and file the required documentation with the County Surveyor pursuant to the Business and Professions Code Section 8771.
12. When it is found that field conditions are not as shown on the plans, the Consulting Engineer shall make revisions and/or adjustments to the satisfaction of the City Engineer prior to further construction.
13. Upon completion of improvements, the developer's engineer shall submit a letter to the City Engineer certifying that those privately maintained improvements (street, lighting, utilities, etc.) have been constructed per the improvement plans.
14. Developer shall coordinate with Pacific Gas and Electric Company for the design and installation of all gas and electric facilities.
15. Developer shall coordinate with AT&T for the design and installation of all Telephone facilities.
16. Construction shall not begin until 7 AM and shall end by 7 PM, weekdays and weekends. No work is allowed on official City holidays.
17. A National Pollution Discharge Elimination System Permit (NPDES construction permit) is required prior to commencement of construction activity related to this site and shall be obtained by the Owner and/or Owner's Contractor as appropriate. Any discharge (during construction) or groundwater into the downstream storm system must be uncontaminated. The Contractor shall make this determination prior to any discharge.
18. If archaeological materials are uncovered during grading, trenching or other excavation, earthwork within 100' of this area shall be stopped until a professional archaeologist who is certified by the Society of California Archaeologist (SCA) or the Society of Professional Archaeologist (SOPA) has had an opportunity to evaluate the significance of the find and suggest appropriate mitigation measures, if they are deemed necessary.
19. Record drawings original plans, including a copy of the AutoCAD files (digital format) shall be furnished to the City Engineer within sixty (60) days of the completion of construction and prior to initial acceptance of public improvements.
20. All grading shall comply with City of Milpitas Grading Ordinance, this plan, and the Geotechnical Report prepared by ENGEO. Incorporated dated February 23, 2012 and all subsequent addendums.
21. City approval of plans does not relieve the developer from his/her responsibility to correct errors and omissions discovered during construction. Upon request, any required plan revisions shall be promptly submitted to the City Engineer for approval.
22. A water valve shall be installed for each residential or commercial area after the meter and prior to entry of the building such that it is accessible to homeowner and City Meter Reader.
23. The following entities shall be responsible for inspection and maintenance/ownership of the listed facilities and completion certificate by design engineer(state ownership's name and inspection by P.W. inspection or Build. Div.):

| Facilities | Ownership | Inspection | Design Engineer |
|---|---|---|---|
| Public street/Parking area in public R/W | City of Milpitas | _____ | _____ |
| Public water system including fire hydrants | City of Milpitas | _____ | _____ |

24. Each parcel shall have separate solid waste enclosure and Allied Waste service. Unless, necessary agreements have been recorded to provide for joint use of enclosure and or Allied Waste services for more than one parcel.

### STREET SURFACE NOTES

1. Upon completion of rough grading, actual thickness (structural section) of the base material and AC pavement shall be determined based on the results of R–values, Sand equivalents laboratory testing. Geotechnical/Soil Engineer shall recommend the structural sections of streets to the City Engineer for review and approval.
2. The contractor shall not order or place any Portland cement concrete or asphalt concrete paving until the forms and subgrade and/or aggregate base have been inspected by the City Public Works Inspector and approved by the engineer in charge of construction.
3. Edge of existing pavement shall be tack coated prior to constructing new pavement.
4. Standard street monuments shall be installed on all street intersections and other locations shown on this plan in conformance with City Standard Drawing No. 446.
5. Driveway locations shall be set by owner's engineer in compliance with City Standard Drawing No, 430 or 432, unless locations are shown on these plans.
6. One street name sign assembly shall be installed in conformance with City Standard Drawing No. 440 at each intersection, and where shown on plans.
7. All fire hydrants, electroliers and meter boxes shall clear driveways and other facilities by 5', 5' and 1' respectively.
8. All existing facilities shall be adjusted to finish grade as directed by City Public Works Inspector. Manholes, water valve boxes, clean out frames and covers shall be brought to finished grade by the contractor after paving is completed.
9. Minimum box trees to be built per Landscape Plan.
10. Mailboxes shall be provided as required by U.S. Postal Services, but will not be inspected by the Public Works Inspector.
11. The final or surface layer of asphalt concrete shall not be placed until all on–site improvements have been completed, including all grading, and until all unacceptable concrete work has been removed and replaced, unless otherwise approved by the City Engineer.

