



Regular Meeting Agenda

City Council

Rich Constantine - Mayor
Rene Spring - Mayor Pro Tem
Yvonne Martinez Beltran - Council Member
Larry Carr - Council Member
John McKay - Council Member

Wednesday, October 23, 2019 7:00 p.m.

Council Chamber
17555 Peak Avenue, Morgan Hill, CA 95037

The City Council has adopted a policy that regular meetings shall not continue beyond 11:00 p.m. unless extended by a majority of the City Council.

CALL TO ORDER

Mayor Constantine

ROLL CALL ATTENDANCE

Deputy City Clerk Michelle Bigelow

DECLARATION OF POSTING AGENDA

Per Government Code Section 54954.2
Deputy City Clerk Bigelow

SILENT INVOCATION

PLEDGE OF ALLEGIANCE

PRESENTATIONS

YAC PRESENTATION - ASSET #31 HEALTHY LIFESTYLE

PROCLAMATIONS

Proclaiming the Month of November 2019 as Philanthropy Month
Pamala Meador

RECOGNITIONS

Recognizing those who were instrumental in establishing the relationship with our Sister City, Ameca in Mexico

Rotary Morgan Hill
John Kelley
Peter Anderson
David and Leslie Allen

Recognizing the AAUW Young Women Leaders for Organizing the Climate Change Rally in conjunction with the Global Climate Strike

Makayla Phea
Ria Deshpande
Diya Kandra
Gelasia Tiwans
Grace Taira
Q
Molly Waddington
Amiriah Alexander
Hassti Tirgardoona
Lili Jaquet

CITY COUNCIL REPORTS

Council Member Spring

CITY MANAGER'S REPORT

City Manager Christina Turner

CITY ATTORNEY'S REPORT

City Attorney Donald Larkin

OTHER REPORTS

PUBLIC COMMENT

Members of the public are entitled to address the City Council concerning any item within the Morgan Hill City Council's subject matter jurisdiction. Public comments are limited to no more than three minutes. Except for certain specific exceptions, the City Council is prohibited from discussing or taking action on any item not appearing on the posted agenda. (See additional noticing at the end of this agenda)

ADOPTION OF AGENDA

CONSENT CALENDAR

Items appearing on the Consent Calendar are considered routine and may be approved by one motion. Pursuant to City Council Policies and Procedures (CP 97-01), any member of the Council or public may request to have an item removed from the Consent Calendar for comment and action.

Time Estimate for Consent Calendar: 1 - 10 Minutes

1. ADOPT RESOLUTION TERMINATING LOCAL EMERGENCY

Recommendation:

Adopt Resolution terminating the local emergency proclaimed on October 8, 2019 and ratified on October 9, 2019.

2. ACCEPT NEW COMMUNITY GARDEN INSTALLATION PROJECT

Recommendation:

1. Accept as complete the New Community Garden Installation Project in the final amount of \$178,671;
2. Authorize the Public Services Director to sign the attached Notice of Completion; and
3. Direct the City Clerk to file said Notice of Completion with the County Recorder's Office.

3. ACCEPT AUGUST 2019 FINANCIAL AND INVESTMENT REPORT

Recommendation:

Accept and file report.

4. APPROVE PURCHASE OF TWO 150 KILOWATT GENERATORS

Recommendation:

1. Approve the purchase of two replacement 150kW trailer-mounted diesel generators from Leete Generators, and authorize the City Manager to approve the purchase order in the amount of \$169,552;
2. Adopt resolution amending the adopted 2019-20 Fiscal Year Budget appropriating \$84,776 from the Water Operations Fund (650); and
3. Declare generator W02017 to be surplus for disposal in accordance with the City Municipal Code.

5. APPROVE FIRST AMENDMENT TO GIS SERVICES AGREEMENT WITH GEOGRAPHIC TECHNOLOGIES GROUP, INC.

Recommendation:

1. Approve First Amendment to the Agreement with Geographic Technologies Group, Inc. for an additional \$78,500 to implement the GIS tasks identified in the GIS Strategic Plan, for a total not to exceed amount of \$137,500; and
2. Authorize the City Manager to execute and administer the amended agreement.

6. ADOPT ORDINANCE OF THE CITY OF MORGAN HILL AMENDING CHAPTER 17.28 ("LAND DEDICATIONS AND RESERVATIONS") IN TITLE 17 ("SUBDIVISIONS") OF THE MORGAN HILL MUNICIPAL CODE TO UPDATE PARK DEDICATION REQUIREMENTS

Recommendation:

Waive the reading, adopt Ordinance No. 2305, New Series, and declare that said title, which appears on the agenda, shall be determined to have been read by title and further reading waived.

OTHER BUSINESS

7. INTRODUCE ORDINANCE ADDING CHAPTER 15.63 (PROHIBITION OF NATURAL GAS INFRASTRUCTURE IN NEW BUILDINGS) TO THE MORGAN HILL MUNICIPAL CODE REDUCING CLIMATE IMPACTS BY REQUIRING NEW BUILDINGS TO BE ALL-ELECTRIC

Recommendation:

1. Waive the first and second reading of the ordinance; and
2. Introduce ordinance.

Estimated Time: 30 Minutes

8. INTRODUCE AN ORDINANCE OF THE CITY OF MORGAN HILL AMENDING TITLE 15 (BUILDING AND CONSTRUCTION) TO ADOPT BY REFERENCE, THE 2019 CALIFORNIA STATE BUILDING STANDARDS CODE KNOWN AND DESIGNATED AS CALIFORNIA CODE OF REGULATIONS, TITLE 24 AND THE 2018 INTERNATIONAL PROPERTY MAINTENANCE CODE; AND TO AMEND, DELETE AND ADD CERTAIN OTHER BUILDING AND CONSTRUCTION STANDARDS

Recommendation:

1. Waive the first and second reading of the Ordinance; and
2. Introduce ordinance.

Estimated Time: 10 Minutes

9. RECEIVE REPORT REGARDING MORGAN HILL AND GILROY SUSTAINABLE WATER MANAGEMENT PLANNING

Recommendation:

1. Receive the technical memorandum on sustainable water management planning; and
2. Provide policy direction.

Estimated Time: 30 Minutes

PUBLIC HEARING

10. ADOPT RESOLUTION UPDATING THE CITY'S SELECT DEVELOPMENT IMPACT FEES

Recommendation:

1. Open/close the public hearing;
2. Adopt Final Draft of Development Impact Fee Update Study prepared by Willdan Financial Services; and
3. Adopt resolution updating the City's select Development Impact Fees.

Estimated Time: 30 Minutes

FUTURE COUNCIL INITIATED AGENDA ITEMS

Note: in accordance with Government Code Section 54954.2(a), there shall be no discussion, debate and/or action taken on any request other than providing direction to staff to place the matter of business on a future agenda.

ADJOURNMENT

NOTICE

Any documents produced by the City and distributed to the majority of the City Council less than 72 hours prior to an open meeting, will be made available for public inspection at the City Clerk's Counter at City Hall located at 17575 Peak Avenue, Morgan Hill, CA, 95037 and at the Morgan Hill Public Library located at 660 West Main Avenue, Morgan Hill, California, 95037 during normal business hours. (Pursuant to Government Code 54957.5)

PUBLIC COMMENT

Members of the Public are entitled to directly address the City Council concerning any item that is described in the notice of this meeting, before or during consideration of that item. If you wish to address the Council on any issue that is on this agenda, please complete a speaker request card located in the foyer of the Council Chambers and deliver it to the Minutes Clerk prior to discussion of the item. You are not required to give your name on the speaker card in order to speak to the Council, but it is very helpful. When you are called, proceed to the podium and the Mayor will recognize you. If you wish to address the City Council on any other item of interest to the public, you may do so during the public comment portion of the meeting following the same procedure described above. Please limit your comments to three (3) minutes or less.

Please submit written correspondence to the Minutes Clerk, who will distribute correspondence to the City Council.

Persons interested in proposing an item for the City Council agenda should contact a member of the City Council who may plan an item on the agenda for a future City Council meeting. Should your comments require Council action, your request may be placed on the next appropriate agenda. Council discussion or action may not be taken until your item appears on an agenda. This procedure is in compliance with the California Public Meeting Law (Brown Act) Government Code §54950.

City Council Policies and Procedures (CP 03-01) outlines the procedure for the conduct of public hearings. Notice is given, pursuant to Government Code Section 65009, that any challenge of Public Hearing Agenda items in court, may be limited to raising only those issues raised by you or on your behalf at the Public Hearing described in this notice, or in written correspondence delivered to the City Council at, or prior to the Public Hearing on these matters.

The time within which judicial review must be sought of the action by the City Council, which acted upon any matter appearing on this agenda is governed by the provisions of Section 1094.6 of the California Code of Civil Procedure.

For a copy of City Council Policies and Procedures CP 97-01, please contact the City Clerk's office (408) 779-7259, (408) 779-3117 (fax) or by email cityclerk@morganhill.ca.gov.

AMERICANS WITH DISABILITIES ACT (ADA)

In compliance with the Americans with Disabilities Act, if you are a disabled person and you need a disability-related modification or accommodation to participate in this meeting, please contact the City Clerk's Office at (408)779-7259, (408)779-3117 (fax) or by email cityclerk@morganhill.ca.gov. Requests must be made as early as possible and at least two-full business days before the start of the meeting.

SUSTAINABLE MORGAN HILL



VISION

To sustain a safe, inclusive, socially responsible, environmentally conscious, and economically sound community

Choose Morgan Hill

The City of Morgan Hill is the best community for people to live, work, visit, and operate their businesses.

City Council Ongoing Priorities

- Enhancing Public Safety
- Protecting the Environment
- Maintaining Fiscal Responsibility
- Supporting our Youth, Seniors, and Entire Community
- Fostering a Positive Organizational Culture
- Preserving and Cultivating Public Trust
- Preserving our Community History
- Enhancing Diversity and Inclusiveness
- Advancing Regional Initiatives

2019-2020 Strategic Priorities

- Agricultural Preservation
- Cannabis Policy
- Community Engagement and Messaging
- Economic Development
- Financial Stewardship
- High Speed Rail
- Homelessness
- Housing
- Infrastructure
- Telecommunications
- Traffic/Transportation





CITY COUNCIL STAFF REPORT

MEETING DATE: October 23, 2019

PREPARED BY: Donald Larkin, City Attorney
APPROVED BY: City Manager

ADOPT RESOLUTION TERMINATING LOCAL EMERGENCY

RECOMMENDATION(S)

Adopt Resolution terminating the local emergency proclaimed on October 8, 2019 and ratified on October 9, 2019.

COUNCIL PRIORITIES, GOALS & STRATEGIES

Ongoing Priorities

Enhancing Public Safety
Maintaining Fiscal Responsibility

REPORT NARRATIVE:

On October 9, 2019 the City Council adopted a resolution ratifying the proclamation of a local emergency due to a widespread public safety power shutoff in the City of Morgan Hill. Power to large areas of Morgan Hill was shut off beginning after 10 p.m. on October 9. Power was restored to most users in Morgan Hill the afternoon of October 10, alleviating the conditions that caused the emergency.

Under Government Code section 8630(d), the City Council is required to terminate the local emergency at the earliest date feasible.

COMMUNITY ENGAGEMENT: Not Applicable

PRIOR CITY COUNCIL AND COMMISSION ACTIONS:

Council adopted a resolution ratifying the proclamation of emergency on October 9, 2019.

FISCAL AND RESOURCE IMPACT:

Termination of the local emergency will have no fiscal or resource impact on the City.

CEQA (California Environmental Quality Act):

Termination of the local emergency is an organizational or administrative activity that will not result in direct or indirect physical changes in the environment.

LINKS/ATTACHMENTS:

1. Reso of CC Terminating Local Emergency

RESOLUTION NO.

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF MORGAN HILL TERMINATING THE LOCAL EMERGENCY

WHEREAS, under the authority contained in California Government Code sections 8610 and 8634 and Morgan Hill Municipal Code Chapter 2.44, the Director of Emergency Services declared the existence of a local emergency in the City of Morgan Hill (the "City") on October 8, 2019, ratified by City Council of Morgan Hill on October 9, 2019 due to the planned public safety power shutoff; and

WHEREAS, the situation resulting from said conditions of local emergency is now deemed to be within the control of the normal protective services, personnel, equipment, and facilities of the City.

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF MORGAN HILL DOES HEREBY FIND, DETERMINE, RESOLVE, AND ORDER AS FOLLOWS:

Section 1. Recitals. The City Council does hereby find, determine, and resolve that all of the foregoing recitals are true and correct.

Section 2. Approval and Authorization. The City Council does further resolve, order and/or direct that the state of local emergency is hereby terminated.

Section 3. This Resolution shall take effect immediately upon adoption.

PASSED AND ADOPTED by the City Council of the City of Morgan Hill at its meeting held on this ____ day of _____, 20__ by the following vote:

AYES:	COUNCIL MEMBERS:
NOES:	COUNCIL MEMBERS:
ABSENT:	COUNCIL MEMBERS:
ABSTAIN:	COUNCIL MEMBERS:

DATE: _____

Richard Constantine, MAYOR

APPROVED AS TO FORM AND LEGALITY:

Donald A. Larkin, CITY ATTORNEY

Attachment: Reso of CC Terminating Local Emergency (2513 : Termination of Emergency)

∞ CERTIFICATION ∞

I, Irma Torrez, City Clerk of the City of Morgan Hill, California, do hereby certify that the foregoing is a true and correct copy of Resolution No. _____, adopted by the City Council at the meeting held on _____, 20____.

WITNESS MY HAND AND THE SEAL OF THE CITY OF MORGAN HILL.

DATE: _____

Irma Torrez, CITY CLERK

Attachment: Reso of CC Terminating Local Emergency (2513 : Termination of Emergency)



CITY COUNCIL STAFF REPORT

MEETING DATE: October 23, 2019

PREPARED BY: Cynthia Iwanaga, Management Analyst
APPROVED BY: City Manager

ACCEPT NEW COMMUNITY GARDEN INSTALLATION PROJECT

RECOMMENDATION(S)

1. Accept as complete the New Community Garden Installation Project in the final amount of \$178,671;
2. Authorize the Public Services Director to sign the attached Notice of Completion; and
3. Direct the City Clerk to file said Notice of Completion with the County Recorder's Office.

COUNCIL PRIORITIES, GOALS & STRATEGIES

Ongoing Priorities

Protecting the Environment
Maintaining Fiscal Responsibility
Supporting Our Youth
Seniors
and Entire Community

2019 Strategic Priorities

Financial Stewardship

REPORT NARRATIVE:

The City Council awarded the contract for the New Community Garden Installation Project to Castlewood Construction Company, Inc. at its December 19, 2018 meeting. This project developed a three-acre city-owned property at 15690 Railroad Avenue into a new community garden. The project's scope of work included preparing the site to accommodate over 100 raised garden plots, 20,000 square feet of multi-crop gardening, 12,000 square feet of land for mulch and an outdoor patio classroom area. At the center of the garden is an enlarged pollinating plants garden. This new permanent location enables the Morgan Hill Community Garden (MHCG) group to expand its services and permanently improve a site that will serve the community for decades to come.

The work was completed on October 4, 2019 in accordance with the plans and specifications for the project. There were three change orders netting -\$16,329. The first change order deducted \$29,584 from the contract amount due to the deletion of the bathroom structure and pad. The second change order increased the contract amount by \$12,420 to extend the rock area to improve drainage and site accessibility. The third change order increased the contract amount by \$835 to install slats and a solid plate on the entry gate to secure the garden's entrance. The final contract amount is \$178,671, which is \$16,329 less than the original contracted amount of \$195,000 (Attachment 1).

Now that the core of the site is prepared, MHCG members and volunteers can complete the construction of garden beds and other site amenities.

COMMUNITY ENGAGEMENT: Inform

Staff posted updates on the City's website, Nextdoor Morgan Hill, Facebook, and Twitter to inform residents on the status of the community garden installation. Staff also kept MHCG members updated on the status of the project, so that they were able to post updates on their website.

ALTERNATIVE ACTIONS: Not Applicable

Accepting the improvements once the contract is complete and in accordance with the contract documents is a required process to complete the construction contract and enables the City to release any retained funds owed to the contractor per the California Public Contract Code Section 7107.

PRIOR CITY COUNCIL AND COMMISSION ACTIONS:

On December 19, 2018, the City Council awarded the contract to Castlewood Construction Company, Inc. in the amount of \$195,000 with a 10% contingency of \$19,500 for a total project authorization of \$214,500. The City Council also previously authorized a \$250,000 grant application to the Santa Clara Valley Open Space Authority on August 24, 2016 and authorized a match amount of \$150,000. The Council has also previously taken annual actions to authorize the agreement allowing the MHCG to operate on land owned by the City.

FISCAL AND RESOURCE IMPACT:

The project was funded in FY 2018-19 from Fund 301 (Park Impact Fund) and is included in the adopted Capital Improvement Program (CIP), project# 142017. The project award amount was \$195,000. At the conclusion of the project, the final contract amount was \$178,671 due to both deductive and additive change orders netting \$16,329 less than the original contract amount. The original total project authorization with 10% contingency was \$214,500, which leaves a balance of \$35,829 that was not utilized for this project. This residual funding will be used to support the purchase of materials needed for the volunteers' completion of the project at the site.

CEQA (California Environmental Quality Act):

Categorical Exemption

The activities described in this Staff Report are categorically exempt under CEQA, specifically pursuant to Section 15303(e) (Small Structures) and 15304(b) (Minor Alterations to Land) of the CEQA Guidelines.

LINKS/ATTACHMENTS:

1. Funding Closeout Statement Community Garden 10082019
2. Notice of Completion_Castlewood_Community Garden

CIP Contract Acceptance Funding Closeout Statement

Project:	New Community Garden Installation Project		
Contract No.	127-04-19-001		
Date of Project Award:	19-Dec-18	Project Award Amount:	\$195,000
Funding Source:	f301	Contingency Authorized:	\$19,500
Date of Project Acceptance:	23-Oct-19	Total Authorized:	\$214,500
		Actual Base Contract Spent:	\$195,000

Change Orders				
	Description	Date	Council Approval Reqd? (Y/N)	
C.O. #1:	Deletion of Bathroom Structure	1-Mar-19	N	-\$29,584
C.O. #2:	Extension of Rock Area, AC, DG	1-Sep-19	N	\$12,420
C.O. #3	Install slats on entry gate and weld galvanized solid plate	27-Sep-19	N'	\$835
Total C.O.:				-\$16,329

Additional Appropriations		
Source	Amount	Date
None		

		Total Construction Amount (Base Contract plus CO's):	\$178,671
Construction Fund Balance:	\$35,829		

Recording Requested By:
City of Morgan Hill
Community Services Dept.

When Recorded Mail To:
City of Morgan Hill
City Clerk's Office
17575 Peak Avenue
Morgan Hill, CA 95037

Record at No Fee Pursuant to
Government Code Section 27383

SPACE ABOVE THIS LINE IS FOR RECORDER'S USE

NOTICE OF COMPLETION
Civil Code §§ 8182, 8184, 9204, and 9208

NOTICE IS HEREBY GIVEN THAT:

1. The undersigned is the Owner or agent of the Owner of the Project described below.
2. Owner's full name is City of Morgan Hill.
3. Owner's address is 17575 Peak Avenue, Morgan Hill, 95037.
4. The nature of Owner's interest in the Project is: Fee ownership
5. Construction work for the City of Morgan Hill Community Project (the "Project") was performed on Owner's behalf and is generally described as follows: Installation of Community Garden.
6. The name of the original Contractor for the Project is: Castlewood Construction, Inc. 835 West San Martin Avenue, San Martin, CA 95046
7. The Project was completed on: October 4, 2019
8. The Project is located at: Community Garden 15690 Railroad Avenue, Morgan Hill, CA 95037.

Verification:

I, the undersigned, declare under penalty of perjury under the laws of the State of California that I have read this notice, and I know and understand the contents thereof, and that the facts stated therein are true and correct.

Morgan Hill, CA
Date and Place

Signature of Person Signing on Behalf of Owner

Chris Ghione, Public Services Director
Print Name and Title

Attachment: Notice of Completion_Castlewood_Community Garden (2499 : Accept New Community Garden Installation Project)



CITY COUNCIL STAFF REPORT

MEETING DATE: October 23, 2019

PREPARED BY: Dat Nguyen, Finance Director
APPROVED BY: City Manager

ACCEPT AUGUST 2019 FINANCIAL AND INVESTMENT REPORT

RECOMMENDATION(S)

Accept and file report.

COUNCIL PRIORITIES, GOALS & STRATEGIES

Ongoing Priorities

Maintaining Fiscal Responsibility
Preserving and Cultivating Public Trust

2019 Strategic Priorities

Financial Stewardship

REPORT NARRATIVE:

As part of the City Council's expectation to maintain a high level of transparency and to be responsible stewards of public funds, attached are the Financial and Investment Reports for the month ended August 31, 2019. The Revenue and Expense Summary for the month of August is included on the first page. Overall, General Fund revenues total \$2.8 million or 6% of the budget. Expenditures, including encumbrances, amounted to \$9.8 million.

COMMUNITY ENGAGEMENT: Inform

Finance staff prepares these monthly reports in an effort to keep City officials, the Council, the community, and various lenders and stakeholders informed on the financial health of the organization, which assists each one of the interested parties in making sound financial and investment decisions.

ALTERNATIVE ACTIONS:

No alternative action is recommended, as this is a monthly financial report on City transactions which have already occurred.

PRIOR CITY COUNCIL AND COMMISSION ACTIONS:

The City Council receives and files the financial and investment report for each month. At the September 16, 2015 meeting, City Council recommended monthly financial and investment reports be agendaized under the Consent Agenda, and quarterly financial and investment reports be presented to City Council as an "Other Business" item.

FISCAL AND RESOURCE IMPACT:

The preparation of the report is a part of the Finance workplan.

CEQA (California Environmental Quality Act):

Not a Project.

This report is not a project, as defined in Section 15378 of the State CEQA Guidelines. Organizational or administrative activities of governments that will not result in direct or indirect physical changes in the environment.

LINKS/ATTACHMENTS:

1. August 2019 Financial Statement Analysis
2. August 2019 Financial and Investment Report

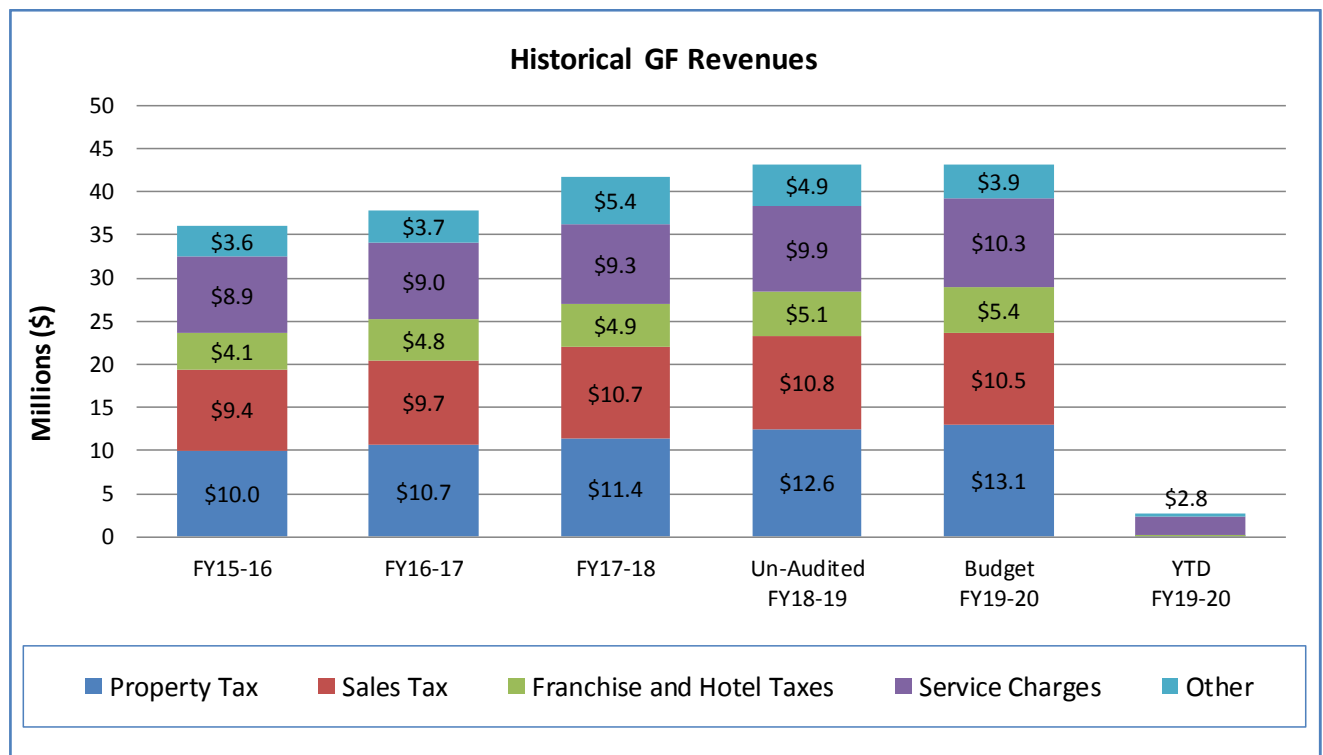


CITY OF MORGAN HILL, CALIFORNIA
FINANCIAL STATEMENT ANALYSIS - FISCAL YEAR 2019-20
FOR THE MONTH ENDED AUGUST 2019 – 17% OF YEAR COMPLETE

- **General Fund** – Revenues through the month of August totaled \$2.8 million, or 6% of the budgeted revenues as some of the major revenue categories such as property tax are received later in the fiscal year. With respect to the property tax revenue forecast, the County's most recent estimate projected Morgan Hill property tax revenue, excluding the property transfer tax, at \$13.4 million for the fiscal year 2019-20, which is approximately \$300,000 more than the revised budget, partially attributable to the higher excess Educational Revenue Augmentation Fund (ERAF) distribution of \$1.4 million versus \$1.2 million estimated in May 2019. Excess ERAF is the money that is returned to the cities, counties, and special districts after schools reach their state-mandated thresholds. Property tax is the largest source of Morgan Hill's General Fund revenue. However, it accounts for only 30% of the approximately \$43.1 million General Fund revenue. Although property tax tends to be a more predictable revenue source, other major revenue categories such as sales tax and transient occupancy tax, which account for a large portion of the City's General Fund revenue, are more volatile and tend to fluctuate more with swings in the economy.

The small category of business licenses was already at 49% of the budgeted amount as annual business license renewal payments are usually received in the first few months of the fiscal year.

The chart below shows historical General Fund revenues by major revenue category from FY15-16 through FY17-18 Actual, Un-audited FY18-19, FY19-20 Budget, and YTD as of August 31, 2019.

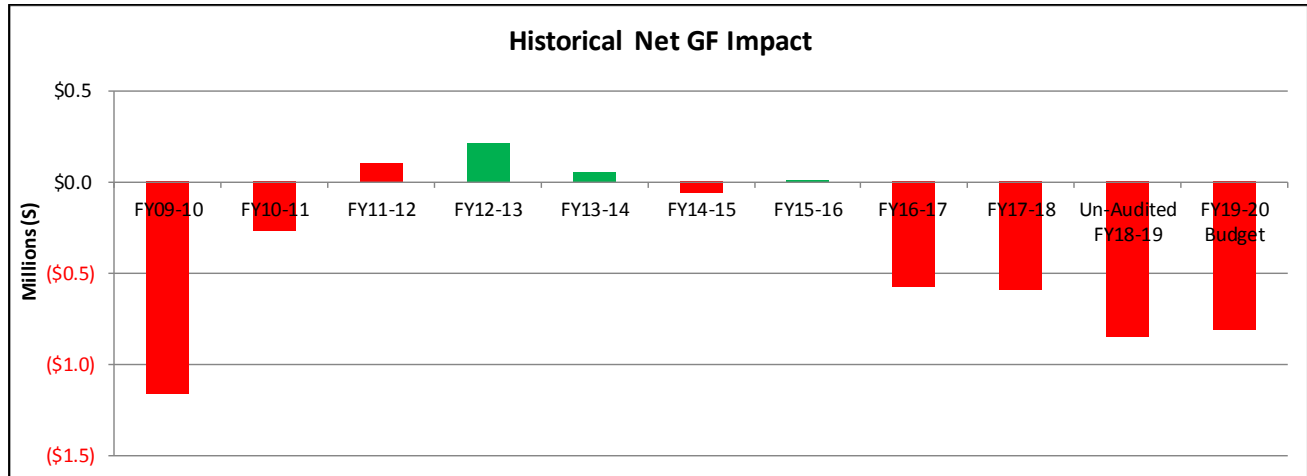


General Fund expenditures and encumbrances as of August 31, 2019 totaled \$9.8 million, of which approximately \$2.3 million is attributable to outstanding encumbrances.



CITY OF MORGAN HILL, CALIFORNIA
FINANCIAL STATEMENT ANALYSIS - FISCAL YEAR 2019-20
FOR THE MONTH ENDED AUGUST 2019 – 17% OF YEAR COMPLETE

- **Community Services** - The Community Services Department's recreation operations, as reflected in the schedule presented on page 4 of the Monthly Financial and Investments Reports, shows a negative impact to the General Fund of approximately \$1.5 million through the month of August. Without the carry-over encumbrances, year-to-date operations resulted in a smaller net deficit to the general fund of approximately \$8,300. Any net impact from the recreation operations increases (decreases) reserves in the General Fund.



Due to longstanding governmental accounting and budgeting convention, the City's recreation operations are not charged for indirect costs (known in Morgan Hill as "General Fund Administration") from the central services departments of City Attorney, City Manager, and Administrative Services. The City's other governmental funds, such as Community Development, and the proprietary funds, such as Water and Wastewater, and the Information Services Fund, are assessed such charges through the City's indirect cost allocation plan, prepared in compliance with the Federal government's OMB Circular No. A-87, which mandates certain calculation and cost allocation practices that must be followed in order to qualify for Federal grant funding, but which also represent best practice for non-grant funded City operations like utilities and information services.

- **Development Services Fund** – Revenues through August totaled \$880,000. Expenditures, including encumbrances, totaled \$1.6 million. Without the outstanding encumbrances, however, expenditures through the month of August amounted to \$788,000. The fund is budgeted to end the fiscal year with an operating deficit of approximately \$0.6 million, a slight improvement from prior year un-audited actual deficit of approximately \$0.7 million. The projected deficit is primarily due to the timing of fee increases, services or new projects unsupported by fees, such as front counter services, responding to public inquiries, tree removal permits, use permits for non-profits or special projects, and continued implementation of Measure S.
- **Debt Service Funds** – Expenditures through the month of August totaled \$2,318. The debt service for the first half of the year includes both interest and principal, while the second half of the year will include interest only. Debt service payments were all scheduled when the bonds were issued, and are budgeted for in the months delineated in the underlying bond documents. The General Fund's portion of the annual debt service payments is approximately \$200,000, less than one percent of the General Fund's budgeted revenues.



CITY OF MORGAN HILL, CALIFORNIA
FINANCIAL STATEMENT ANALYSIS - FISCAL YEAR 2019-20
FOR THE MONTH ENDED AUGUST 2019 – 17% OF YEAR COMPLETE

- **Wastewater Operations** – Revenues from Sewer Operations through the month of August totaled \$0.7 million. Expenditures and outstanding encumbrances totaled \$1.6 million or approximately 13% of the budget primarily attributable to the timing of the quarterly billing for sewer plant maintenance and operations. The table below shows historical Sewer Operations revenues and expenditures from FY15-16 through FY17-18 Actual, Un-audited FY18-19, FY19-20 Budget, and YTD as of August 31, 2019.

(amount in millions)	FY15-16	FY16-17	FY17-18	Un-Audited FY18-19	Budget FY19-20	YTD FY19-20
Revenues	10.2	9.7	10.3	11.4	12.1	0.7
Expenditures	12.0	9.8	10.8	10.6	12.1	1.6
Operating Margin	(1.8)	(0.1)	(0.5)	0.8	-	(0.9)
Operating Margin without Encumbrances	(1.8)	(0.0)	(0.3)	1.2	-	(0.3)

- **Water Operations** – Water Operations includes Utility Billing, Water Conservation, and Water Operations. Revenues from Water Operations through the month of August totaled \$1.2 million. Water Operations expenditures, including outstanding encumbrances, totaled \$3.9 million for the year. Without the encumbrances, however, the expenditures amounted to \$2.1 million. The table below shows Water Operations revenues and expenditures from FY15-16 through FY17-18 Actual, Un-audited FY18-19, FY19-20 Budget, and YTD as of August 31, 2019.