### UNDERGROUND NOTES

1. The letter "W" shall be impressed in the face of curb where each water service crosses the curb, the letter "S" shall be impressed in the face of curb where each sewer lateral crosses the curb and the letter "R" shall be impressed in the face of curb where each recycled water service crosses the curb.
2. The location, depth and existence of underground improvements are shown in their approximate positions based upon information available to the engineer. The contractor shall excavate inspection holes "pot holes" and determine the location and depth of all underground structures and utilities that are in the vicinity of and/or may be affected by the proposed improvement work prior to any construction work which could damage or conflict with said structures and/or utilities.
3. Minimum cover for utilities in roadway (from top of pipe to roadway surface) shall be provided (60" sanitary sewer, 42" water line in street, 48" water line in easement, 24" storm line in street). Where the minimum cover cannot be achieved, such locations shall be specifically identified on the plans and the method of protecting the pipe and valve stems shall be indicated. The following solutions shall be subject to the City Engineer's approval:
   a. Use of ductile iron pipe and butterfly valves.
   b. Concrete cap.
   c. Any other solution devised by the Engineer and Contractor.
4. Water mains are to be separated a minimum of 10' horizontal distance and 1' vertical distance from sewer and recycled water laterals and mains. Potable water lines shall be above all storm drain, sanitary sewer and recycle water lines.
5. Separation between the Recycle water lines from other utilities; such as potable water, fire protection and sanitary sewer; shall be in accordance with the City of Milpitas "Recycled (non–potable) Water Guidelines". Call (408) 586–3329 for a copy.
6. Building sewers shall not be connected to laterals until sewers are tested.
7. Sanitary sewer lateral shall be constructed to various building locations to be staked in field by owner's engineer prior to construction. A backflow protection device shall be installed per City Standard Drawing No. 624 when the elevation of the lowest floor containing gravity waste drainage is less than one foot above the surface elevation of the nearest upstream public sewer structure (manhole, etc.).
8. Connections to existing water mains shall be approved by City Engineer. Contractor shall perform all excavation, prepare site, furnish all materials, install tapping tee, valve and all thrust blocks, backfill, restore surface, and clean up. Non–metallic water lines shall be installed with a trace wire, per City Standard Drawing No. 752.
9. All water valves shall be clustered, unless otherwise directed by the City Engineer.
10. Each lot shall have separate water, sewer and storm drain services.
11. If applicable to this project, water service pressure regulators and sewage backflow protection devices shown are for the information of the developer and City's Building Division. These items are not included in the Public Works inspection or acceptance.
12. All utility stubs, especially water line components, shall be capped.
13. Abandonment of existing water lines shall take place at the main line.
14. Contractors shall not turn water valves without prior approval Utility Maintenance Supervisor at (408) 586–2640.
15. All metallic underground piping shall be protected against corrosion per City standard specifications.
16. The contractor is responsible for performing locate services for those facilities installed by the contractor until such time as the work has been officially accepted by the City of Milpitas. The marking, labeling, and timing of such locates shall be in conformance with the requirements of Underground Service Alert.
17. Contractor shall provide video inspection of all storm and sanitary sewer mains. Video inspection of all mains shall be performed after all testing has been completed.
18. If recycled water is provided to the site, owner is responsible to attend Site Supervisor training and submit Annual Self Inspection Reports. If recycled water is used inside a building, Owner is also responsible to perform cross–connection tests every four years.

### SIGNING AND STRIPING NOTES

1. All signs shall conform to California Manual of Uniform Traffic Control Device (CAMUTCD) 2003.
2. Signs shall be of standard size designated for each type in the CAMUTCD, except where noted otherwise.
3. Mounting shall conform to CAMUTCD and applicable "standard plans," State of California (Caltrans), latest edition, except where otherwise indicated on plans.
4. All traffic signs (except street nameplates) shall be of minimum .080 gage aluminum blanks with 3M high intensity Prismatic reflective faces or approved equal meeting minimum CAMUTCD reflectivity requirements.
5. Striping shall conform to appropriate provisions of Chapter 6, CAMUTCD, except where noted otherwise. Traffic stripes and pavement markings shall be thermoplastic with glass beads unless approved otherwise by City Engineer.
6. Striping paint for City streets shall be:
   a. Rapid Dry Water Brome–White, Yellow and Black to conform to state specifications.
   b. Glass beads shall conform to State Specification No. 8010–004 (Type II).

   The certification requirements shall be submitted for ready mixed white and yellow paints.
7. Raised Pavement Markers of various types shall conform to Section 85, "Pavement Markers", of the State Standard Specifications, these Technical Provisions, and as shown on the plans.
8. Painted legends shall conform to standard sizes and patterns used by the City of Milpitas. Arrangements may be made to use the City's Stencils by contacting Public Works inspector.

### STREET LIGHTING NOTES

1. Splicing of street light conductor is permitted only in pull boxes.
2. Electroliers shall be connected to the closest underground secondary P.G.&E. source. Pull (junction) boxes shall be required at each electrolier and where more than one bend of the cable is necessary to reach to electrolier, where shown on plans, and at service point where no P.G. & E. box is installed. Install in–line fuses at electroliers, in the hand hole of each pole. Fuses shall be installed on each energized lead, and shall be adequately sized to conform with the National Electrical Codes (NEC) and enclosed in a phenolic case. Head configuration shall be either double door mounted ballast or single door – swing down ballast. 120/240 volt ballasts shall be provided. Voltage and wattage of electroliers shall be as shown on the plans.
3. Street Light Numbers will be assigned by the City and installed on the poles by the contractor as directed by the Public Works Inspector.
4. Electroliers shall be LED lights per new street light city standard (most recent 2013). See street light plans for specifications, HAPCO drawing B31859 and B29156.

**RECEIVED**

MAR 25 2015

CITY OF MILPITAS
ENGINEERING DIVISION

1–800–227–2600
CALL BEFORE YOU DIG
USA
UNDERGROUND SERVICE ALERT
1–800–227–2600

## CIVIL PLANS

| SHEET NO | TITLE |
|---|---|
| C1 | TITLE SHEET |
| C2 | PROJECT NOTES |
| C3 | CONDITIONS OF APPROVAL |
| C4 | CONDITIONS OF APPROVAL |
| C5 | INDEX MAP, LEGEND & ABBREVIATIONS |
| C6 | DETAILS |
| C7 | SYSTEMS MAP |
| C8 | ASSEMBLY BLOWUPS |
| C9 | GREAT MALL PARKWAY GRADING AND UTILITIES |
| C10 | GREAT MALL PARKWAY SIGNING AND STRIPING |
| C11 | GREAT MALL PARKWAY WATER MAIN REPLACEMENT |
| C12 | McCANDLESS DRIVE IMPROVEMENTS |
| C13 | McCANDLESS DRIVE IMPROVEMENTS |
| C14 | McCANDLESS DRIVE SIGNING AND STRIPING |
| C15 | EROSION CONTROL |
| C16 | BEST MANAGEMENT PRACTICES |
| C17 | CITY STANDARD DETAILS |
| C18 | CITY STANDARD DETAILS |
| C19 | CITY STANDARD DETAILS |
| C20 | EVA PLAN (FOR INFORMATIONAL USE ONLY) |
| C21 | EMERGENCY VEHICLE ACESS PLAN |

## LANDSCAPE PLANS

| SHEET NO | TITLE |
|---|---|
| L0.00 | TITLE SHEET |
| L1.00 | CONSTRUCTION LEGENDS, NOTES, SCHEDULES |
| L1.01 | CONSTRUCTION PLAN |
| L1.02 | CONSTRUCTION PLAN |
| L1.21 | CONSTRUCTION SPECIFICATIONS |
| L2.00 | IRRIGATION LEGENDS, NOTES, SCHEDULES |
| L2.01 | IRRIGATION PLAN |
| L2.02 | IRRIGATION PLAN |
| L2.11 | IRRIGATION DETAILS |
| L2.12 | IRRIGATION DETAILS |
| L2.13 | IRRIGATION DETAILS |
| L2.21 | IRRIGATION SPECIFICATIONS |
| L2.22 | IRRIGATION SPECIFICATIONS |
| L3.00 | PLANTING LEGENDS, NOTES, SCHEDULES |
| L3.01 | PLANTING PLAN |
| L3.02 | PLANTING PLAN |
| L3.11 | PLANTING DETAILS |
| L3.21 | PLANTING SPECIFICATIONS |

## TRAFFIC SIGNAL PLANS

| SHEET NO | TITLE |
|---|---|
| T1–T4 | GREAT MALL PARKWAY AND McCANDLESS DRIVE |

## DEFERRED SUBMITTALS

STREET LIGHTING PLANS
JOINT TRENCH PLANS
SBWR SUBMITTAL
MULTI–USE TRAIL PLANS
PHOTOMETRIC PLANS

3RD REVIEW - 9-11-1192

E-EN15-0013 - P-71134 - 1137

**CIVIL ENGINEER:** I hereby declare that I am the engineer of work for this project, that I have exercised responsible charge over the design of the project as defined in section 6703 of the business and professions codes, and that the design is consistent with current standards. The design shown hereon is necessary and reasonable and does not restrict any historic drainage flows from adjacent properties nor increase drainage to adjacent properties. The design includes principles and techniques to reduce quantity and improve the quality of storm water runoff, as required by NPDES. I understand that the check of project drawings and specifications by the City of Milpitas is confined to a review only and does not relieve me, as engineer of work, of my responsibilities for project design.

SIGNATURE P.E. SEAL

Firm:

Address:

Telephone:

REGISTERED PROFESSIONAL ENGINEER
JORGE M. DURAN
C–59978
CIVIL
STATE OF CALIFORNIA

RJA
RUGGERI-JENSEN-AZAR
ENGINEERS ▪ PLANNERS ▪ SURVEYORS
8055 CAMINO ARROYO GILROY, CA 95020
PHONE: (408) 848–0300 FAX: (408) 848–0302

**SOILS ENGINEER:** These plans have reviewed and found to be in substantial conformance with the intent and purpose of the geotechnical exploration report dated _____, _____; prepared by _____

(Name) Date

Firm:

Address:

Telephone:

SEAL

**Record Drawings**
To be competed prior to acceptance of work by the City

Signature + Seal Date
P.E. No. Exp.
Public Works Inspector:

**Revisions**

| Num. | Date | By | Description | City Engr. Aprv. | Date |
|---|---|---|---|---|---|
| | | | | | |

**CITY OF MILPITAS**
**ENGINEERING DIVISION**

Approved:

City Engineer Date
Any changes to public improvements shall be approved by the City engineer

Recommended for approval:
Fire Dept. Date:
Engineering Date:

Project No. 072030
City Project No. 3822
City Drawing No. 2–1192

Sheet 1 of 21

## OWNERS' STATEMENT

WE HEREBY STATE THAT WE ARE THE OWNERS OF OR HAVE SOME RIGHT, TITLE, OR INTEREST IN AND TO THE REAL PROPERTY INCLUDED WITHIN THE SUBDIVISION SHOWN HEREON; THAT WE ARE THE ONLY PERSONS WHOSE CONSENT IS NECESSARY TO PASS A CLEAR TITLE TO SAID REAL PROPERTY; THAT WE CONSENT TO THE MAKING AND FILING OF THIS SUBDIVISION MAP AS SHOWN WITHIN THE DISTINCTIVE BORDER LINE.

THE REAL PROPERTY DESCRIBED BELOW IS DEDICATED AS AN EASEMENT FOR PUBLIC PURPOSES TO THE CITY OF MILPITAS FOR OPERATION, ALTERATION, RELOCATION, MAINTENANCE, REPAIR AND REPLACEMENT OF ALL PUBLIC SERVICE FACILITIES AND THEIR APPURTENANCES, OVER, UNDER, ALONG AND ACROSS THE FOLLOWING:

1. EASEMENTS FOR PUBLIC SERVICE, UTILITY, AND SIDEWALK EASEMENT PURPOSES (PSUSE).
2. EASEMENTS FOR EMERGENCY VEHICLE ACCESS PURPOSES (EAE).
3. EASEMENTS FOR OVERLAND DRAINAGE RELEASE OF STORM WATER (ODE).
4. EASEMENTS FOR MULTI-USE TRAIL AND ACCESS (MTAE).

THE ABOVE MENTIONED EASEMENTS (PSUSE), (EAE), (ODE), AND (MTAE) SHALL REMAIN OPEN AND FREE FROM BUILDINGS AND STRUCTURES OF ANY KIND EXCEPT UTILITY SERVICE AND UTILITY STRUCTURES, CURBS, SIDEWALKS, APPURTENANCES TO THE ABOVE, AND ALL LAWFUL UNSUPPORTED BUILDING OVERHANGS. UNOBSTRUCTED CONTINUOUS ACCESS SHALL BE MAINTAINED AT ALL TIMES.

WE HEREBY RETAIN FOR THE PRIVATE USE OF THE LOT OWNERS WITHIN THIS SUBDIVISION, THEIR LICENSEES, VISITORS AND TENANTS, WITH MAINTENANCE BY THE HOMEOWNERS ASSOCIATION AS STATED IN THE DECLARATION OF COVENANTS, CONDITIONS AND RESTRICTIONS CREATED FOR "TRACT 10140, MCCANDLESS DISTRICT 1", THE FOLLOWING:

1. EASEMENTS FOR PRIVATE SERVICES AND UTILITY EASEMENT PURPOSES (PRUE), INCLUDING, BUT NOT LIMITED TO, THE CONSTRUCTION AND MAINTENANCE OF SIDEWALKS, CONDUITS FOR STORM DRAINS, SANITARY SEWERS, WATER LINES, AND THEIR APPURTENANCES.