(amount in millions)	FY15-16	FY16-17	FY17-18	Un-Audited FY18-19	Budget FY19-20	YTD FY19-20
Revenues	8.5	10.9	13.0	14.2	14.8	1.2
Expenditures	9.7	11.2	12.1	12.8	15.1	3.9
Operating Margin	(1.2)	(0.3)	0.9	1.4	(0.3)	(2.7)
Operating Margin without Encumbrances	(1.2)	(0.1)	1.4	2.3	(0.3)	(0.9)

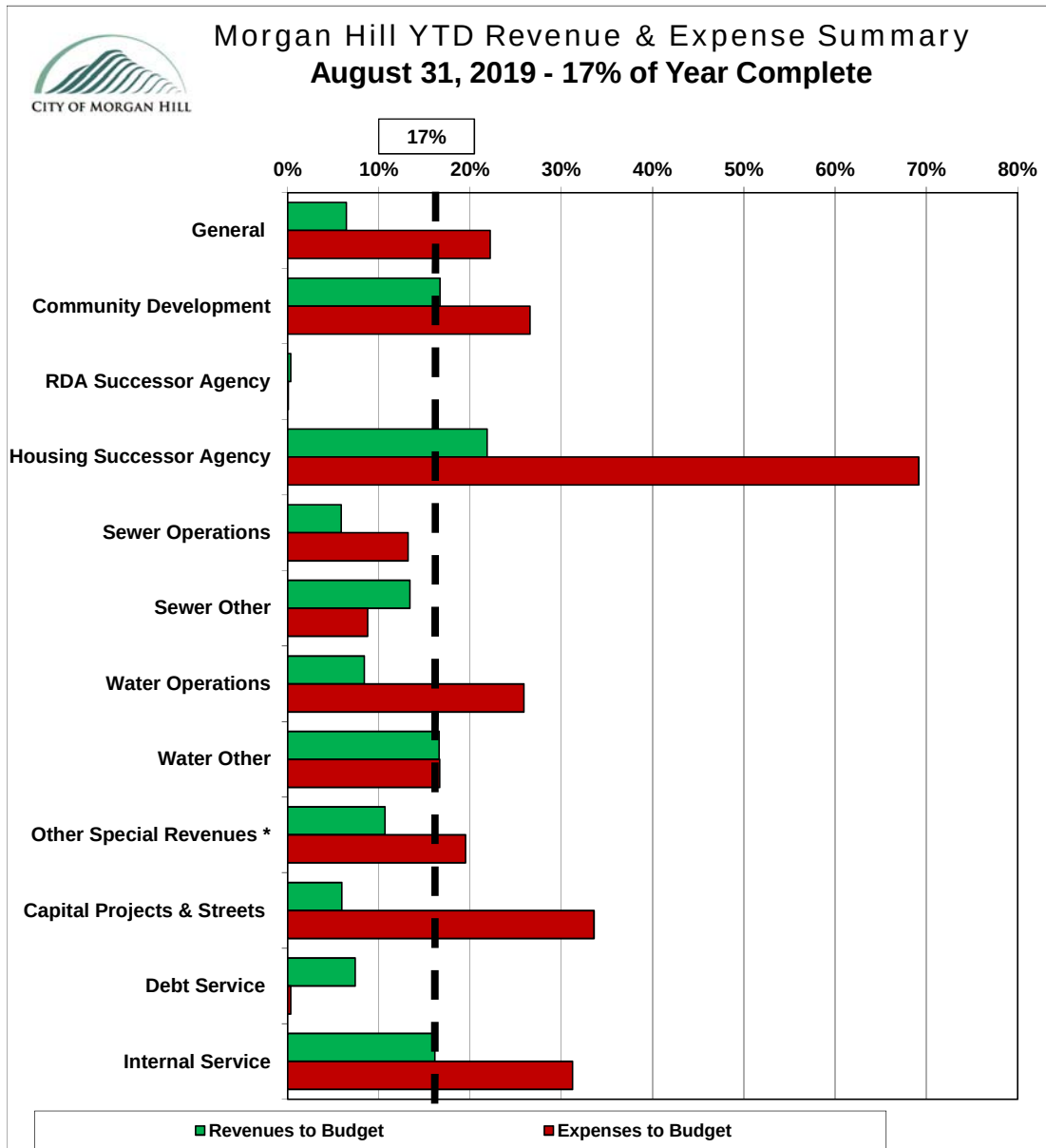
- **Investments** – Five securities were called during the month of August 2019. Total interest earnings received on investments were \$65,000 during the month.

CITY OF MORGAN HILL
Monthly Financial and Investment Reports
August 31, 2019 - 17% of Year Complete



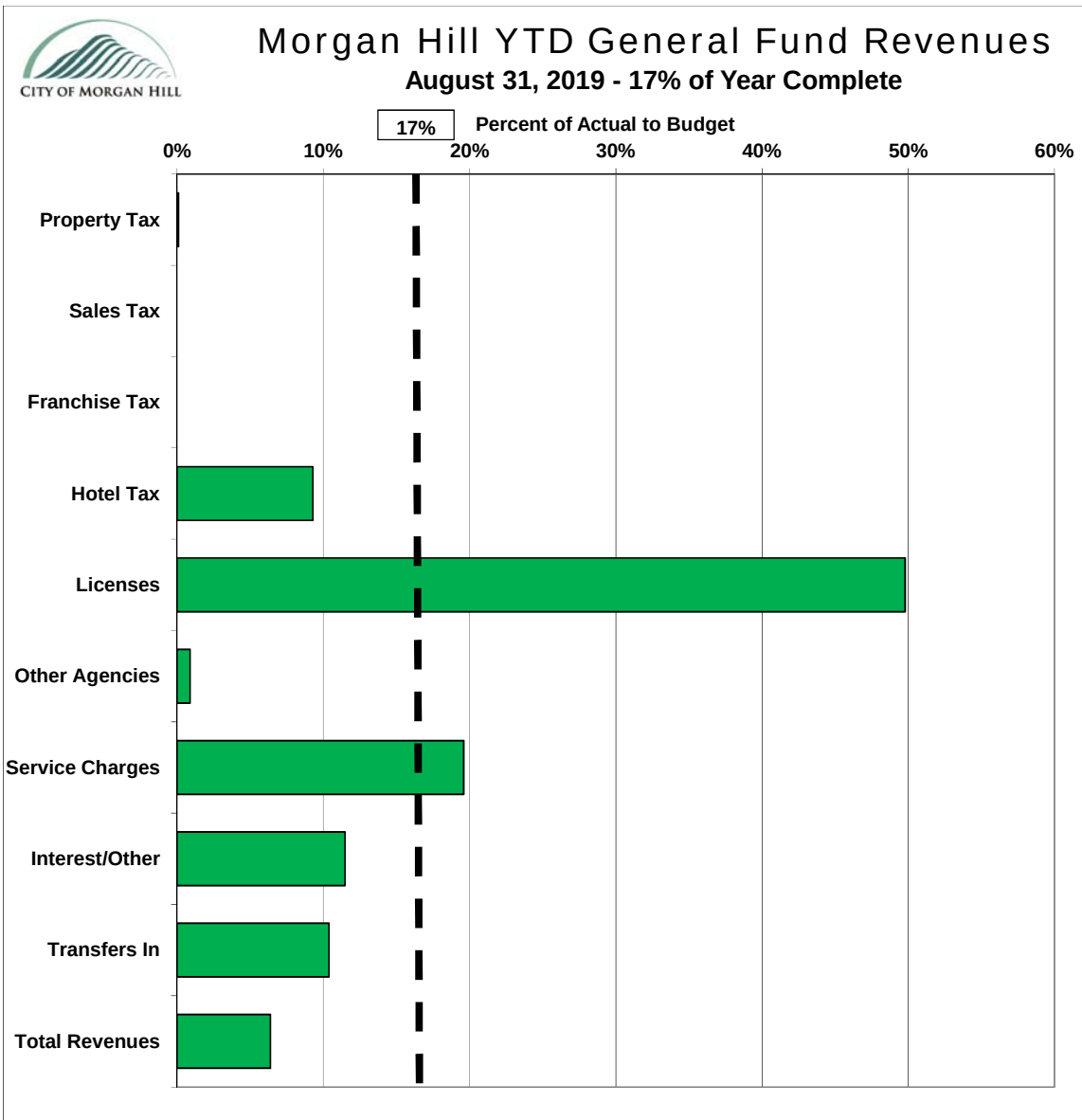
CITY OF MORGAN HILL

Prepared by:
FINANCE DIVISION

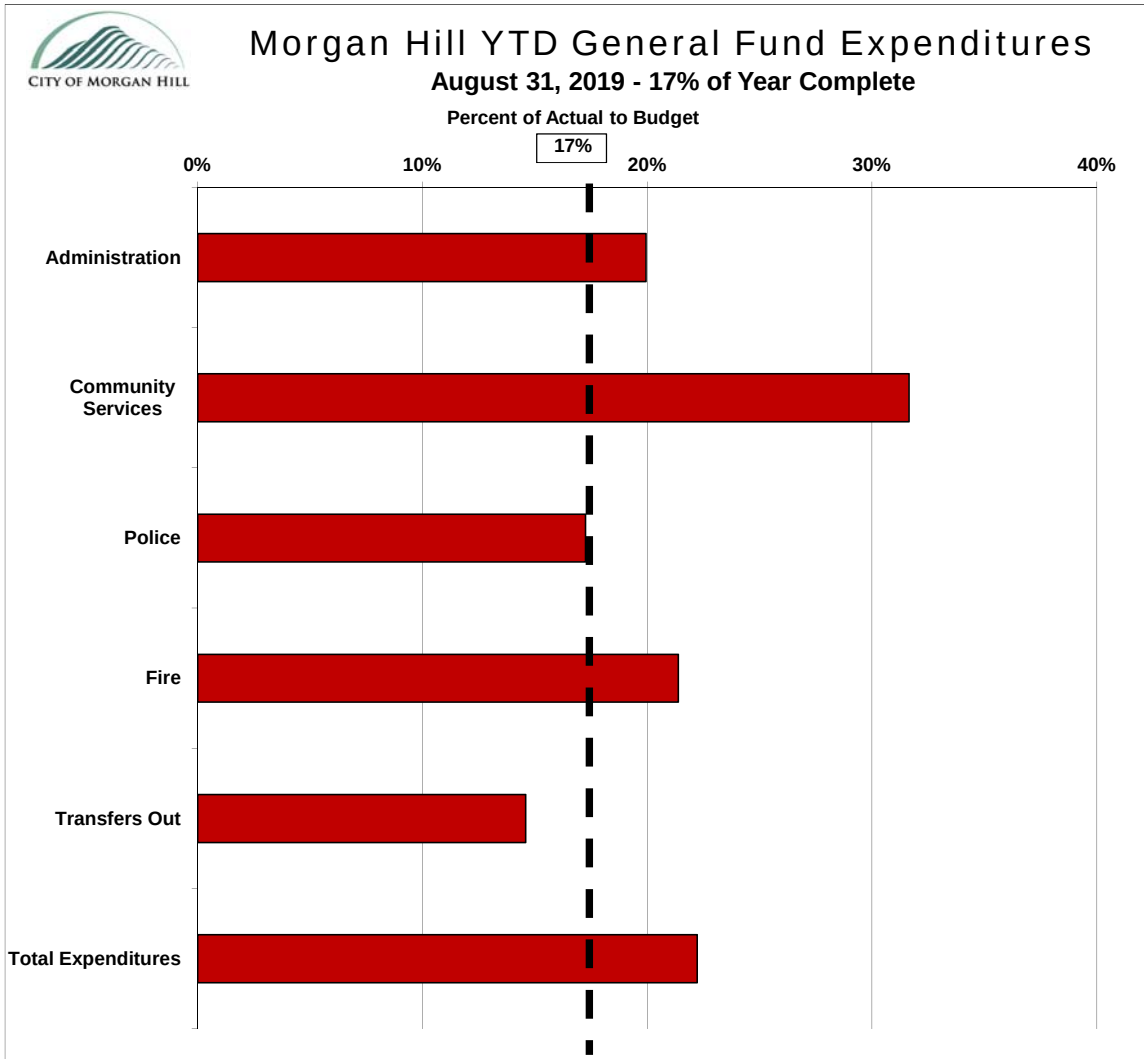


FUND NAME	REVENUES		EXPENSES	
	ACTUAL	% OF BUDGET	ACTUAL PLUS ENCUMBRANCES	% OF BUDGET
General	\$ 2,779,130	6%	\$ 9,760,126	22%
Community Development	879,721	17%	1,554,314	27%
RDA Successor Agency	23,629	0%	5,424	0%
Housing Successor Agency	121,112	22%	647,024	69%
Sewer Operations	712,681	6%	1,597,942	13%
Sewer Other	1,068,269	13%	1,448,434	9%
Water Operations	1,241,941	8%	3,914,550	26%
Water Other	888,512	17%	791,789	17%
Other Special Revenues *	412,406	11%	742,433	20%
Capital Projects & Streets	1,238,623	6%	7,009,202	34%
Debt Service	50,120	7%	2,318	0%
Internal Service	1,920,081	16%	3,569,054	31%
TOTAL FOR ALL FUNDS	\$ 11,336,226	8%	\$ 31,042,609	22%

* Includes all Special Revenue Funds except Community Development, Street Funds, and RDA and Housing Successor Agencies.



REVENUE CATEGORY	BUDGET	ACTUAL	% OF BUDGET	PRIOR YEAR TO DATE	% CHANGE FROM PRIOR YEAR
Property Tax	\$13,082,377	\$ 15,783	0%	\$ 87,815	-82%
Sales Tax	10,476,000	-		66,780	-100%
Franchise Tax	2,319,566	-		-	#DIV/0!
Hotel Tax	3,080,880	286,783	9%	277,328	3%
Licenses	206,940	102,963	50%	170,786	-40%
Other Agencies	403,389	3,679	1%	86,459	-96%
Service Charges	10,267,724	2,013,611	20%	1,962,201	3%
Interest/Other	1,461,324	167,364	12%	215,730	-22%
Transfers In	1,822,658	188,948	10%	133,126	42%
TOTAL REVENUES	\$43,120,858	\$ 2,779,130	6%	\$ 3,000,225	-7%



EXPENDITURE CATEGORY	BUDGET	ACTUAL PLUS ENCUMBRANCES	% OF BUDGET	PRIOR YTD PLUS ENCUMBRANCES	% CHANGE FROM PRIOR YEAR
Administration	\$ 4,835,112	\$ 964,641	20%	\$ 1,142,034	-16%
Community Services	12,679,427	4,012,440	32%	3,767,332	7%
Police	17,413,961	3,003,702	17%	3,419,254	-12%
Fire	6,861,396	1,466,678	21%	1,337,528	10%
Transfers Out	2,142,463	312,666	15%	303,506	3%
TOTAL EXPENDITURES	\$ 43,932,359	\$ 9,760,126	22%	\$ 9,969,653	-2%



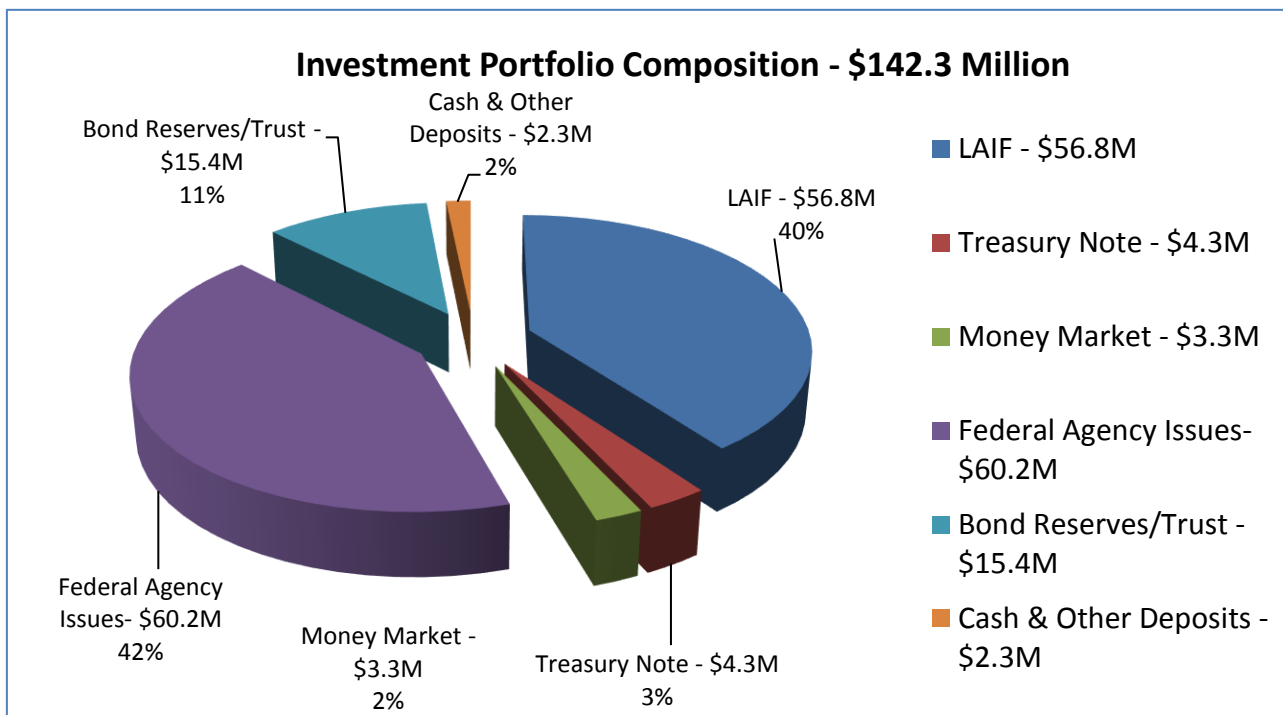
**City of Morgan Hill
Recreation Report - Fiscal Year 2019-20
For the Month and Two Months Ended August 31, 2019
17% of Year Complete**

	<u>Budget</u>	<u>August 2019</u>	<u>YTD</u>	<u>% of Budget</u>
Revenues				
Membership Services & Rec Programs	\$ 6,426,631	\$ 573,094	\$ 1,392,092	
Facility Rentals	915,330	85,247	207,359	
Community Services	149,705	1,761	6,811	
Transfers in	75,000	6,250	12,500	
Total Revenues	\$ 7,566,666	\$ 666,353	\$ 1,618,762	21%
Less: Expenditures				
Membership & Program Services	\$ 6,371,297	\$ 982,130	\$ 1,298,504	
Facility Rentals	1,356,318	133,197	222,489	
Community Services	648,407	83,303	106,042	
Total Expenditures	\$ 8,376,023	\$ 1,198,629	\$ 1,627,035	19%
Net Impact without encumbrances	\$ (809,357)	\$ (532,277)	\$ (8,273)	
Encumbrances	-	-	1,506,331	
Net Impact with encumbrances	\$ (809,357)	\$ (532,277)	\$ (1,514,604)	