SAID EASEMENTS SHALL REMAIN OPEN AND FREE FROM BUILDINGS AND STRUCTURES AND THEIR APPURTENANCES, EXCEPT FOR IRRIGATION SYSTEMS AND THEIR APPURTENANCES, LAWFUL FENCES, WALKWAYS, AND ALL LAWFUL UNSUPPORTED BUILDING OVERHANGS. UNOBSTRUCTED CONTINUOUS ACCESS SHALL BE MAINTAINED AT ALL TIMES.

OWNERS:

MILPITAS-DISTRICT 1 ASSOCIATES, LLC, A DELAWARE LIMITED LIABILITY COMPANY (OWNER OF LOT 1 ONLY)

BY: _____

NAME: Michael A. Barmettler

TITLE: Secretary of Managing Member

THE CITY OF MILPITAS, A MUNICIPAL CORPORATION OF THE STATE OF CALIFORNIA (OWNER OF LOT 2 ONLY)

BY: _____

NAME: _____

TITLE: _____

## OWNER ACKNOWLEDGMENT

A NOTARY PUBLIC OR OTHER OFFICER COMPLETING THIS CERTIFICATE VERIFIES ONLY THE IDENTITY OF THE INDIVIDUAL WHO SIGNED THE DOCUMENT TO WHICH THIS CERTIFICATE IS ATTACHED, AND NOT THE TRUTHFULNESS, ACCURACY, OR VALIDITY OF THAT DOCUMENT.

STATE OF CALIFORNIA
COUNTY OF Orange } ss.

ON March 19, 2015, BEFORE ME, Monica Fajardo, Notary Public

PERSONALLY APPEARED Michael A. Barmettler
WHO PROVED TO ME ON THE BASIS OF SATISFACTORY EVIDENCE TO BE THE PERSON(S) WHOSE NAME(S) IS/ARE SUBSCRIBED TO THE WITHIN INSTRUMENT AND ACKNOWLEDGED TO ME THAT HE/SHE/THEY EXECUTED THE SAME IN HIS/HER/THEIR AUTHORIZED CAPACITY(IES), AND THAT BY HIS/HER/THEIR SIGNATURE(S) ON THE INSTRUMENT THE PERSON(S), OR THE ENTITY UPON BEHALF OF WHICH THE PERSON(S) ACTED, EXECUTED THE INSTRUMENT.

I CERTIFY UNDER PENALTY OF PERJURY UNDER THE LAWS OF THE STATE OF CALIFORNIA THAT THE FOREGOING PARAGRAPH IS TRUE AND CORRECT.

WITNESS MY HAND.

NOTARY'S SIGNATURE: _____
NAME OF NOTARY (PLEASE PRINT): Monica Fajardo
PRINCIPAL COUNTY OF BUSINESS: Orange
MY COMMISSION NUMBER: 2072491
MY COMMISSION EXPIRES: June 24, 2018

## OWNER ACKNOWLEDGMENT

A NOTARY PUBLIC OR OTHER OFFICER COMPLETING THIS CERTIFICATE VERIFIES ONLY THE IDENTITY OF THE INDIVIDUAL WHO SIGNED THE DOCUMENT TO WHICH THIS CERTIFICATE IS ATTACHED, AND NOT THE TRUTHFULNESS, ACCURACY, OR VALIDITY OF THAT DOCUMENT.

STATE OF CALIFORNIA
COUNTY OF _____ } ss.

ON _____, 2015, BEFORE ME, _____,

PERSONALLY APPEARED _____
WHO PROVED TO ME ON THE BASIS OF SATISFACTORY EVIDENCE TO BE THE PERSON(S) WHOSE NAME(S) IS/ARE SUBSCRIBED TO THE WITHIN INSTRUMENT AND ACKNOWLEDGED TO ME THAT HE/SHE/THEY EXECUTED THE SAME IN HIS/HER/THEIR AUTHORIZED CAPACITY(IES), AND THAT BY HIS/HER/THEIR SIGNATURE(S) ON THE INSTRUMENT THE PERSON(S), OR THE ENTITY UPON BEHALF OF WHICH THE PERSON(S) ACTED, EXECUTED THE INSTRUMENT.

I CERTIFY UNDER PENALTY OF PERJURY UNDER THE LAWS OF THE STATE OF CALIFORNIA THAT THE FOREGOING PARAGRAPH IS TRUE AND CORRECT.

WITNESS MY HAND.

NOTARY'S SIGNATURE: _____
NAME OF NOTARY (PLEASE PRINT): _____
PRINCIPAL COUNTY OF BUSINESS: _____
MY COMMISSION NUMBER: _____
MY COMMISSION EXPIRES: _____

## CITY CLERK'S CERTIFICATE

I, MARY LAVELLE, CITY CLERK OF THE CITY OF MILPITAS, CALIFORNIA, HEREBY CERTIFY THAT SAID CITY COUNCIL OF THE CITY OF MILPITAS, AS GOVERNING BODY OF SAID CITY AT A REGULAR MEETING HELD ON _____, 20____, HAS TAKEN THE FOLLOWING ACTIONS:

1. APPROVED THIS FINAL MAP, "TRACT 10140, MCCANDLESS DISTRICT 1".
2. ACCEPTED, SUBJECT TO IMPROVEMENT, ON BEHALF OF THE PUBLIC THOSE PARCELS OF LAND DEDICATED FOR PUBLIC USE IN CONFORMITY WITH THE TERMS OF THE DEDICATION TO WIT:
   a.) EASEMENTS FOR PUBLIC SERVICE, UTILITY, AND SIDEWALK EASEMENT PURPOSES (PSUSE).
   b.) EASEMENTS FOR EMERGENCY VEHICLE ACCESS PURPOSES (EAE).
   c.) EASEMENTS FOR OVERLAND DRAINAGE RELEASE OF STORM WATER (ODE).
   d.) EASEMENTS FOR MULTI-USE TRAIL AND ACCESS (MTAE).
3. PURSUANT TO SECTION 66499.20.2 OF THE SUBDIVISION MAP ACT, THE FILING OF THIS MAP SHALL CONSTITUTE ABANDONMENT OF THE FOLLOWING:
   a.) THAT PORTION OF THE "SLOPE EASEMENT" GRANTED TO THE CITY OF MILPITAS, IN THE DOCUMENT RECORDED OCTOBER 20, 1975, IN BOOK B672, PAGE 90, OFFICIAL RECORDS OF SANTA CLARA COUNTY, CALIFORNIA, CONTAINED WITHIN THE SUBDIVISION SHOWN HEREON.
   b.) THAT PORTION OF THE "LANDSCAPE EASEMENT" GRANTED TO THE CITY OF MILPITAS, IN THE DOCUMENT RECORDED DECEMBER 10, 1985, IN BOOK J542, PAGE 2058, OFFICIAL RECORDS OF SANTA CLARA COUNTY, CALIFORNIA, CONTAINED WITHIN THE SUBDIVISION SHOWN HEREON.
   c.) A PORTION OF CAPITOL AVENUE AS SHOWN ON THE RECORD OF SURVEY FILED JANUARY 17, 1975, IN BOOK 350 OF MAPS, AT PAGE 33, RECORDS OF SANTA CLARA COUNTY, CALIFORNIA, CONTAINED WITHIN THE SUBDIVISION SHOWN HEREON.

THE ABANDONMENTS DESCRIBED ABOVE ARE THEREFORE NOT SHOWN ON THIS MAP. ALL OTHER PUBLIC STREETS AND EASEMENTS NOT SPECIFICALLY LISTED HEREON FOR ABANDONMENT ARE RETAINED FOR PUBLIC USE.

DATED: _____

_____
MARY LAVELLE
CITY CLERK, CITY OF MILPITAS

## RECORDER'S CERTIFICATE

FILE NO._____ FEE $_____PAID. ACCEPTED FOR RECORD AND FILED IN BOOK_____OF MAPS AT PAGES_____, SANTA CLARA COUNTY RECORDS, THIS_____ DAY OF_____, 20__ AT_____ M., AT THE REQUEST OF FIDELITY NATIONAL TITLE INSURANCE COMPANY.

REGINA ALCOMENDRAS, RECORDER
SANTA CLARA COUNTY, CALIFORNIA BY_____
DEPUTY

# TRACT 10140
# McCANDLESS DISTRICT 1

CITY OF MILPITAS

SANTA CLARA COUNTY, CALIFORNIA

**BEING ALL OF "PARCEL 7" AS DESCRIBED IN THE GRANT DEED, RECORDED MARCH 10, 2015, AS DOCUMENT NO. 22878627, OFFICIAL RECORDS OF SANTA CLARA COUNTY, CALIFORNIA, AND A PORTION OF CAPITOL AVENUE AS SHOWN ON THE RECORD OF SURVEY FILED JANUARY 17, 1975, IN BOOK 350 OF MAPS, AT PAGE 33, RECORDS OF SANTA CLARA COUNTY, CALIFORNIA**

Prepared By:
RUGGERI-JENSEN-AZAR & ASSOCIATES
8055 Camino Arroyo, Gilroy, CA 95020

MARCH 2015

*21

City of Milpitas, California

**BUDGET CHANGE FORM**

| Type of Change | From | | To | |
|---|---|---|---|---|
| | Account | Amount | Account | Amount |
| **Check one:** ☒ Budget Appropriation ☐ Budget Transfer | 500-2940 | $ 31,000 | 500-426-4241 | $ 31,000 |

**Explain the reason for the budget change:**

**Background:** During the annual inspection of Ladder Truck, TK86 it was determined that the yoke supporting the ladder was leaning causing the firefighter in the basket to be unsafe. The City received the following quotes to repair the damage to the yoke. Both companies are needed to be involved in the repair since different segments of the truck and ladder are involved.

| | |
|---|---|
| Burton Fire | $11,053.43 |
| Sutphen Corporation | $19,963.67 |
| | $31,017.10 Total |

**Alternatives:** If the replacement of the yoke on Ladder Truck TK86 is not completed, the firefighter using the ladder will be exposed to a fall. The truck must be placed out of commission and can not respond to calls.

**Fiscal Impact:** A budget appropriation from the equipment management fund in the amount of $31,000 is needed to replace the yoke.

**Recommendation:**

1) Authorize staff to pay invoices to Burton Fire and Sutphen Corporation totaling $31,017.10 for Ladder Truck TK86 repairs.
2) Approve a budget appropriation from the Equipment Management Fund into the Public Works Fleet Maintenance Budget.

☒ **Check if City Council Approval required.** **Meeting Date**: May 5, 2015

| | | |
|---|---|---|
| **Requested by:** | Steven Machida, City Engineer/Acting PW Director | **Date:** April 24, 2015 |
| **Reviewed by:** | **Finance Director:** Tina C Kane | **Date:** 4/24/15 |
| **Approved by:** | **City Manager:** | **Date:** |
| **Date approved by City Council, if required:** | | **Confirmed by:** |

# MEETING MINUTES
# CITY OF MILPITAS

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| **Minutes of:** | **Regular Meeting of Milpitas City Council** |
| **Date:** | **Tuesday, May 5, 2015** |
| **Time:** | **5:30 PM Closed Session**<br>**6:00 PM Study Session**<br>**7:00 PM Regular Business** |
| **Location:** | **Council Chambers, Milpitas City Hall,**<br>**455 East Calaveras Blvd., Milpitas** |

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**CALL TO ORDER**

Mayor Esteves called the meeting to order at 5:30 PM. The City Clerk noted the roll.