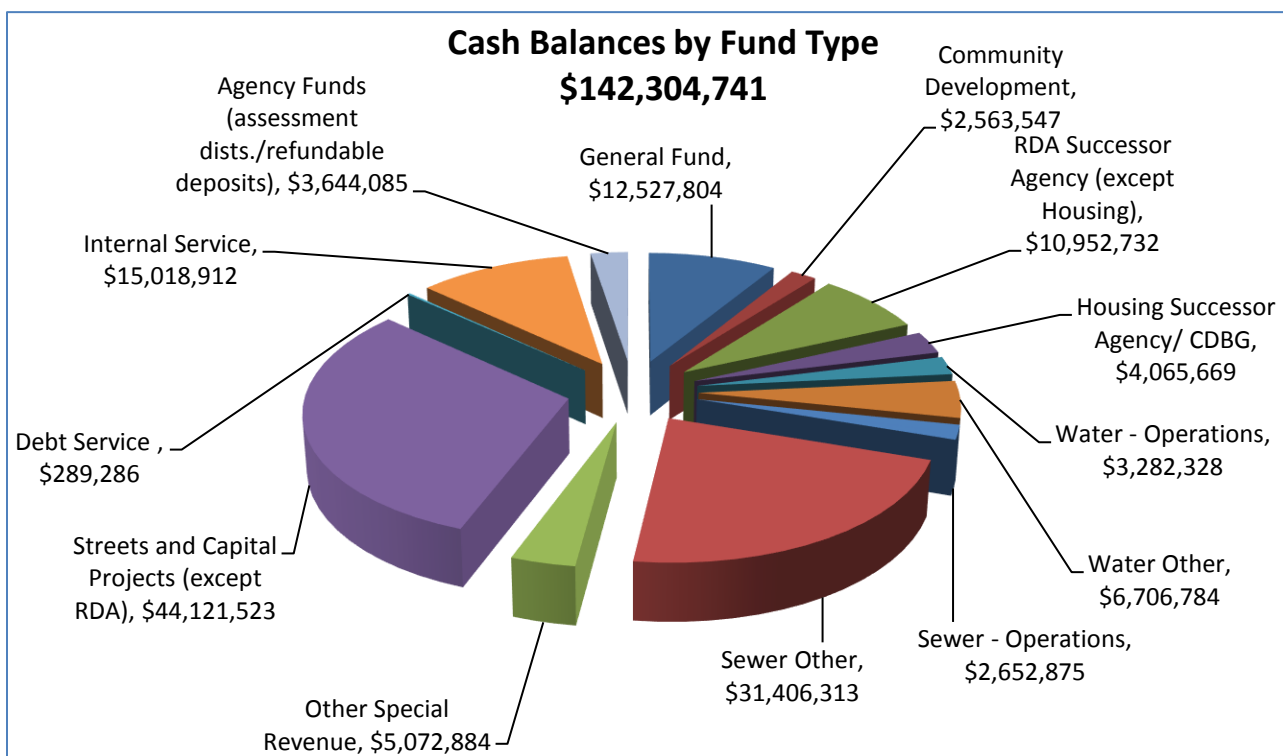
Attachment: August 2019 Financial and Investment Report (2503 : Accept August 2019 Financial and Investment Report)

City of Morgan Hill Monthly Investment Report - August 31, 2019

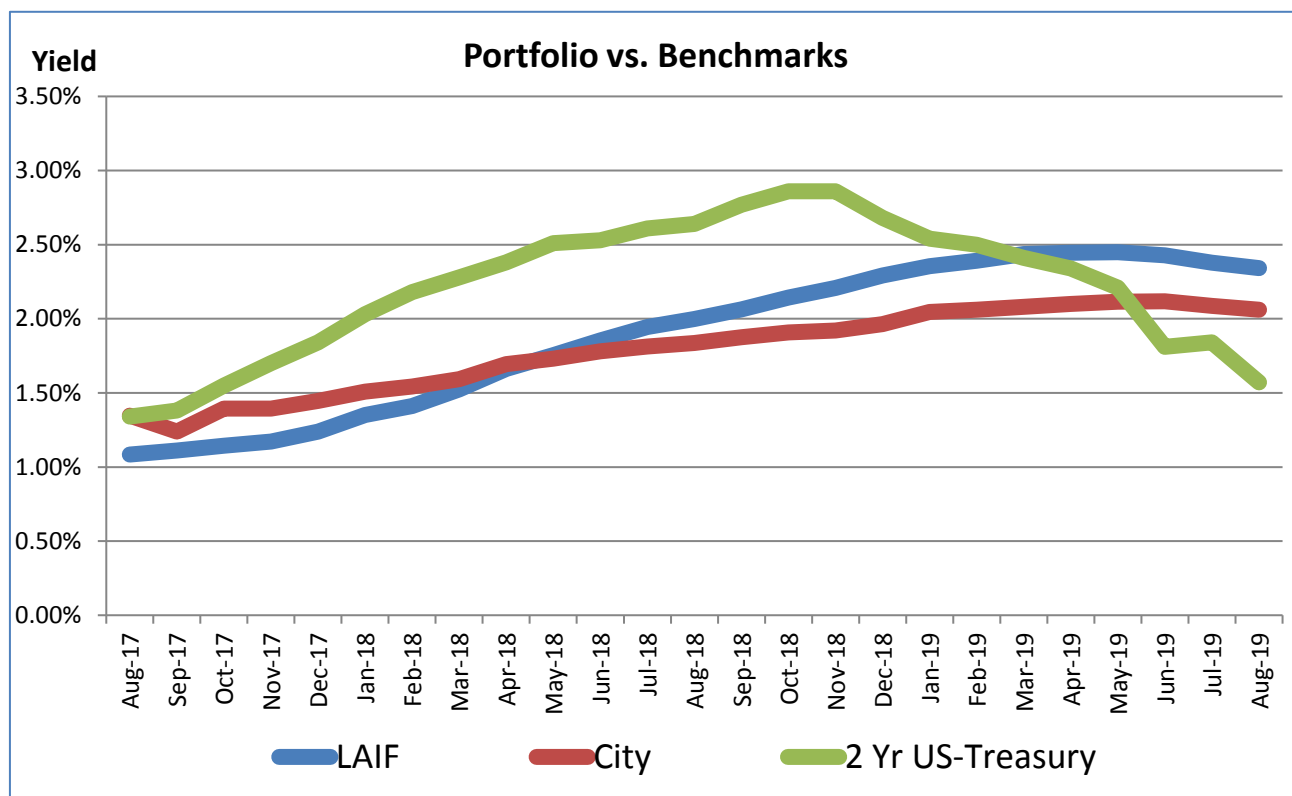
The following are the snapshots of City's investment portfolio as of August 31, 2019. The first chart shows the portfolio composition by investment type:



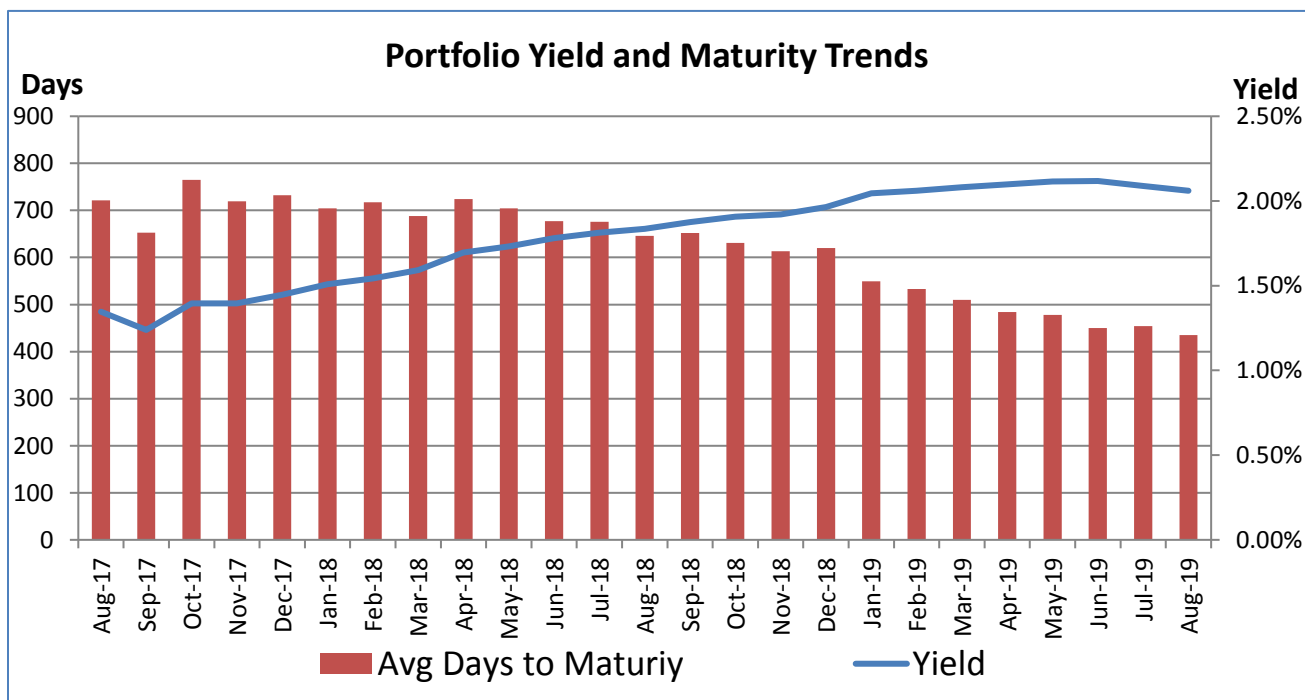
The chart below shows cash balances by fund type reconciled to City's financial system:



The following chart illustrates a yield comparison by month among the City's portfolio, LAIF and 2-Year US Treasury:



The chart below illustrates monthly average days to maturity of the City's portfolio along with the weighted average yield for the past two years:





City of Morgan Hill
Investment Portfolio Detail
As of August 31, 2019

Investment Type	Settlement Date	Book Value	% of Portfolio	Market Value	YTM at Cost	Next Call Date	Date of Maturity
L A I F		\$ 56,811,570	39.92%	\$ 56,908,819	2.34%		
City Managed							
Fed Home Loan Bank	10/19/2015	4,000,000	2.81%	3,992,160	1.70%	10/19/2019	10/19/2020
Fed Home Loan Bank	6/30/2016	4,000,000	2.81%	3,992,160	1.50%	6/30/2020	6/30/2021
Fed Natn'l Mortgage Assn	8/25/2016	4,000,000	2.81%	3,990,440	1.40%	8/25/2020	8/25/2021
Fed Home Loan Mortgage	9/29/2016	2,000,000	1.41%	1,999,700	1.65%	8/29/2020	9/29/2021
Fed Natn'l Mortgage Assn	9/29/2016	4,000,000	2.81%	3,992,640	1.60%	9/29/2019	9/29/2021
Fed Home Loan Mortgage	10/27/2016	4,000,000	2.81%	3,995,160	1.60%	10/27/2019	10/27/2021
Fed Natn'l Mortgage Assn	10/28/2016	4,000,000	2.81%	3,999,000	1.55%	10/28/2019	10/28/2021
Fed Home Loan Mortgage	10/28/2016	2,000,000	1.41%	1,999,980	1.65%	10/28/2019	10/28/2021
Fed Home Loan Mortgage	11/15/2016	4,000,000	2.81%	3,978,640	1.55%	10/15/2019	11/15/2021
Fed Home Loan Mortgage	11/23/2016	3,000,000	2.11%	3,000,060	1.65%	11/23/2019	11/23/2021
Fed Home Loan Mortgage	11/23/2016	4,000,000	2.81%	3,999,800	1.63%	11/23/2019	11/23/2021
Fed Home Loan Mortgage	11/30/2016	4,000,000	2.81%	4,002,000	1.88%	10/26/2019	11/26/2021
Fed Home Loan Mortgage	6/29/2017	1,300,000	0.91%	1,300,533	2.15%	8/29/2020	6/29/2022
Fed Home Loan Bank	10/19/2017	3,850,000	2.71%	3,850,039	2.15%	10/19/2019	10/19/2022
Fed Natn'l Mortgage Assn	10/26/2017	4,150,000	2.92%	4,152,739	2.20%	10/26/2019	10/26/2022
Fed Home Loan Mortgage	7/10/2019	3,000,000	2.11%	3,010,140	2.15%	7/2/2020	7/2/2024
Fed Home Loan Mortgage	10/7/2016	749,996	0.53%	749,813	1.29%	9/12/2019	9/12/2019
Fed Natn'l Mortgage Assn	10/24/2016	749,998	0.53%	749,520	1.25%	9/30/2019	9/30/2019
Fed Home Loan Bank	9/26/2018	748,199	0.53%	752,190	2.80%	3/30/2020	3/30/2020
Fed Home Loan Bank	11/6/2018	744,527	0.52%	749,018	2.87%	11/15/2019	11/15/2019
Fed Home Loan Mortgage	1/18/2019	999,448	0.70%	1,003,850	2.59%	4/23/2020	4/23/2020
Fed Farm Credit Sys Disc	4/30/2019	892,924	0.63%	895,104	2.39%	12/31/2019	12/31/2019
Treasury Note	4/30/2018	4,315,512	3.03%	4,513,185	2.73%	3/31/2023	3/31/2023
Sub Total/Average		\$ 64,500,604	42.29%	\$ 64,667,870	1.84%		
Money Market		\$ 3,341,792	2.35%	\$ 3,341,792	1.96%		
Total City Managed/Average		\$ 124,653,967	84.56%	\$ 124,918,481	2.05%		
Bond Reserve Accounts - Held By Trustees		\$ 12,772,560	8.98%	\$ 12,828,421			
Cash/Deposits		\$ 2,290,810	1.61%	\$ 2,290,810			
PARS Trust		\$ 2,587,404	1.82%	\$ 2,965,955			
GRAND TOTAL/AVERAGE		\$ 142,304,741	97%	\$ 143,003,668			

Attachment: August 2019 Financial and Investment Report (2503 : Accept August 2019 Financial and Investment Report)



CITY OF MORGAN HILL CASH AND INVESTMENT REPORT
FOR THE MONTH OF AUGUST 31, 2019
FOR THE FISCAL YEAR OF 2018-19

	Invested in Fund	Yield	Book Value End of Month	% of Total	Market Value
Investments					
State Treasurer LAIF - City	All Funds Pooled	2.34%	\$ 53,903,983	37.88%	\$ 53,996,256
2015 Wastewater Rev Bonds - CIP	Wastewater Fund	2.34%	2,907,587	2.04%	2,912,564
Federal Issues	All Funds Pooled	1.65%	60,185,093	42.29%	60,154,685
US Treasury Notes	All Funds Pooled	2.73%	4,315,512	3.03%	4,513,185
Dreyfus Treas Cash Management Acct	All Funds Pooled	1.96%	3,341,792	2.35%	3,341,792
	SUBTOTAL		\$ 124,653,967	87.60%	\$ 124,918,481
Bond Reserve Accounts - held by trustees					
Zions Bank - Civic Center/Library Facility					
Blackrock Liq Fund	Debt Service	1.76%	81	0.00%	81
Zions Bank - MH Police Facility Lease Revenue Bonds					
Blackrock Liq Fund	Debt Service	1.76%	103	0.00%	103
BNY - RDA Bonds					
Dreyfus Cash Mgmt 521	Successor Fund	1.96%	6,569,133	4.62%	6,569,133
US Treasury Notes - Reserve Acct.	Successor Fund	1.25%	5,074,237	3.57%	5,130,098
Zions Bank - MH Ranch 2015					
Blackrock Liq Funds Fed Fund -DI -2015	Agency Fund	1.76%	584,592	0.41%	584,592
Zions Bank - Madrone Bus Park Taxable/ Tax Exempt 2015					
Blackrock Liquidity Temp Fund-2015	Agency Fund	1.76%	544,414	0.38%	544,414
	SUBTOTAL		12,772,560	8.98%	12,828,421
Other Cash/Deposits					
General Checking	All Funds		2,253,698	1.58%	2,253,698
Workers' Comp Administrators	Workers' Comp		30,000	0.02%	30,000
Petty Cash & Emergency Cash	General Fund		7,112	0.00%	7,112
PARS - OPEB Trust			1,787,404	1.26%	2,037,817
PARS - PENSION Trust			800,000	0.56%	928,137
	SUBTOTAL		4,878,214	3.43%	5,256,765
Total Cash and Investments			\$ 142,304,741	100.00%	\$ 143,003,668

CASH ACTIVITY SUMMARY
FY 2019-20

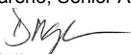
Fund Type	Un-audited 07/01/19 Balance	Change in Cash Balance	8/31/2019 Balance
General Fund	\$ 15,044,885	\$ (2,517,081)	\$ 12,527,804
Community Development	3,419,872	(856,325)	2,563,547
RDA Successor Agency (except Housing)	12,277,198	(1,324,466)	10,952,732
Housing Successor Agency/ CDBG	4,150,303	(84,634)	4,065,669
Water - Operations	2,317,454	964,874	3,282,328
Water Other	4,954,819	1,751,965	6,706,784
Sewer - Operations	1,505,059	1,147,816	2,652,875
Sewer Other	29,212,866	2,193,446	31,406,313
Other Special Revenue	5,052,285	20,599	5,072,884
Streets and Capital Projects (except RDA)	42,155,711	1,965,811	44,121,523
Debt Service	253,454	35,832	289,286
Internal Service	12,991,987	2,026,925	15,018,912
Agency Funds (assessment dists./refundable deposits)	4,116,381	(472,296)	3,644,085
Total	\$ 137,452,276	\$ 4,852,465	\$ 142,304,741

Note: See Investment Portfolio Detail for maturities of "Investments." Market values are obtained from the City's investment brokers' monthly reports.

I certify the information on the investment reports on pages has been reconciled to the general ledger and bank statements and that there are sufficient funds to meet the expenditure requirements of the City for the next six months. The portfolio is in compliance with the City of Morgan Hill investment policy and all State laws and regulations.

Prepared by: 
 Gina Nazareno, Senior Accountant

Approved by:

Reviewed by: 
 Dat Nguyen, Finance Director

David Clink, Treasurer

Attachment: August 2019 Financial and Investment Report (2503 : Accept August 2019 Financial and Investment Report)



City of Morgan Hill
Year to Date Revenues - Fiscal Year 2019-20
For the Two Months Ended August 31, 2019
17% of Year Complete

FUND REVENUE SOURCE	ADOPTED BUDGET	AMENDED BUDGET	CURRENT YTD ACTUAL	% OF BUDGET	PRIOR YTD	INCR (DECR) FROM PRIOR YTD	% CHANGE
010 GENERAL FUND							
TAXES							
Property Tax - Secured/Unsecured	\$ 11,189,507	\$ 11,189,507	\$ -	0%	\$ -	\$ -	0%
Property Tax - RPTTF Residual Distribution	1,573,610	1,573,610	-	n/a	73,755	(73,755)	-100%
Property Tax - Supplemental Roll	319,260	319,260	15,783	5%	14,060	1,723	12%
Sales Tax	10,091,000	10,091,000	-	n/a	-	-	n/a
Public Safety Sales Tax	385,000	385,000	-	n/a	66,780	(66,780)	-100%
Transient Occupancy Taxes	3,080,880	3,080,880	286,783	9%	277,328	9,454	3%
Franchise (Refuse, Cable, PG&E)	2,319,566	2,319,566	-	0%	-	-	n/a
Property Transfer Tax	515,000	515,000	45,059	9%	50,620	(5,561)	-11%
TOTAL TAXES	29,473,823	29,473,823	347,625	1%	482,543	(134,918)	-28%
LICENSES/PERMITS							
Business License	202,000	202,000	98,267	49%	167,759	(69,492)	-41%
Other Permits	4,940	4,940	4,696	95%	3,027	1,669	55%
TOTAL LICENSES/PERMITS	206,940	206,940	102,963	50%	170,786	(67,823)	-40%
FINES AND PENALTIES							
Parking Enforcement	8,500	8,500	674	8%	937	(263)	-28%
Bails & Fines	73,645	73,645	-	n/a	-	-	0%
Administrative Citations	9,785	9,785	13,066	134%	1,743	11,323	650%
TOTAL FINES AND PENALTIES	91,930	91,930	13,740	15%	2,680	11,060	413%
OTHER AGENCIES							
Motor Vehicle in-Lieu	24,652	24,652	-	0%	-	-	n/a
Other Revenue - Other Agencies	403,389	403,389	3,679	1%	86,459	(82,780)	-96%
TOTAL OTHER AGENCIES	428,041	428,041	3,679	1%	86,459	(82,780)	-96%
CHARGES CURRENT SERVICES							
Police False Alarm Charge	33,990	33,990	900	3%	1,218	(318)	-26%
Business License Application Review	36,000	36,000	3,528	10%	8,664	(5,136)	-59%
Membership Services & Rec Programs	6,426,631	6,426,631	1,392,092	22%	1,385,862	6,230	0%
Facility Rentals	915,330	915,330	207,359	23%	204,355	3,005	1%
Community Services	149,705	149,705	6,811	5%	8,921	(2,110)	-24%
General Administration Overhead	1,795,198	1,795,198	298,570	17%	284,352	14,218	5%
Other Charges Current Services	910,870	910,870	104,351	11%	68,830	35,521	52%
TOTAL CURRENT SERVICES	10,267,724	10,267,724	2,013,611	20%	1,962,201	51,410	3%
OTHER REVENUE							
Use of money/property	517,900	517,900	81,660	16%	47,912	33,748	70%
Other Revenues	311,842	311,842	26,905	9%	114,518	(87,614)	-77%
TOTAL OTHER REVENUE	829,742	829,742	108,565	13%	162,431	(53,866)	-33%
TRANSFERS IN							
One Time Transfer	180,000	180,000	29,998	17%	-	29,998	0%
Asset Seizure	-	-	-	0%	-	-	0%
Public Safety	100,000	100,000	-	0%	-	-	0%
Fire Impact	-	-	25,000	0%	-	25,000	0%
Streets	738,968	738,968	-	0%	-	-	n/a
Park Maintenance	-	-	-	0%	-	-	n/a
Police Impact	25,000	25,000	4,166	17%	4,166	-	n/a
Sewer Operations	351,845	351,845	58,642	17%	58,230	412	1%
Water Operations	351,845	351,845	58,642	17%	58,230	412	1%
Park Development	75,000	75,000	12,500	17%	12,500	-	n/a
TOTAL TRANSFERS IN	1,822,658	1,822,658	188,948	10%	133,126	55,822	42%
TOTAL GENERAL FUND	43,120,858	43,120,858	2,779,130	6%	3,000,225	(221,095)	-7%
SPECIAL REVENUE FUNDS							
202 STREET MAINTENANCE							
Gas Tax 2105 - 2107.5	738,968	738,968	56,983	8%	43,367	13,617	31%
Interest / Other Revenue/Other Charges	-	-	84	n/a	58,553	(58,469)	-100%
202 STREET MAINTENANCE	738,968	738,968	57,067	8%	101,919	(44,853)	-44%

Attachment: August 2019 Financial and Investment Report (2503 : Accept August 2019 Financial and Investment Report)



City of Morgan Hill
Year to Date Revenues - Fiscal Year 2019-20
For the Two Months Ended August 31, 2019
17% of Year Complete

FUND REVENUE SOURCE	ADOPTED BUDGET	AMENDED BUDGET	CURRENT YTD ACTUAL	% OF BUDGET	PRIOR YTD	INCR (DECR) FROM PRIOR YTD	% CHANGE
SPECIAL REVENUE FUNDS							
205 PUBLIC SAFETY TRUST							
Interest Income	135	135	122	91%	19	104	551%
Police Grant/SLEF/JAG	100,000	100,000	-	n/a	-	-	0%
205 PUBLIC SAFETY TRUST	100,135	100,135	122	0%	19	104	551%
206 COMMUNITY DEVELOPMENT							
Building Fees	3,275,864	3,275,864	676,260	21%	411,733	264,527	64%
Planning Fees	1,476,912	1,476,912	161,929	11%	309,751	(147,823)	-48%
Engineering Fees	495,977	495,977	38,091	8%	188,120	(150,029)	-80%
Other Revenue/Current Charges	14,682	14,682	3,442	23%	1,976	1,466	74%
206 COMMUNITY DEVELOPMENT	5,263,435	5,263,435	879,721	17%	911,581	(31,859)	-3%
207 LONG RANGE PLANNING	736,371	736,371	135,536	18%	118,797	16,739	14%
215 and 216 HCD BLOCK GRANT							
Interest Income/Other Revenue	3,660	3,660	83	2%	25	58	230%
215 and 216 HCD BLOCK GRANT	3,660	3,660	83	2%	25	58	230%
225 ASSET SEIZURE	2,227	2,227	170	8%	27,024	(26,854)	-99%
229 LIGHTING AND LANDSCAPE	189,158	189,158	138	0%	57	81	143%
230 COMMUNITY FACILITIES DISTRICT	44,504	44,504	128	0%	30	98	325%
232 ENVIRONMENTAL PROGRAMS	409,843	409,843	80,941	20%	89,081	(8,139)	-9%
234 MOBILE HOME PARK RENT STAB.	873	873	69	8%	16	52	319%
235 SENIOR HOUSING	4,462	4,462	298	7%	85	214	253%
236 HOUSING MITIGATION	2,336,690	2,336,690	191,620	8%	106,569	85,051	80%
240 EMPLOYEE ASSISTANCE	29,256	29,256	3,128	11%	3,892	(765)	-20%
247 ENVIRONMENT REMEDIATION	2,824	2,824	173	6%	54	119	223%
250 COMH-SUCCESSOR AGENCY-MHRDA	6,935,750	6,935,750	23,629	0%	854,454	(830,825)	-97%
255 HOUSING SUCCESSOR AGENCY	553,622	553,622	121,112	22%	5,631	115,480	2051%
TOTAL SPECIAL REVENUE FUNDS	17,351,779	17,351,779	1,493,935	9%	2,219,235	(725,300)	-33%
CAPITAL PROJECTS FUNDS							
301 PARK DEVELOPMENT	2,647,562	2,647,562	153,710	6%	455,636	(301,927)	-66%
302 PARK MAINTENANCE	1,371,696	1,371,696	63,645	5%	201,899	(138,254)	-68%
303 LOCAL DRAINAGE	1,652,576	1,652,576	16,880	1%	310,922	(294,042)	-95%
304 LOCAL DRAINAGE/NON AB1600	83,498	83,498	2,040	2%	71,241	(69,201)	-97%
306 AGRICULTURE & OPEN SPACE PRESERVATION	3,420,324	3,420,324	280,899	8%	842,715	(561,816)	-67%
308 STREET CIP	5,068,938	5,068,938	191,943	4%	700,840	(508,897)	-73%
309 TRAFFIC IMPACT	1,283,196	1,283,196	194,117	15%	516,375	(322,259)	-62%
311 POLICE IMPACT	295,109	295,109	50,328	17%	74,128	(23,800)	-32%
313 FIRE IMPACT	469,220	469,220	33,741	7%	54,489	(20,748)	-38%
346 PUBLIC FACILITIES NON-AB1600	630,420	630,420	-	n/a	93,931	(93,931)	-100%
347 PUBLIC FACILITIES IMPACT	221,932	221,932	56,265	25%	49,649	6,617	13%
348 LIBRARY	936,224	936,224	47,514	5%	191,607	(144,092)	-75%
350 UNDERGROUNDING	50,079	50,079	1,125	2%	133,596	(132,471)	-99%
355 SCHOOL PEDESTRIAN/TRAFFIC SAFETY	656,864	656,864	5,275	1%	3,906	1,369	35%
360 COMMUNITY/REC IMPACT FUND	1,359,693	1,359,693	84,074	6%	230,767	(146,694)	-64%
TOTAL CAPITAL PROJECTS FUNDS	20,147,331	20,147,331	1,181,557	6%	3,931,701	(2,750,144)	-70%
DEBT SERVICE FUNDS							
420 CIVIC CENTER DEBT	301,874	301,874	50,083	17%	49,504	579	1%
441 POLICE FACILITY BOND	376,090	376,090	36	0%	31	5	16%
TOTAL DEBT SERVICE FUNDS	677,964	677,964	50,120	7%	49,535	584	1%

Attachment: August 2019 Financial and Investment Report (2503 : Accept August 2019 Financial and Investment Report)



City of Morgan Hill
Year to Date Revenues - Fiscal Year 2019-20
For the Two Months Ended August 31, 2019
17% of Year Complete

FUND REVENUE SOURCE	ADOPTED BUDGET	AMENDED BUDGET	CURRENT YTD ACTUAL	% OF BUDGET	PRIOR YTD	INCR (DECR) FROM PRIOR YTD	% CHANGE
ENTERPRISE FUNDS							
640 SEWER OPERATION							
Sewer Service Fees	11,746,083	11,746,083	691,391	6%	833,865	(142,473)	-17%
Interest Income/Transfers	43,166	43,166	3,977	9%	846	3,131	370%
Other Revenue/Current Charges	328,660	328,660	17,314	5%	88,174	(70,860)	-80%
640 SEWER OPERATION	12,117,909	12,117,909	712,681	6%	922,884	(210,203)	-23%
641 SEWER EXPANSION							
Interest Income	253,972	253,972	25,149	10%	7,408	17,741	239%
Development Impact Fee	4,801,041	4,801,041	557,836	12%	1,365,118	(807,282)	-59%
Transfers/Other	-	-	-	0%	-	-	0%
641 SEWER EXPANSION	5,055,013	5,055,013	582,985	12%	1,372,526	(789,541)	-58%
642 SEWER RATE STABILIZATION	52,262	52,262	3,428	7%	971	2,457	253%
643 SEWER-CAPITAL PROJECT	2,853,531	2,853,531	481,856	17%	458,474	23,381	5%
TOTAL SEWER FUNDS	20,078,715	20,078,715	1,780,951	9%	2,754,856	(973,905)	-35%
650 WATER OPERATION							
Water Sales	13,400,000	13,400,000	1,031,563	8%	1,250,078	(218,516)	-17%
Meter Install & Service	125,500	125,500	1,500	1%	63,189	(61,689)	-98%
Transfers-In / Interest Income	478,039	478,039	74,080	15%	67,436	6,644	10%
Other Revenue/Current Charges	776,961	776,961	134,799	17%	251,221	(116,422)	-46%
650 WATER OPERATION	14,780,500	14,780,500	1,241,941	8%	1,631,924	(389,983)	-24%
651 WATER EXPANSION							
Interest Income/Other Revenue/Transfer	73,821	73,821	3,434	5%	1,054	2,380	226%
Development Impact Fee	1,452,925	1,452,925	247,831	17%	349,529	(101,698)	-29%
651 WATER EXPANSION	1,526,746	1,526,746	251,265	16%	350,583	(99,318)	-28%
652 Water Rate Stabilization	11,107	11,107	1,352	12%	208	1,144	551%
653 Water Capital Project	3,812,288	3,812,288	635,894	17%	400,316	235,578	59%
TOTAL WATER FUNDS	20,130,641	20,130,641	2,130,453	11%	2,383,031	(252,579)	-11%
TOTAL ENTERPRISE FUNDS	40,209,356	40,209,356	3,911,403	10%	5,137,887	(1,226,484)	-24%
INTERNAL SERVICE FUNDS							
730 INFORMATION SYSTEMS	1,783,719	1,783,719	301,653	17%	313,409	(11,756)	-4%
740 BUILDING MAINTENANCE	3,258,548	3,258,548	536,222	16%	547,610	(11,388)	-2%
741 BUILDING REPLACEMENT	831,677	831,677	129,259	16%	123,178	6,081	5%
745 CIP ADMINISTRATION	1,871,909	1,871,909	252,807	14%	220,074	32,734	15%
760 UNEMPLOYMENT INSURANCE	2,898	2,898	186	6%	62	124	201%
770 WORKERS COMPENSATION	800,422	800,422	157,324	20%	132,684	24,641	19%
790 EQUIPMENT REPLACEMENT	1,052,269	1,052,269	234,565	22%	169,791	64,774	38%
791 EMPLOYEE BENEFITS	1,229,852	1,229,852	131,119	11%	225,693	(94,574)	-42%
793 CORPORATION YARD COMMISSION	-	-	-	0%	1,100	(1,100)	-100%
795 GENERAL LIABILITY INSURANCE	1,076,586	1,076,586	176,946	16%	167,550	9,397	6%
TOTAL INTERNAL SERVICE FUNDS	11,907,880	11,907,880	1,920,081	16%	1,901,149	18,933	1%
TOTAL FOR ALL FUNDS	\$ 133,415,168	\$ 133,415,168	\$ 11,336,226	8%	\$ 16,239,732	\$ (4,903,506)	-30%

Attachment: August 2019 Financial and Investment Report (2503 : Accept August 2019 Financial and Investment Report)



City of Morgan Hill
Year to Date Expenses - Fiscal Year 2019-20
For the Month and Two Months Ended August 31, 2019
17% of Year Complete

FUND NO.	FUND/ACTIVITY	CURRENT MONTH ACTUAL EXPENSES	AMENDED BUDGET	YTD EXPENSES	OUTSTANDING ENCUMBRANCE	TOTAL ALLOCATED	PERCENT OF TOTAL TO BUDGET	PRIOR YTD
010 GENERAL FUND								
I. ADMINISTRATION								
	CITY COUNCIL	\$ 31,470	\$ 336,684	\$ 77,432	\$ 84,000	\$ 161,432	48%	\$ 61,432
	CITY ATTORNEY	69,484	763,698	100,010	68,451	168,460	22%	100,010
	CITY MANAGER	51,380	580,167	72,862	-	72,862	13%	121,380
	HUMAN RESOURCES	88,147	751,908	127,109	-	127,109	17%	111,147
	COUNCIL SVCS & RECORDS MGMT							
	Council Svcs & Records Mgmt	66,382	601,560	100,284	6,131	106,415	18%	100,284
	Elections	2,313	178,037	3,360	-	3,360	2%	-
	COUNCIL SVCS & RECORDS MGMT	68,695	779,597	103,644	6,131	109,775	14%	100,284
	FINANCE	167,647	1,623,059	282,755	42,248	325,003	20%	282,755
	TOTAL ADMINISTRATION	476,824	4,835,112	763,812	200,829	964,641	20%	799,824
II. COMMUNITY SERVICES								
	Membership Services & Rec. Programs	982,130	6,371,297	1,298,504	1,402,031	2,700,535	42%	1,260,504
	Recreation Facility Rentals	133,197	1,356,318	222,489	33,980	256,469	19%	211,197
	Community Services	83,303	648,407	106,042	70,321	176,362	27%	106,042
	Environmental Services	25,059	293,918	35,846	-	35,846	12%	35,846
	Street Maintenance	167,913	2,386,836	241,821	253,921	495,742	21%	300,913
	Downtown Maintenance	30,663	321,475	44,518	74,488	119,006	37%	44,518
	Cable Television	2,492	22,594	3,582	-	3,582	16%	-
	COMMUNITY SERVICES	1,424,757	11,400,845	1,952,802	1,834,740	3,787,542	33%	1,966,802
	CODE COMPLIANCE	15,193	160,943	24,066	-	24,066	15%	24,066
	CONGESTION MANAGEMENT	30,803	318,537	43,012	-	43,012	14%	-
	ECONOMIC DEVELOPMENT PROGRAMS	85,423	799,102	118,755	39,064	157,819		85,423
	TOTAL COMMUNITY SERVICES	1,556,175	12,679,427	2,138,635	1,873,805	4,012,440	32%	2,077,305
III. PUBLIC SAFETY								
	POLICE							
	PD Administration	170,307	1,300,288	228,017	12,763	240,779	19%	211,307
	Field Operations	991,012	9,094,915	1,468,129	174,357	1,642,486	18%	1,189,012
	Support Services	226,004	2,359,572	399,128	7,500	406,628	17%	369,128
	Emergency Services/Haz Mat	20,835	195,641	28,754	-	28,754	15%	28,754
	Special Operations	252,210	2,747,543	397,736	-	397,736	14%	339,210
	Dispatch Services	205,989	1,716,002	287,319	-	287,319	17%	277,989
	POLICE	1,866,358	17,413,961	2,809,082	194,620	3,003,702	17%	2,406,358
	FIRE	896,427	6,861,396	1,392,915	73,763	1,466,678	21%	1,290,427
	TOTAL PUBLIC SAFETY	2,762,785	24,275,358	4,201,997	268,383	4,470,380	18%	3,696,785
IV. TRANSFERS								
	Other	156,333	2,142,463	312,666	-	312,666	15%	300,333
	TOTAL TRANSFERS	156,333	2,142,463	312,666	-	312,666	15%	300,333
	TOTAL GENERAL FUND	4,952,118	43,932,359	7,417,110	2,343,016	9,760,126	22%	6,874,110