**PRESENT:** Mayor Esteves, Vice Mayor Montano, Councilmembers Barbadillo, Giordano and Grilli

**ABSENT**: None

Assistant City Attorney Johnny Phan was present in place of City Attorney Mike Ogaz.

**CLOSED SESSION**

City Council convened in Closed Session to discuss two items.

**ANNOUNCEMENT**

None out of Closed Session.

**STUDY SESSION**

The study session on the draft CIP for FY 2015-2020 was not heard and was continued to another meeting date.

City Council convened in Open Session for scheduled regular business at 7:08 PM.

**PLEDGE**

Boy Scouts Troop No. 92 presented the flags and led the pledge of allegiance.

**INVOCATION**

Councilmember Grilli invited teacher Oona Cadorin (Teacher of the Year 2014) to give the invocation to start the meeting.

**MEETING MINUTES**

Motion: to approve the minutes of April 21, 2015 City Council meeting

Motion/Second: Councilmember Giordano/Councilmember Grilli

Motion carried by a vote of: AYES: 5
NOES: 0

**SCHEDULE OF MEETINGS**

Motion: to approve Council Calendar/Schedule of Meetings for May 2015

Motion/Second: Councilmember Giordano/Councilmember Grilli

Motion carried by a vote of: AYES: 5
NOES: 0

**PRESENTATION**

Mayor Esteves presented the following proclamations:

- *National Foster Care Resource Parent Awareness Month* – accepted by Quyen Vu, a social worker for the County of Santa Clara.
- *Older Americans Month* for May 2015 – several Senior Advisory Commissioners and Senior Center staff accepted the proclamation. Mayor Esteves presented additional commendations to Commissioners Barbara Ebright and Mary Banick.

- *Building Safety Month* for May 2015, accepted by five employees of the Building & Safety Department, in the 11th year participating in this special month of attention to safety of buildings to preserve life and property.
- Honoring Jason Scrempos, a highly skilled Milpitas High School football player who will attend University of Washington next year. The Mayor proclaimed "Jason Scrempos Day."

**PUBLIC FORUM**

Diane Kruger, San Jose resident, did not care for the waiver and release form for non-Milpitas residents required of parents to sign for children enrolling in swim classes.

Robert Marini, Milpitas resident, showed a pie chart named "Number of people in parcel type" and discussed related utility rates for sewer service.

Rob Means, 1421 Yellowstone resident, tried to show a video webage displaying information on Personal Rapid Transit.

Joseph Weinstein, Milpitas resident, described the Milpitas Police Honor Guard, consisting of off-duty police officers who take pride in their efforts at special memorable occasions. He urged financial support by the community to assist the Honor Guard with purchase of uniforms.

Voltaire Montemayor, Milpitas resident, was proud to live in this city. He hoped to have a successful karoake tournament. He would like to have big water tanks installed that say "City of Milpitas" on them.

**ANNOUNCEMENTS**

City Manager Tom Williams announced that this afternoon 98.5 KFOX radio was in Milpitas, to announce results of a contest for best Mexican restaurant in the South Bay, and nearby La Milpa restaurant in Milpitas was selected.

Vice Mayor Montano noted a special Mother's Day event on Saturday, from 12–3 PM, featuring mariachis, Pacific Asian and Folkorico dancers, to be held at the Milpitas Community Center.

**ANNOUNCEMENT OF CONFLICT OF INTEREST AND CAMPAIGN CONTRIBUTIONS**

City Attorney Ogaz asked the Mayor and Councilmembers if they had any personal conflicts of interest or reportable campaign contributions. No contributions were reported.

Councilmember Garry Barbadillo announced that he needed to recuse himself on agenda item no. 2 regarding the 450 Montague Expressway development project.

**APPROVAL OF AGENDA**

Motion: to approve the agenda, as submitted

Motion/Second: Councilmember Giordano/Vice Mayor Montano

Motion carried by a vote of: AYES: 5
NOES: 0

**CONSENT CALENDAR**

Motion: to approve the Consent Calendar items (noted by *asterisk), as amended

Mayor Esteves requested to remove item no. 12 (International Park) from the consent calendar.

Motion/Second: Councilmember Giordano/Vice Mayor Montano

Motion carried by a vote of: AYES:
NOES: 0

* 5. Commission Appointments

On the Sister Cities Commission, per the Mayor's recommendation, appointed Peter Chang as a voting, regular member to a term that will expire in September of 2015, and newly appointed Mary Llamas as Alternate No. 1 to a term that will expire in September of 2016.

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| * 8. Fee Waiver | Waived $1,450 in fees for City fees (for the rental of Milpitas Sports Center Football Field and Special Event Permit Fee) related to the annual American Cancer Society's Relay for Life walkathon event at the Sports Center on June 20-21, 2015. |
| * 9. New Banners | Approved new designs for banners to be placed on City streetlight poles. |
| *10. Investment Portfolio status | Received the investment report for the quarter ended March 31, 2015. |
| *11. Financial Status | Received the financial status report for the City of Milpitas for the nine months ended March 31, 2014. |
| 12. International Park | Mayor Esteves asked for this item to come off consent, however it was not heard and would be continued to a future Council meeting. |
| *13. Adopt Ordinance 38.822 | Waived the second reading and adopted Ordinance No. 38.822 amending the Mixed Use zone to permit transitional and supportive housing and the Residential 2 zone to permit manufactured housing. |
| *14. Resolution | Adopted Resolution No. 8468 authorizing the purchase of one unmarked police vehicle from the National Auto Fleet Group for the not-to-exceed amount of $24,843.73 through a cooperative procurement contract in accordance with the Milpitas Municipal Code. |
| *15. Resolution | Adopted Resolution No. 8469 approving the request from AEG Cycling authorizing the temporary street closure of various streets (Piedmont Rd. and others) on Tuesday, May 12, 2015 from 9:49 am to 10:57 am for the Amgen Tour of California bicycle event. |
| *16. Resolution | Adopted Resolution No. 8470 directing the preparation of the Annual Engineer's Report for LLMD No. 95-1 at McCarthy Ranch. |
| *17. Resolution | Adopted Resolution No. 8471 directing the preparation of the Annual Engineer's Report for LLMD No. 98-1 at Sinclair Horizon. |
| *18. 2 Resolutions | 1. Adopted Resolution No. 8472 for the summary vacation of a portion of Old Capitol Avenue ("White Hole").<br>2. Approved the Purchase and Sale Agreement for "White Hole" property.<br>3. Adopted Resolution No. 8473 annexing real properties located within the Final Tract Map No. 10140 into Community Facility District 2008-1.<br>4. Approved the Subdivision Improvement Agreement between the City of Milpitas and Milpitas – District 1 Associates, LLC for public improvements associated with Final Tract Map No. 10140 (District 1, Building 1). |
| *19. Authorize Purchase of Ammunition | Authorized the purchase of ammunition for the Police Department for the not-to-exceed amount of $45,154.09 from San Diego Police Supply. |
| *20. Authorize Purchase | Authorized the purchase and installation of 90 uninterrupted power supply batteries in the total amount of $25,693.63 from Stationary Power Systems. |
| *21. Fire Ladder Truck Repair | 1. Authorized a budget appropriation from the Equipment Replacement Fund into the Public Works Fleet Maintenance budget.<br>2. Authorized payment of invoices to two vendors: Burton Fire and Sutphen Corporation, totaling $31,017.10 for Fire Department Ladder Truck TK86 repairs. |