Attachment: August 2019 Financial and Investment Report (2503 : Accept August 2019 Financial and Investment Report)



City of Morgan Hill
Year to Date Expenses - Fiscal Year 2019-20
For the Month and Two Months Ended August 31, 2019
17% of Year Complete

FUND NO.	FUND/ACTIVITY	CURRENT MONTH ACTUAL EXPENSES	AMENDED BUDGET	YTD EXPENSES	OUTSTANDING ENCUMBRANCE	TOTAL ALLOCATED	PERCENT OF TOTAL TO BUDGET	PRIOR YTD
SPECIAL REVENUE FUNDS								
202	STREET MAINTENANCE	342	743,072	684	-	684	0%	1
205	PUBLIC SAFETY/SUPP.LAW	572	106,863	1,144	-	1,144	1%	1
206	COMMUNITY DEVELOPMENT FUND							
	Planning	203,338	2,516,024	302,477	74,953	377,430	15%	31
	Building	211,429	1,998,366	302,189	342,871	645,060	32%	25
	Engineering	124,688	1,332,942	183,184	348,640	531,824	40%	21
206	COMMUNITY DEVELOPMENT FUND	539,455	5,847,332	787,850	766,464	1,554,314	27%	77
207	LONG RANGE PLANNING	39,086	736,054	59,406	174,149	233,555	32%	8
215/216	CDBG	434	5,209	868	-	868	17%	1
225	ASSET SEIZURE	-	-	-	-	-	0%	1
229	LIGHTING AND LANDSCAPE	16,745	206,031	19,952	54,316	74,268	36%	11
230	COMMUNITY FACILITIES DISTRICT	5,090	46,979	6,785	-	6,785	14%	1
232	ENVIRONMENT PROGRAMS	44,852	439,095	72,105	33,578	105,683	24%	6
234	MOBILE HOME PARK	35	425	70	-	70	16%	1
236	HOUSING MITIGATION	190,604	2,235,207	221,348	91,803	313,151	14%	1,18
240	EMPLOYEE ASSISTANCE	3,521	28,477	6,691	-	6,691	23%	1
247	ENVIRONMENTAL REMEDIATION	110	-	219	-	219	0%	1
250	COMH-SUCCESSOR AGENCY-MHRDA	3,310	6,973,161	5,424	-	5,424	0%	77
255	HOUSING SUCCESSOR AGENCY	128,396	935,845	191,126	455,898	647,024	69%	54
TOTAL SPECIAL REVENUE FUNDS		972,553	18,303,750	1,373,671	1,576,208	2,949,878	16%	3,46
CAPITAL PROJECT FUNDS								
301	PARK DEVELOPMENT	137,447	5,180,802	161,114	900,869	1,061,982	20%	5
302	PARK MAINTENANCE	110,930	1,227,852	150,011	177,395	327,406	27%	16
303	LOCAL DRAINAGE	10,578	2,513,533	17,748	7,912	25,659	1%	1
304	LOCAL DRAIN. NON-AB1600	228	153,783	456	9,950	10,406	7%	1
306	AGRICULTURE & OPEN SPACE PRESERVATION	6,496	1,640,771	8,699	53,666	62,365	4%	37
308	STREET CIP	90,921	5,414,791	103,083	4,432,530	4,535,613	84%	3
309	TRAFFIC IMPACT	84,867	1,267,514	172,260	153,002	325,262	26%	5
311	POLICE IMPACT	2,382	226,130	4,716	-	4,716	2%	1
313	FIRE IMPACT	273	28,425	25,539	9,462	35,002	123%	1
346	PUBLIC FAC.NON AB1600	51,107	588,826	52,661	38,706	91,367	16%	1
347	PUBLIC FACILITIES IMPACT	22,268	119,458	24,535	72,019	96,553	81%	1
348	LIBRARY IMPACT	36,919	655,384	59,385	36,143	95,527	15%	9
350	UNDERGROUNDING	90	1,075	180	-	180	17%	1
355	SCHOOL PEDESTRIAN & TRAFFIC SAFETY	33,267	663,118	46,323	148,416	194,739	29%	1
360	COMM/REC CENTER IMPACT	12,619	458,875	23,345	118,396	141,741	0%	1
TOTAL CAPITAL PROJECTS FUNDS		600,391	20,140,338	850,054	6,158,464	7,008,518	35%	83
DEBT SERVICE FUNDS								
420	CIVIC CENTER DEBT	839	311,636	1,678	-	1,678	1%	1
441	POLICE FACILITY BOND DEBT	320	380,552	640	-	640	0%	1
TOTAL DEBT SERVICE FUNDS		1,159	692,188	2,318	-	2,318	0%	1

Attachment: August 2019 Financial and Investment Report (2503 : Accept August 2019 Financial and Investment Report)



City of Morgan Hill
 Year to Date Expenses - Fiscal Year 2019-20
 For the Month and Two Months Ended August 31, 2019
 17% of Year Complete

FUND NO.	FUND/ACTIVITY	CURRENT MONTH ACTUAL EXPENSES	AMENDED BUDGET	YTD EXPENSES	OUTSTANDING ENCUMBRANCE	TOTAL ALLOCATED	PERCENT OF TOTAL TO BUDGET	PRIOR YTD
ENTERPRISE FUNDS								
SEWER								
640	SEWER OPERATIONS	558,488	12,087,541	987,914	610,028	1,597,942	13%	97%
641	SEWER CAPITAL EXPANSION	49,526	12,040,565	84,547	390,079	474,626	4%	8%
642	SEWER RATE STABILIZATION	90	1,078	180	-	180	17%	
643	SEWER-CAPITAL PROJECTS	25,724	4,480,646	42,281	931,346	973,628	22%	14%
TOTAL SEWER FUND(S)		633,828	28,609,829	1,114,922	1,931,453	3,046,376	11%	1,20%
WATER								
	Water Operations	1,378,264	14,118,964	1,922,664	1,740,543	3,663,206	26%	1,58%
	Utility Billing	81,092	789,099	147,856	45,515	193,371	25%	13%
	Water Conservation	6,510	198,464	10,424	47,549	57,973	29%	1%
650	WATER OPERATIONS	1,465,867	15,106,526	2,080,944	1,833,607	3,914,550	26%	1,73%
651	WATER CAPITAL EXPANSION	194,488	1,538,305	270,628	433,613	704,242	46%	17%
652	WATER RATE STABILIZATION	29	352	58	-	58	16%	
653	WATER-CAPITAL PROJECTS	9,231	3,210,663	17,639	69,850	87,489	3%	7%
TOTAL WATER FUND(S)		1,669,615	19,855,846	2,369,269	2,337,070	4,706,339	24%	1,99%
TOTAL ENTERPRISE FUNDS		2,303,443	48,465,676	3,484,192	4,268,523	7,752,715	16%	3,19%
INTERNAL SERVICE FUNDS								
730	INFORMATION SYSTEMS	225,190	2,385,467	300,177	112,558	412,735	17%	25%
740	BUILDING MAINTENANCE	353,878	3,383,819	498,781	388,776	887,557	26%	45%
741	BUILDING REPLACEMENT	18,973	278,950	18,973	126,159	145,132	52%	3%
745	CIP ADMINISTRATION	170,613	1,619,521	252,798	9,983	262,781	16%	22%
760	UNEMPLOYMENT	2,135	10,000	2,135	-	2,135	21%	
770	WORKERS COMPENSATION	104,551	952,045	593,062	-	593,062	62%	39%
790	EQUIPMENT REPLACEMENT	-	1,136,915	-	374,915	374,915	33%	
791	EMPLOYEE BENEFITS FUND	90,047	615,000	104,444	-	104,444	17%	15%
793	CORP YARD COMMISSION	-	-	-	-	-	0%	
795	GEN. LIABILITY INSURANCE	11,853	1,044,568	786,294	-	786,294	75%	71%
TOTAL INTERNAL SERVICE FUNDS		977,240	11,426,284	2,556,664	1,012,390	3,569,054	31%	2,23%
REPORT TOTAL		\$ 9,806,904	\$ 142,960,594	\$ 15,684,008	\$ 15,358,601	\$ 31,042,609	22%	\$ 16,61%

Attachment: August 2019 Financial and Investment Report (2503 : Accept August 2019 Financial and Investment Report)

City of Morgan Hill
Fund Activity Summary - Fiscal Year 2019-20
For the Two Months Ended August 31, 2019
17% of Year Complete

Fund No.	Fund	Preliminary Fund Balance 06-30-19	Revenues		Expenses		Year to-Date Deficit or Carryover	Ending Fund Balance	
			YTD Actual	% of Budget	YTD Actual	% of Budget		Reserved ¹	Unreserved
010	GENERAL FUND	\$ 16,923,251	\$ 2,779,130	6%	\$ 7,417,110	17%	\$ (4,637,980)	\$ 2,343,016	\$ 9,942,255
TOTAL GENERAL FUND		\$ 16,923,251	\$ 2,779,130	6%	\$ 7,417,110	17%	\$ (4,637,980)	\$ 2,343,016	\$ 9,942,255
202	STREET MAINTENANCE	37,001	\$ 57,067	8%	\$ 684	15%	\$ 56,383	\$ -	\$ 93,384
205	PUBLIC SAFETY/SUPPL. LAW	93,760	122	0%	1,144	14%	(1,022)	-	92,738
206	COMMUNITY DEVELOPMENT	2,907,445	879,721	17%	787,850	13%	91,872	766,464	2,232,852
207	LONG RANGE PLANNING	1,253,342	135,536	18%	59,406	8%	76,130	174,149	1,155,323
215 / 216	CDBG	62,328	83	2%	868	0%	(785)	-	61,543
225	ASSET SEIZURE	129,741	170	8%	-	0%	170	-	129,911
229	LIGHTING AND LANDSCAPE	82,282	138	0%	19,952	10%	(19,814)	54,316	8,152
230	COMMUNITY FACILITIES DISTRICT	92,596	128	0%	6,785	0%	(6,657)	-	85,939
232	ENVIRONMENTAL PROGRAMS	332,708	80,941	20%	72,105	16%	8,837	33,578	307,967
234	MOBILE HOME PK RENT STAB.	52,295	69	8%	70	16%	(2)	-	52,294
235	SENIOR HOUSING	227,806	298	7%	-	0%	298	-	228,104
236	HOUSING MITIGATION	2,572,871	191,620	8%	221,348	10%	(29,728)	91,803	2,451,340
240	EMPLOYEE ASSISTANCE	52,272	3,128	11%	6,691	23%	(3,563)	-	48,709
247	ENVIRONMENT REMEDIATION	132,766	173	6%	219	0%	(46)	-	132,720
250	COMH-SUCCESSOR AGENCY-MHRDA	12,975,818	23,629	0%	5,424	0%	18,205	11,643,370	1,350,654
255	HOUSING SUCCESSOR AGENCY	1,838,588	121,112	22%	191,126	20%	(70,015)	455,898	1,312,675
260	PUBLIC ART	185	-	n/a	-	-	-	-	185
TOTAL SPECIAL REVENUE FUNDS		\$ 22,843,804	\$ 1,493,935	9%	\$ 1,373,671	8%	\$ 120,264	\$ 13,219,577	\$ 9,744,491
301	PARK DEV. IMPACT FUND	\$ 4,199,953	\$ 153,710	6%	\$ 161,114	3%	\$ (7,404)	\$ 900,869	\$ 3,291,680
302	PARK MAINTENANCE	4,112,677	63,645	5%	150,011	12%	(86,366)	177,395	3,848,917
303	LOCAL DRAINAGE	9,826,411	16,880	1%	17,748	1%	(868)	7,912	9,817,632
304	LOCAL DRAINAGE/NON-AB1600	1,556,343	2,040	2%	456	0%	1,584	9,950	1,547,977
306	AGRICULTURE AND OPEN SPACE PRESERV	7,929,839	280,899	8%	8,699	1%	272,200	53,666	8,148,373
308	STREET CIP	3,223,422	191,943	4%	103,083	2%	88,860	4,432,530	(1,120,248)
309	TRAFFIC IMPACT FUND	991,301	194,117	15%	172,260	14%	21,857	153,002	860,156
311	POLICE IMPACT FUND	103,466	50,328	17%	4,716	2%	45,611	-	149,077
313	FIRE IMPACT FUND	3,998,223	33,741	7%	25,539	90%	8,202	9,462	3,996,963
346	PUBLIC FACILITIES NON-AB1600	(159,653)	-	n/a	52,661	9%	(52,661)	72,019	(284,333)
347	PUBLIC FACILITIES IMPACT FUND	694,036	56,265	25%	24,535	21%	31,731	36,143	689,624
348	LIBRARY IMPACT FUND	2,732,401	47,514	5%	59,385	9%	(11,870)	-	2,720,531
350	UNDERGROUNDING	859,066	1,125	2%	180	17%	945	148,416	711,596
355	SCHOOL PEDESTRIAN/TRAFFIC SFTY	1,504,861	5,275	1%	46,323	7%	(41,048)	118,396	1,345,417
360	COMM/REC CTR IMPACT FUND	2,126,444	84,074	6%	23,345	0%	60,729	-	2,187,173
TOTAL CAPITAL PROJECT FUNDS		\$ 43,698,790	\$ 1,181,557	6%	\$ 850,054	4%	\$ 331,503	\$ 6,119,758	\$ 37,910,534
420	CIVIC CENTER DEBT	\$ 170,884	\$ 50,083	17%	\$ 1,678	1%	\$ 48,405	\$ 81	\$ 219,208
441	POLICE FACILITY BOND DEBT	70,281	36	0%	640	0%	(604)	103	69,574
TOTAL DEBT SERVICE FUNDS		\$ 241,165	\$ 50,120	7%	\$ 2,318	0%	\$ 47,802	\$ 184	\$ 288,782

City of Morgan Hill
Fund Activity Summary - Fiscal Year 2019-20
For the Two Months Ended August 31, 2019
17% of Year Complete

Fund No.	Fund	Preliminary Fund Balance 06-30-19	Revenues		Expenses		Year to-Date Deficit or Carryover	Ending Fund Balance	
			YTD Actual	% of Budget	YTD Actual	% of Budget		Reserved ¹	Unreserved
640	SEWER OPERATIONS	\$ 2,823,174	\$ 712,681	6%	\$ 987,914	8%	\$ (275,233)	610,028	1,937,913
641	SEWER IMPACT FUND*	18,814,124	582,985	12%	84,547	1%	498,439	390,079	18,922,484
642	SEWER RATE STABILIZATION	2,616,622	3,428	7%	180	17%	3,248	-	2,619,870
643	SEWER-CAPITAL PROJECTS	9,215,793	481,856	17%	42,281	1%	439,574	931,346	8,724,021
650	WATER OPERATIONS	4,236,038	1,241,941	8%	2,080,944	14%	(839,003)	1,833,607	1,563,429
651	WATER IMPACT FUND*	2,646,280	251,265	16%	270,628	18%	(19,363)	433,613	2,193,304
652	WATER RATE STABILIZATION	559,697	1,352	12%	58	16%	1,294	-	560,991
653	WATER -CAPITAL PROJECT	1,808,228	635,894	17%	17,639	1%	618,255	69,850	2,356,633
TOTAL ENTERPRISE FUNDS		\$ 42,719,956	\$ 3,911,403	10%	\$ 3,484,192	7%	\$ 427,211	\$ 4,268,523	\$ 38,878,644
730	INFORMATION SERVICES	\$ 980,991	\$ 301,653	17%	\$ 300,177	13%	\$ 1,476	\$ 112,558	\$ 869,909
740	BUILDING MAINTENANCE	257,695	536,222	16%	498,781	15%	37,441	388,776	(93,640)
741	BUILDING REPLACEMENT	2,590,644	129,259	16%	18,973	7%	110,287	126,159	2,574,772
745	CIP ENGINEERING	64,112	252,807	14%	252,798	16%	9	9,983	54,139
760	UNEMPLOYMENT	142,037	186	6%	2,135	21%	(1,949)	-	140,088
770	WORKERS COMPENSATION	2,009,766	157,324	20%	593,062	62%	(435,737)	30,000	1,544,029
790	EQUIPMENT REPLACEMENT	4,873,213	234,565	22%	-	-	234,565	374,915	4,732,863
791	EMPLOYEE BENEFITS FUNDS	2,584,062	131,119	11%	104,444	17%	26,675	-	2,610,737
793	CORP YARD COMMISSION	3,012	-	0%	-	0%	-	-	3,012
795	GEN. LIABILITY INSURANCE	1,647,076	176,946	16%	786,294	75%	(609,348)	-	1,037,728
TOTAL INTERNAL SERVICE FUNDS		\$ 15,152,608	\$ 1,920,081	16%	\$ 2,556,664	22%	\$ (636,583)	\$ 1,042,390	\$ 13,473,636
SUMMARY BY FUND TYPE									
GENERAL FUND GROUP		\$ 16,923,251	\$ 2,779,130	6%	\$ 7,417,110	17%	\$ (4,637,980)	\$ 2,343,016	\$ 9,942,255
SPECIAL REVENUE GROUP		22,843,805	1,493,935	9%	1,373,671	8%	120,264	13,219,577	9,744,491
DEBT SERVICE GROUP		241,165	50,120	7%	2,318	0%	47,802	184	288,782
CAPITAL PROJECTS GROUP		43,698,791	1,181,557	6%	850,054	4%	331,503	6,119,758	37,910,534
ENTERPRISE GROUP		42,719,956	3,911,403	10%	3,484,192	7%	427,211	4,268,523	38,878,644
INTERNAL SERVICE GROUP		15,152,608	1,920,081	16%	2,556,664	22%	(636,583)	1,042,390	13,473,636
TOTAL ALL GROUPS		\$ 141,579,576	\$ 11,336,226	8%	\$ 15,684,008	11%	\$ (4,347,782)	\$ 26,993,449	\$ 110,238,343

For Enterprise Funds: Unrestricted fund balance = Fund balance net of fixed assets and long-term liabilities.

*Unreserved fund balance includes bond proceeds reserved for projects listed in bond documents.

¹ Amount restricted for encumbrances, fixed asset replacement, long-term receivables, and bond reserves.

² Amount restricted for debt service payments and AB1600 capital expansion projects as detailed in the City's five year CIP Plan and bond agreements.



CITY COUNCIL STAFF REPORT

MEETING DATE: October 23, 2019

PREPARED BY: Inga Alonzo, Management Analyst

APPROVED BY: City Manager

APPROVE PURCHASE OF TWO 150 KILOWATT GENERATORS

RECOMMENDATION(S)

1. Approve the purchase of two replacement 150kW trailer-mounted diesel generators from Leete Generators, and authorize the City Manager to approve the purchase order in the amount of \$169,552;
2. Adopt resolution amending the adopted 2019-20 Fiscal Year Budget appropriating \$84,776 from the Water Operations Fund (650); and
3. Declare generator W02017 to be surplus for disposal in accordance with the City Municipal Code.

COUNCIL PRIORITIES, GOALS & STRATEGIES

Ongoing Priorities

Enhancing Public Safety

2019 Strategic Priorities

Infrastructure

GUIDING DOCUMENTS

Sewer System Master Plan

Water System Master Plan

REPORT NARRATIVE:

The City water and wastewater utilities division has a fleet of seven 150kW portable generators that have the capacity to run seven of the City's eight large water wells. Staff is recommending the purchase of two new generators. One generator is a scheduled replacement of an older unit. The second generator is an addition to the Water Utility fleet. Portable generators have a service life of approximately 15 years and therefore need to be replaced periodically. Some generators must also be replaced when they no longer meet air quality requirements. One of the proposed new generators is on the City's equipment replacement schedule to replace a 2002 generator that is beyond its 15-year life span and does not comply with Air Resources Board "Tier 4 Final" standards. Tier 4 refers to a set of emissions requirements established by the EPA to reduce emissions of particulate matter and air toxics from new, non-road diesel engines. The Tier 4 Final rating ensures the longest possible air quality regulatory compliance window and therefore the longest service life of the generator.

The second generator is an addition to the Water Utility Fleet giving a total to eight 150kW generators in the fleet. With eight generators we can run eight of our largest wells during power outages providing enough water to meet customer demands without interruption in service.

In anticipation of PG&E public safety power outages, Staff has been renting a generator to fill in the gap at a cost of approximately \$3,000 per month. Given that portable generators have a service life of approximately 15 years, the rental costs over that period would total \$540,000. Staff concludes that adding a new generator to the fleet would be less costly to the City's Water Utility.

In January 2019, the Utility Division solicited Bids for the purchase of one 150kW Trailer-Mounted Diesel Portable Generator to replace another old generator in the fleet. Bid results were as follows:

Generator Bid Summary

<u>Company</u>	<u>Price</u>	<u>Kilowatts (kW)</u>	<u>Tier 4 Final</u>
Valley Power	\$89,320	150	Yes
Technology International	\$128,967	152	Yes
Leete Generator	\$84,776	150	Yes

Given that the bid pricing is recent, Staff asked Leete Generators if they could provide the City with two more 150kW generators with the same price and specifications and Leete has agreed to do so. Staff believes Leete's price is very competitive and it would be difficult to get the same in today's market. Staff is therefore recommending the purchase of two generators from Leete for a total of \$169,552.

COMMUNITY ENGAGEMENT: Not Applicable

This purchase is a business operation for the City's Water Utility and specific outreach to the community was not performed or believed necessary in relation to the purchase.

ALTERNATIVE ACTIONS:

The Council could choose to not approve the recommended purchase and direct staff to take alternative actions, such as:

1. Seek new formal bids for the generator purchase;
2. Allow purchase of the replacement generator only and direct staff to use a rental generator as needed; or
3. Provide other alternative direction.

These alternatives are not recommended due to the public safety need and uncertainty relating to future power supply reliability.

PRIOR CITY COUNCIL AND COMMISSION ACTIONS:

On February 20, 2019, Council approved the purchase of a replacement generator for FY 2018-19, from Leete Generators.

FISCAL AND RESOURCE IMPACT:

The purchase of the replacement generator was included in the Council adopted budget for Fiscal Year 2019-20 within the Water Operations Fund (650). The purchase of the additional generator is not included in the Fiscal Year 2019-20 budget and the recommended action is to appropriate the additional funds (Attachment 1) from the Water Operations Fund (650), where there are adequate funds available

(GL#650.5710.43825). Future fiscal year budgets will require replacement funding to be allocated annually for the new generator, but those increased costs will be offset by the elimination of the annual rental costs.

CEQA (California Environmental Quality Act):

Categorical Exemption.

The planned maintenance and management of existing city infrastructure falls within the CEQA categorical exemption of Class 1, Existing Facilities.

LINKS/ATTACHMENTS:

1. Resolution for Budget Adjustment - Generators

RESOLUTION NO.

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF MORGAN HILL APPROVING AN AMENDMENT TO THE CITY'S FISCAL YEAR 2019-20 ADOPTED BUDGET TO APPROPRIATE \$84,776 IN THE WATER OPERATIONS FUND (650) FOR THE PURCHASE OF A NEW GENERATOR

WHEREAS, recommended amendments are needed and proposed to the City's previously adopted Budget for Fiscal Year 2019-20 as set forth on Exhibit A to this Resolution, to appropriate the requisite funds to implement the actions authorized by this Resolution; and

WHEREAS, the activities allowed under this Resolution do not constitute a project under the provisions of California Environmental Quality Act of 1970; and

WHEREAS, the consideration by City Council of the adoption of this Resolution has been duly noticed pursuant to applicable laws and has been placed upon the City Council Meeting Agenda on the date set forth in the Staff Report, or to such date that the City Council may have continued or deferred consideration of this Resolution, and on such date the City Council conducted a duly noticed public meeting at which the City Council provided members of the public an opportunity to comment and be heard and considered any and all testimony and other evidence provided in connection with the adoption of this Resolution; and

WHEREAS, the City Council determines that adoption of this Resolution is in the public interest.

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF MORGAN HILL DOES HEREBY FIND, DETERMINE, RESOLVE AND ORDER AS FOLLOWS:

Section 1. Recitals. The City Council does hereby find, determine, and resolve that all of the foregoing recitals are true and correct.

Section 2. Approval and Authorization. The City Council does further resolve, order and/or direct as follows:

- a. That the City's previously adopted Fiscal Year 2019-20 Budget, as the same has been amended to date, is hereby further amended in accordance with and as reflected on Exhibit A attached hereto and incorporated herein by this reference; and
- b. That the City Clerk is hereby authorized and directed to forward a copy of this Resolution to the City's Finance Director, who is hereby authorized and directed to take all actions necessary to implement the terms of this Resolution pertaining to the Fiscal Year 2019-20 Budget of City.

Section 3. This Resolution shall take effect immediately upon adoption.

PASSED AND ADOPTED by the City Council of the City of Morgan Hill at its meeting held on this 23rd day of October 2019 by the following vote:

AYES:
NOES:
ABSTAIN:
ABSENT:

COUNCIL MEMBERS:
COUNCIL MEMBERS:
COUNCIL MEMBERS:
COUNCIL MEMBERS:

DATE: _____

RICH CONSTANTINE, MAYOR

∞ **CERTIFICATION** ∞

I, Irma Torrez, City Clerk of the City of Morgan Hill, California, do hereby certify that the foregoing is a true and correct copy of Resolution No.XXXX , adopted by the City Council at the meeting held on October 23, 2019.

WITNESS MY HAND AND THE SEAL OF THE CITY OF MORGAN HILL.

DATE: _____

Irma Torrez, CITY CLERK

Exhibit A

AGENDA BUDGET SCORECARD

FISCAL YEAR 2019-20

ADJUSTMENT #

009

FUND:

650 Water Operations Fund

DEPARTMENT:

5710 Water Operations

OBJECT:

43825 MACHINERY/EQUIPMENT

AGENDA DATE:

10/23/19

AGENDA ITEM TITLE:

Generator Purchase

	07/01/19 PROJECTED BEGINNING FUND BALANCE	ESTIMATED REVENUES	AMENDED APPROPRI- ATIONS	06/30/20 PROJECTED ENDING FUND BALANCE
ORIGINAL BUDGET	4,289,401	14,780,500	15,106,526	3,963,375
CUMULATIVE REVISIONS PRIOR TO RECOMMENDED ACTION	-	-	-	-
RECOMMENDED ACTION		-	84,776	(84,776)
RESULT OF RECOMMENDED ACTION	<u>4,289,401</u>	<u>14,780,500</u>	<u>15,191,302</u>	<u>3,878,599</u>



CITY COUNCIL STAFF REPORT

MEETING DATE: October 23, 2019

PREPARED BY: Pam van der Leeden, GIS Manager

APPROVED BY: City Manager

APPROVE FIRST AMENDMENT TO GIS SERVICES AGREEMENT WITH GEOGRAPHIC TECHNOLOGIES GROUP, INC.

RECOMMENDATION(S)

1. Approve First Amendment to the Agreement with Geographic Technologies Group, Inc. for an additional \$78,500 to implement the GIS tasks identified in the GIS Strategic Plan, for a total not to exceed amount of \$137,500; and
2. Authorize the City Manager to execute and administer the amended agreement.

COUNCIL PRIORITIES, GOALS & STRATEGIES

Ongoing Priorities

Enhancing Public Safety

Protecting the Environment

Supporting Our Youth

Seniors

and Entire Community

Fostering a Positive Organizational Culture

Advancing Regional Initiatives

REPORT NARRATIVE:

The purpose of this amendment is for Geographic Technologies Group Inc. (GTG) to help implement key tasks identified in the GIS Strategic Plan. The GIS Strategic Plan was produced as part of the GIS Services Project and was presented to City Council on September 18, 2019.

Staff initiated a GIS Services Project to develop a GIS strategic plan to outline a road map that assesses existing GIS system infrastructure, and designs and implements an Enterprise GIS system. The goal of this project is to create the platform from which we can build out the City's GIS program with spatial data, maps, and applications. Previously, we were not able to support a City-wide Enterprise GIS system due to gaps in infrastructure and technology.

In December 2018, the City entered into an agreement with GTG to design a 3-year GIS strategic plan, assess the existing GIS system infrastructure, and design and implement an Enterprise GIS system. The project began in January 2019. To date, the strategic plan is complete, and the system implementation and the replacement for the City's internal web map (MHMaps) are expected to be completed in November 2019.

The first strategic plan for GIS at the City will be instrumental in developing the City's Enterprise GIS program over the next three years. It includes a wealth of information and recommendations for increasing the City's GIS capabilities to meet business needs and industry standards. Due to the length of the report, there is an Executive Summary that provides more condensed information. The Tactical Plan portion of the report outlines specific tasks recommended for building out the City's GIS capabilities.

The Strategic Plan lays out a vision and specific tactics for a full-blown GIS program. City staff have reviewed the recommended tasks in the Strategic Plan and selected for implementation those for which there is the highest need. The goal is to strategically address GIS needs to maximize the benefits to the City given limited staffing and financial resources. City staff has analyzed each priority task and made a determination on whether it would be best accomplished in-house, or by outsourcing (full or partial). This will allow the City to deploy consultant resources deliberately and thoughtfully where they can be used to best effect.

Staff is recommending the City amend its agreement with GTG to add additional tasks in order to assist staff in executing priority tasks from the Tactical Plan portion of the GIS Strategic Plan. The tasks in this recommended amendment have been selected for full or partial out-sourcing. Given the inter-related nature of many of the tasks, staff recommends out-sourcing to a single consultant who can coordinate the inter-locking tasks as the most efficient way to proceed. This will relieve staff of the burden of coordinating project work between multiple consultants. Some of the partially outsourced tasks may not require the full budgeted amount for that task. Staff has included these projects as tasks so that consultant support will be available as needed for the successful completion of that task.

Staff recommends GTG as the best option to execute these additional tasks. After conducting the needs assessment, departmental interviews, infrastructure testing and system installation, GTG has an in-depth knowledge of the City's GIS status, needs and challenges. In addition, GTG has proven themselves to City staff as capable of delivering an excellent product.

During scope development, staff conducted an informal survey to estimate costs for the task with the highest cost, the address database (Task 7: \$15,000). The proposed cost of \$15,000 by GTG for this item is in line with costs determined during this informal information gathering process.

The recommended tasks can be broadly grouped into several categories: data organization and new data development, completing the installation of the full system design, integration of new data and existing business systems with the new Enterprise GIS system, and making data available to the public.

The tasks in the tactical plan support the following ongoing priorities as established by the Council:

- Enhancing Public Safety: GIS infrastructure and master address database to better support GIS for emergency services.

- Protecting the Environment: System will enable mobile field data collection for Environmental Services projects and will also better support mapping of City utilities.
- Supporting our Youth and Seniors and Entire Community: Better GIS integration with City departments will enhance and improve data available. A public portal will allow the City to make data available on the web.
- Fostering a positive organization culture: Increased resources and collaboration possible between City departments.
- Advancing regional initiatives: Will allow the City to fully take advantage of public safety mapping initiatives.

COMMUNITY ENGAGEMENT: Inform

This report serves to inform the community of the recommended agreement amendment. If approved, the public is expected to have access to the open GIS data.

ALTERNATIVE ACTIONS:

Council could direct staff to seek proposals from other consultants to perform either some or all the tasks. This alternative is not recommended as the GIS program is supported by one position currently, GIS Manager, and as previously stated, given the inter-related nature of many of the tasks, staff recommends out-sourcing to a single consultant who can coordinate the inter-locking tasks as the most efficient way to proceed. This will relieve staff of the burden of coordinating project work between multiple consultants.

PRIOR CITY COUNCIL AND COMMISSION ACTIONS:

On December 5, 2018, the original agreement with Geographic Technologies Group was approved by the City Council.

On June 26, 2019, the City Council approved a GIS software licensing agreement with ESRI.

On September 18, 2019, the City Council received a report on the new GIS Strategic Plan.

FISCAL AND RESOURCE IMPACT:

The recommended additional tasks will be funded from the adopted GIS budget for FY 2019-20; no additional appropriations are requested at this time.

CEQA (California Environmental Quality Act):

Not a Project.

Since the resulting activity will not result in a change to the physical environment, this action is not a project under the California Environmental Quality Act.

LINKS/ATTACHMENTS:

1. GTG - First Amendment
2. GIS Strategic Plan

FIRST AMENDMENT TO AGREEMENT GEOGRAPHIC TECHNOLOGIES GROUP

This FIRST AMENDMENT TO AGREEMENT is entered into and becomes effective on _____ (Effective Date), by THE CITY OF MORGAN HILL, a municipal corporation, ("CITY") and GEOGRAPHIC TECHNOLOGIES GROUP, a North Carolina Corporation ("CONSULTANT"), duly authorized to do business in California and will remain so during the term of this Agreement, hereinafter referred to collectively as "Parties." In consideration of the promises and the mutual covenants contained in this Agreement, the Parties agree as follows:

RECITALS

The following recitals are a substantive part of this Agreement:

1. This First Amendment to Agreement is entered into pursuant to the action of the Morgan Hill City Council taken on _____, _____, 20____.
2. The CITY and CONSULTANT entered into that "Consultant Agreement" made as of December 20, 2018, for consultant services for a maximum compensation of Fifty-Nine Thousand and No/100 Dollars (\$59, 000.00) ("CONSULTANT AGREEMENT"). The CONSULTANT AGREEMENT is attached as Exhibit "1" to this Agreement.

AGREEMENT

THE PARTIES MUTUALLY AGREE AS FOLLOWS:

1. **Amendments:** All terms and conditions of the CONSULTANT AGREEMENT, as amended, as attached as Exhibit "1," shall remain in full force and effect; except that the following amendments shall be made as set forth below:

A. In addition to Tasks 1 through 4 described in the CONSULTANT AGREEMENT, Tasks 5 to 18 are added to the scope services. Paragraph 3 shall be amended by adding the following:

"The services to be provided by CONSULTANT shall consist of the additional services described as "A. Scope of Services" in Exhibit "2" attached hereto and incorporated herein by this reference."