**PUBLIC HEARING**

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| **2.** Residential Development Proposal for 450 Montague Expressway (Lennar) | Contract Planner Darryl Boyd reviewed the proposed development for residential and commercial property at 450 Montague Expressway. The hearing was continued from April 21, when staff and developer provided some introductory information on the project but no public comments had been provided. |

Mayor Esteves wanted his questions answered from the dais to questions he raised at the last meeting. Staff expressed that detailed responses were in the memo to City Council in the agenda packet. Issues responded to related to public benefit estimated value.

Councilmember Grilli asked staff to confirm open space and amenities without balconies to meet the open space requirements for this site.

Next, the Mayor invited the applicant Kevin Ma from Lennar Homes to address the Council on the residential project for 351 apartment homes and 151 stacked flats as condominiums. The project architect briefly walked through the design of the project.

Vice Mayor Montano asked if there would be palm trees on site. She asked if there would be recycled water used for landscaping. Mr. Ma said yes to the water.

Mayor Esteves asked about public art, what would be installed and its value. Mr. Ma agreed there would be public art, but was uncertain what type or its value. The Mayor also asked him about adding any affordable units. The Mayor asked if the developer was certain on the impact fees to pay for Transit Area Specific Plan development, and that fees were applied at the point of the building permit issuance. 50 Electric Vehicle charging stations would be provided, Mr. Ma responded when asked about that feature.

Councilmember Grilli asked the timeframe for the project and Mr. Ma said the company was targeting construction to begin next year.

Next, Mayor Esteves opened the public hearing and invited speakers.

Robert Marini, Milpitas resident, did not support more housing being developed when that would add more use of water resources, when there was a state-wide drought occurring.

Rob Means, 1421 Yellowstone resident, noted true-green evergreen elm trees in the project, in response to the Vice Mayor. He talked about a ramp overcrossing at Montague where PRT or a shuttle could work instead.

Steve Siddell, Milpitas resident, congratulated the business people working so hard with City staff on this project. He was concerned about fees, including impact fees on the project. Also he objected to any "tax" for public art. There could be crime due to criminals coming on BART, so limit access to public parks to keep crime down.

Voltaire Montemayor, Milpitas resident, commented on a loop, with business booming at the Great Mall. BART would connect to 49ers stadium, and Milpitas could be like San Francisco welcoming people.

(1) Motion: to close the public hearing, after hearing four speakers

Motion/Second: Councilmember Giordano/Vice Mayor Montano

Motion carried by a vote of: AYES: 4
NOES: 0
ABSTAIN: 1 (Barbadillo)

Recreation Manager Renee Lorentzen came forward, stating the suggested names for the two public parks which came from the Milpitas Historical Society originally, and then four of those were recommended to City Council by the Parks, Recreation and Cultural Resources Commission.

Vice Mayor Montano would like to see some indigenous names, specifically Ohlone Indians and so she would recommend Ohlone Park.

Mayor Esteves felt this was a guessing game for Council. The park names could be

decided later, with more input and consideration for the Vice Mayor's suggestion. Councilmember Grilli agreed it would be difficult to select two names, without being clearer on other options and the reason for the recommendation. Maybe staff could return with a firm recommendation on park names after more research.

Mayor Esteves was bothered by the public benefit amount quoted by the developer. The estimated value for the public art was too small, as quoted by Mr. Ma. Affordable housing was needed in Milpitas as soon as possible, so help was needed from developers. A gesture of social responsibility was important, the Mayor felt. He was against the park inside the complex, as designed, as it should be a contiguous large park for the community. There should be a development agreement on the items he recommended.

Councilmember Giordano wanted to work with the developer and no affordable housing ordinance was adopted just yet in Milpitas, as that was in the future. Also, the public art ordinance not in place yet either. She wanted to move forward on the project, and incorporate the spirit of what the Mayor was trying to do.

No action was taken by the City Council regarding names for the two park spaces in this project. Suggestions were made to return to Milpitas Historical Society and the Parks, Recreation and Cultural Resources Commission to recommend specific names with more background and to consider indigenous people for park names.

(2) Motion: to adopt Resolution No. 8467 approving the Vesting Tentative Map No. MT14-0002, Site Development Permit No. SD14-0014, and Conditional Use Permit No. UP14-0023 and Exception to Urgency Ordinance No. 240.2 for a 489 dwelling unit project located at 450 Montague Expressway

Motion/Second: Councilmember Giordano/Councilmember Grilli

Councilmember Grilli and Vice Mayor Montano gave explicitly supportive comments.

Mayor Esteves reminded the City Council his motion was to consider what he said earlier. He asked the developer (Lennar representative) if the company understood what he was asking and if the company would go along in spirit, even though no conditions of approval were added on public art and affordable housing.

Motion carried by a vote of:

AYES: 4
NOES: 0
ABSTAIN: 1 (Barbadillo)

At 9:09 PM, the Mayor announced City Council would take a break until 9:15 PM.

**UNFINISHED BUSINESS**

**3.** Adopt Ordinance for Required Public Art Fee

The City Manager reported that City Council had received letters requesting a change to the formula recommended for public art fees on developers, as proposed in the ordinance. Mayor Esteves reviewed the ideas in two letters he'd received from BDK and Summerhill Homes, essentially for lower or a different fee than the 1% proposed.

Mayor Esteves invited speakers on this topic.

Melanie Holden who worked with BDK Capital, expressed that the main request was for a reduction less than 1% fee as proposed, particularly for large dollar value developments. Her company's project of $300 million could be at a lower percentage than proposed, with many other amenities for the City from the new development.

Marshall Torre, from Summerhill Homes, would like consideration of a reduction in the proposed fee amount for a multi-$100 million project. Mayor Esteves confirmed his recommendation for a 0.5% fee rather than 1% of project value.

Steve Siddell, Milpitas resident, talked about economic development in the city and to be thoughtful about fees that would impact the manufacturing sector of businesses. He recommended a cap such as $250,000 - $500,000 for public art.

Councilmembers commented, with all supporting the idea of 0.5% fee instead of 1%.

Assistant City Attorney Johnny Phan recommended that staff edit the wording in the ordinance and to bring it back on May 19, after advertising that change, for adoption.

Motion: to amend the text of Ordinance No. 38.821 to incorporate the lower 0.5% fee (v. 1% as introduced on April 7), amending the Milpitas Municipal Code to include provisions relating to public art in private development projects and to bring the ordinance back for adoption at the next regular City Council meeting May 19

Motion/Second: Councilmember Giordano/Vice Mayor Montano

Motion carried by a vote of: AYES: 5
NOES: 0

**4.** Odor Report

This item was not heard.

**NEW BUSINESS**

**6.** Policies for Solid Waste Services RFP

City Engineer Steven Machida introduced Senior Manager Peter Deibler and Partner Robert Hilton from the consultant firm HF&H. Those men reviewed a wide array of issues related to the upcoming RFP for solid waste services in Milpitas. They gave City Council some very specific recommendations to change current practices for the RFP. Key contract terms were identified while the structure and schedule for the proposed RFP were reviewed.

City Councilmembers asked various detail questions that the consultants answered.

Mayor Esteves asked for comments from the audience.

Michael Gross, GreenWaste Zanker Director of Green Waste, had a long term contract with Monterey County and would like to bid here in Milpitas.

Robert Marini, Milpitas resident, wondered how the City was going to handle scaling of service, when collection of waste/recyclables was separate from disposal of same.

Voltaire Montemayor, Milpitas resident, said it would be good if it will reduce the smell that was discussed and sorting and separating items was helpful prior to disposal.

Mayor Esteves asked if the contractor would be involved in drafting the final contract with the selected provider. Mr. Hilton responded that the RFP would be the contract the city wanted to have, and then exceptions could be requested. Staff would review that with the City Attorney. Following the RFP, then they would negotiate an actual contract with a provider, discussing the changes desired.

Motion: to receive a report from representatives of consultant HF&H, and direct staff to continue working with consultant on finalizing the policies governing and the content of the solid waste services Request for Proposals

Motion/Second: Vice Mayor Montano/Councilmember Giordano

Motion carried by a vote of: AYES: 5
NOES: 0

**7.** Report on Water Augmentation

City Engineer Steven Machida reported on various ways to consider augmenting City water supply, after a recent study on the possibilities to diversify water sources. Ten considerations for alternate water supply were listed. One concept was to pursue discussion with Alameda County Water District as an alternate water supply, possibly in addition to the current two city wells.

Councilmember Grilli asked what the City was doing to reduce watering of landscape areas, such as in front of Milpitas Police and other City properties. Mr. Machida noted the need to consider looking at a change to drought tolerant vegetation in the city.

Vice Mayor Montano asked if all households had a water meter. Mr. Machida replied that every house is metered in some way. Newer building might have a "master meter" rather than a single family house with single meter, as in older homes. She asked about percolation ponds and permission that would be needed from the Santa Clara Valley Water District.

Councilmember Barbadillo asked if most City parks were using recycled water on grass and landscaping. Staff replied, no not yet, but recycled water pipelines were being installed in additional neighborhoods and under I-680 to the east, so more parks in the coming year would switch from use of potable water.

Mayor Esteves asked about possible additional wells, noting the City of Santa Clara had 27 groundwater wells established. He also asked about more large storage tanks, to collect large amount of water for future use.

Next, the Mayor invited comments from the audience.

Robert Marini, Milpitas resident, recommended use of proportional charging for sewer fees to be more fair, based on the number of people in house or unit.

Voltaire Montemayor, Milpitas resident, spoke of water from highlands and reservoir, inducing rain, warnings of global warming, desalination, and a tank in the mountains.

Motion: to receive the staff report on Water Supply Augmentation, and continue work plan tasks for conservation, recycled water, and ground water wells

Motion/Second: Councilmember Giordano/Vice Mayor Montano

Motion carried by a vote of: AYES: 5
NOES: 0

**ORDINANCE**

One ordinance was adopted on the consent calendar.

**RESOLUTIONS**

Six resolutions were adopted on the consent calendar.

**DEMANDS**

Three items were approved on the consent calendar.

**ADJOURNMENT**

Mayor Esteves adjourned the Council meeting at 11:18 PM with a call for a Special City Council meeting to discuss the draft Capital Improvement Program (CIP) and two items not heard on the agenda tonight, on Monday, May 11, 2015 at 7:00 PM.

**The foregoing minutes were approved by the Milpitas City Council on May 19, 2015.**

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**Mary Lavelle**
**Milpitas City Clerk**