B. Paragraph 4.1 shall be amended and replaced in its entirety by the following:

"4.1. **Amount.** Compensation under this Agreement shall not exceed ONE HUNDRED THIRTY-SEVEN THOUSAND FIVE HUNDRED AND NO/100 DOLLARS (\$137,500.00) and shall be billed based on the rate and basis set forth in Exhibit B and Exhibit 2 described as "C. Budget" attached hereto and incorporated herein by this reference. If the City Manager extends the term of this Agreement for up to one year pursuant to the provisions of Section 2 above, the City Manager shall have the authority to increase the maximum compensation allowed to be paid to CONSULTANT during that extended term period, so long as City Council has appropriated sufficient funds therefor, the Parties mutually agree to such amount in a writing signed by both Parties to this Agreement and provided further that in no event shall such maximum compensation allowed for the extended term exceed the City Manager's authority pursuant to Chapter 3.04 of the Morgan Hill Municipal Code, unless otherwise authorized by City Council."

C. Paragraph 6 is amended and replaced in its entirety to read as follows:

6. **Performance of Work.** CONSULTANT represents that it is qualified by virtue of experience, training, education, and expertise to accomplish these services. Services shall be performed by CONSULTANT in accordance with professional practices in a manner consistent with a level of care, competence and skill exercised by qualified members of the CONSULTANT'S profession. By delivery of completed work, CONSULTANT certifies that the work conforms to the requirements of this Agreement and all applicable federal, state and local laws. CONSULTANT shall perform all work and services under this Agreement in conformance with the time schedule set forth on Exhibit C, "Schedule of Performance" and Exhibit 2 described as "D. Schedule", attached hereto and incorporated herein by this reference. CITY's City Manager is authorized on behalf of CITY to modify the timeframes set forth on the Schedule of Performance within the term of this Agreement. If CONSULTANT desires to leave or store any of CONSULTANT's equipment at a CITY site while CONSULTANT is performing work or service pursuant to this Agreement, CONSULTANT will first obtain the consent of CITY's City Manager, or his/her delegate, to do so, and any such storage shall occur only in the manner and location allowed by such CITY official and entirely at CONSULTANT's sole risk.

D. The Project Team identified in Exhibit B of the CONSULTANT AGREEMENT is updated to include "B. Proposed Project Team" identified in Exhibit 2 attached hereto and incorporated herein by this reference.

///

///

///

///

///

///

///

///

///

///

///

///

///

Attachment: GTG - First Amendment (2476 : A Amendment to GIS Services Contract)

2. **Conflicts.** In the event of a conflict between the terms and provisions of this First Amendment to Agreement and the terms and provisions of the CONSULTANT AGREEMENT, the terms of this First Amendment to Agreement shall govern and control.

TWO SIGNATURES ARE REQUIRED FOR CORPORATIONS:

- (1) CHAIRPERSON OF THE BOARD, PRESIDENT, OR VICE PRESIDENT; **AND**
 (2) SECRETARY, ASSISTANT SECRETARY, CHIEF FINANCIAL OFFICER OR ASSISTANT TREASURER.

ATTEST:

CITY OF MORGAN HILL

Michelle Bigelow, Deputy City Clerk
 Date: _____

Christina J. Turner, City Manager
 Date: _____

APPROVED AS TO FORM:

GEOGRAPHIC TECHNOLOGIES GROUP

Donald A. Larkin, City Attorney
 Date: _____

By: Curtis A. Hinton, Jr.
 Title: President

Print Name and Title of Signer.
 If Corporate: Chairman, President or
 Vice President

Date: _____

By: Robin D. Hinton
 Title: Secretary

Print Name and Title of Signer.
 If Corporate: Secretary, Assistant
 Secretary, Chief Financial Officer or
 Assistant Treasurer

Date: _____

Attachment: GTG - First Amendment (2476 : Amendment to GIS Services Contract)

EXHIBIT "1"

CONSULTANT AGREEMENT
Geographic Technologies Group

THIS AGREEMENT is entered into and becomes effective on 12/20/18 (Effective Date), by and between the CITY OF MORGAN HILL, a municipal corporation, ("CITY"), and Geographic Technologies Group a North Carolina corporation ("CONSULTANT"), duly authorized to do business in California and will remain so during the term of this Agreement, hereinafter referred to collectively as "Parties." In consideration of the promises and the mutual covenants contained in this Agreement, the Parties agree as follows:

1. **City Authority.** This Agreement is entered into pursuant to the action of the Morgan Hill City Council taken on December, 5, 2018.
2. **Term of Agreement.** This Agreement shall cover services rendered from the Effective Date of this Agreement until August 31, 2021 at which time CONSULTANT'S services shall be completed. The City Manager is authorized to extend the term of this Agreement for a maximum period of one year. Any such extension shall be in writing and signed by both Parties to this Agreement.
3. **Scope of Service.** The services to be performed by CONSULTANT shall be GIS Services as further described in **Exhibit A**.
4. **Compensation.** CONSULTANT shall be compensated as follows:
 - 4.1. **Amount.** \$59,000.00. Total compensation to CONSULTANT under this Agreement during its initial term set forth in Section 2 above shall not exceed FIFTY-NINE THOUSAND AND NO/100 DOLLARS and shall be billed based on the rate and basis set forth in **Exhibit B**. If the City Manager extends the term of this Agreement for up to one year pursuant to the provisions of Section 2 above, the City Manager shall have the authority to increase the maximum compensation allowed to be paid to CONSULTANT during that extended term period, so long as City Council has appropriated sufficient funds therefor, the Parties mutually agree to such amount in a writing signed by both Parties to this Agreement and provided further that in no event shall such maximum compensation allowed for the extended term exceed the City Manager's authority pursuant to Chapter 3.04 of the Morgan Hill Municipal Code, unless otherwise authorized by City Council.
 - 4.2. **Billing.** CONSULTANT shall provide CITY with an invoice containing the dated, detailed, and itemized descriptions of all services performed and expenses incurred (if such expenses are reimbursable pursuant to Exhibit B) by CONSULTANT on a monthly basis unless otherwise specified in Exhibit B. All invoices shall be sent to the CITY addressed to the department head or project manager identified below in Section 13 Notices. Any rate charged shall be prorated where services are interrupted or not provided for any rate period (for example, any monthly rate charge should be prorated when services were interrupted or provided for only part of the month). For services billed on an hourly rate, the minimum unit of billed time shall not exceed one tenth of one hour. CITY shall pay for services and expenses (if so provided in Exhibit B) up to the limit of compensation set forth above, that in the CITY's judgment were necessary and reasonable. Services for work performed and expenses incurred in excess of the total compensation set forth in paragraph 4.1 above shall be at no cost to CITY.
5. **Termination.** CITY or CONSULTANT shall have the right to terminate this Agreement, without cause, by giving thirty (30) days' written notice or less under urgent circumstances. Upon such termination, CONSULTANT shall submit to CITY an itemized statement of services performed for which compensation has not been paid. CITY may require CONSULTANT to complete certain work product or documents and

CONSULTANT shall deliver to CITY all documents in its possession without additional compensation to CONSULTANT. The CITY Manager of CITY is authorized to terminate this AGREEMENT, in whole or in part, on behalf of CITY.

6. **Performance of Work.** CONSULTANT represents that it is qualified by virtue of experience, training, education, and expertise to accomplish these services. Services shall be performed by CONSULTANT in accordance with professional practices in a manner consistent with a level of care, competence and skill exercised by qualified members of the CONSULTANT'S profession. By delivery of completed work, CONSULTANT certifies that the work conforms to the requirements of this Agreement and all applicable federal, state and local laws. CONSULTANT shall perform all work and services under this Agreement in conformance with the time schedule set forth on Exhibit C, "Schedule of Performance," attached hereto and incorporated herein by this reference. CITY's City Manager is authorized on behalf of CITY to modify the timeframes set forth on the Schedule of Performance within the term of this Agreement. If CONSULTANT desires to leave or store any of CONSULTANT's equipment at a CITY site while CONSULTANT is performing work or service pursuant to this Agreement, CONSULTANT will first obtain the consent of CITY's City Manager, or his/her delegate, to do so, and any such storage shall occur only in the manner and location allowed by such CITY official and entirely at CONSULTANT's sole risk.

7. **Insurance Requirements.** CONSULTANT shall procure and provide proof of the insurance coverage required by this section in the form of certificates and endorsements. The required insurance must cover the activities of CONSULTANT, including its subcontractors, employees and agents, relating to or arising from the performance of any work or service under this Agreement, and must remain in full force and effect at all times during the period covered by this Agreement. The coverages may be arranged under a single policy for the full limits required or by a combination of underlying policies with the balance provided by excess or "umbrella" policies, provided each such policy complies with the requirements set forth herein. CONSULTANT further understands that the CITY reserves the right to modify the insurance requirements set forth herein, with thirty (30) days' notice provided to CONSULTANT, at any time as deemed necessary to protect the interests of the CITY.

7.1. **Insurance Types and Amounts.**

7.1.1. **Commercial General Liability (CGL).** CONSULTANT shall maintain CGL against claims and liabilities for personal injury, death, or property damage providing protection in the minimum amount of: (i) one million dollars (\$1,000,000.00) for bodily injury or death to any one person for any one accident or occurrence and at least one million dollars (\$1,000,000.00) for property damage, or (ii) the maximum amount of such insurance available to CONSULTANT under CONSULTANT's combined insurance policies (including any excess or "umbrella" policies), whichever is greater.

7.1.2. **Automobile Liability.** CONSULTANT shall maintain Automobile Liability covering all owned, non-owned and hired automobiles (if CONSULTANT does not own automobiles, then CONSULTANT shall maintain Hired/Non-owned Automobile Liability) against claims and liabilities for personal injury, death, or property damage providing protection in the minimum amount of: (i) one million dollars (\$1,000,000.00) for bodily injury or death to any one person for any one accident or occurrence and at least one million dollars (\$1,000,000.00) for property damage, or (ii) the maximum amount of such insurance available to CONSULTANT under CONSULTANT's combined insurance policies (including any excess or "umbrella" policies), whichever is greater.

7.1.3. Workers' Compensation Insurance and Employer's Liability. CONSULTANT shall maintain Workers Compensation coverage, as required by law, in the minimum amount of: (i) one million dollars (\$1,000,000.00) for any one accident or occurrence, or (ii) the maximum amount of such insurance available to CONSULTANT under CONSULTANT's combined insurance policies (including any excess or "umbrella" policies), whichever is greater. If CONSULTANT is self-insured, CONSULTANT shall provide its Certificate of Permission to Self-Insure, duly authorized by the Department of Industrial Relations.

7.1.4. Pollution (Environmental) Liability. If the performance of CONSULTANT'S work or service under this Agreement involves hazardous materials, contaminated soil disposal, and/or a risk of accidental release of fuel oil, chemicals or other toxic gases or hazardous materials, CONSULTANT shall procure and maintain Pollution Liability covering the contractor's liability for bodily injury, property damage and environmental damage resulting from pollution and related cleanup costs arising out of the work or services to be performed under this Agreement. Coverage shall be provided for both work performed on site, as well as during the transport of hazardous materials. Such coverage shall be in the minimum amount of: (i) one million dollars (\$1,000,000.00) for any one accident or occurrence, or (ii) the maximum amount of such insurance available to CONSULTANT under CONSULTANT's combined insurance policies (including any excess or "umbrella" policies), whichever is greater.

7.1.5. Professional Liability.

7.1.5.1. If the performance of CONSULTANT's work or service under this Agreement involves professional and/or technical services (examples include, but are not limited to, architects, engineers, land surveyors, and appraisers), CONSULTANT shall procure and maintain either a claims made or occurrence Errors and Omission liability insurance in the minimum amount of: (i) one million dollars (\$1,000,000.00) each claim, or (ii) the maximum amount of such insurance available to CONSULTANT under CONSULTANT's combined insurance policies (including any excess or "umbrella" policies), whichever is greater. Further, if CONSULTANT maintains a claims-made policy, CONSULTANT shall provide written evidence of such insurance to the CITY for at least five (5) years after the completion of work performed under this Agreement.

7.1.5.2. If the performance of CONSULTANT's work or service under this Agreement relates to Information Technology or related services (examples include, but are not limited to computer programmers, software designers, hardware engineers, or other systems consultants), CONSULTANT shall procure and maintain a claims made Errors and Omission liability insurance, including Cyber Liability and Data Breach, in the minimum amount of: (i) one million dollars (\$1,000,000.00) each claim, or (ii) the maximum amount of such insurance available to CONSULTANT under CONSULTANT's combined insurance policies (including any excess or "umbrella" policies), whichever is greater.

7.1.5.3. If the performance of CONSULTANT's work or service under this Agreement involves contact with minors, CONSULTANT shall procure and maintain Sexual Abuse and Molestation insurance in the minimum amount of: (i) one million dollars (\$1,000,000.00) each claim, or (ii) the maximum amount of such insurance

available to CONSULTANT under CONSULTANT's combined insurance policies (including any excess or "umbrella" policies), whichever is greater.

- 7.2. **Endorsements.** CONSULTANT shall provide proof of the following endorsements, listed for each policy for which endorsements are required, as outlined below:

7.2.1. **General Liability.**

7.2.1.1. The City of Morgan Hill, its elected or appointed officials, boards, agencies, officers, agents, employees, and volunteers are named as additional insureds;

7.2.1.2. the insurer waives the right of subrogation against the City of Morgan Hill and the CITY's elected or appointed officials, boards, agencies, officers, agents, employees, and volunteers; and,

7.2.1.3. insurance shall be primary non-contributing.

7.2.2. **Workers Compensation.**

If the performance of CONSULTANT'S work or service under this Agreement involves access to or activity on any property or premises owned or occupied by the CITY, including, but not limited to, CONSULTANT'S presence during site visits and meetings, then insurer waives the right of subrogation against the City of Morgan Hill and the CITY's elected or appointed officials, boards, agencies, officers, agents, employees, and volunteers.

- 7.3. **Qualification of Insurers.** All insurance required pursuant to this Agreement must be issued by a company licensed and admitted, or otherwise legally authorized to carry out insurance business in the State of California, and each insurer must have a current A.M. Best's financial strength rating of "A" or better and a financial size rating of "VII" or better.

- 7.4. **Certificates.** CONSULTANT shall furnish CITY of Morgan Hill with copies of all policies or certificates as outlined herein, whether new or modified, promptly upon receipt. No policy subject to the CONSULTANT's agreement with the CITY shall be canceled or materially changed except after thirty (30) days' notice by the insurer to CITY. Certificates, including renewal certificates, may be mailed electronically to riskmgmt@morganhill.ca.gov or delivered to the Certificate Holder address provided herein

Certificate Holder address:

City of Morgan Hill
Attn: Risk Management
17575 Peak Avenue
Morgan Hill, CA 95037

8. **Non-Liability of Officials and Employees of the CITY.** No official or employee of CITY shall be personally liable for any default or liability under this Agreement.

9. **Compliance with Law.**

- 9.1. CONSULTANT and its officers, employees, agents, and subcontractors shall comply with all applicable laws, ordinances, administrative regulations, and permitting requirements in carrying out their obligations under this Agreement. CONSULTANT and its officers, employees, agents, and subcontractors covenant there shall be no discrimination based upon race, color, creed, religion, gender, marital status, age, sexual orientation, national origin, mental disability, physical disability, medical condition, or ancestry, in any activity pursuant to this Agreement.
- 9.2. Compliance with Wage and Hour Laws: Consultant, and any subcontractor it employs to complete work under this Agreement, shall comply with all applicable federal, state and local wage and hour laws. Applicable laws may include, but are not limited to, the Federal Fair Labor Standards Act and the California Labor Code.

Final Judgments, Decisions, and Orders: For purposes of this Section, a “final judgment, decision, or order” refers to one for which all appeals have been exhausted or the time to appeal has expired. Relevant investigatory government agencies include: the federal Department of Labor, the California Division of Labor Standards Enforcement, or any other governmental entity or division tasked with the investigation and enforcement of wage and hour laws.

Prior Judgments against CONSULTANT and/or its Subcontractors: BY SIGNING THIS AGREEMENT, CONSULTANT AFFIRMS THAT IT HAS DISCLOSED ANY FINAL JUDGMENTS, DECISIONS OR ORDERS FROM A COURT OR INVESTIGATORY GOVERNMENT AGENCY FINDING – IN THE FIVE (5) YEARS PRIOR TO EXECUTING THIS AGREEMENT – THAT CONSULTANT OR ITS SUBCONTRACTOR(S) HAS VIOLATED ANY APPLICABLE WAGE AND HOUR LAWS. CONSULTANT FURTHER AFFIRMS THAT IT OR ITS SUBCONTRACTOR(S) HAS SATISFIED AND COMPLIED WITH – OR HAS REACHED AGREEMENT WITH THE CITY REGARDING THE MANNER IN WHICH IT WILL SATISFY – ANY SUCH JUDGMENTS, DECISIONS OR ORDERS.

Judgments or Decisions During Term of Contract: If at any time during the term of this Agreement, a court or investigatory government agency issues a final judgment, decision or order finding that CONSULTANT or an subcontractor it employs to perform work under this Agreement has violated any applicable wage and hour law, or CONSULTANT learns of such a judgment, decision, or order that was not previously disclosed, CONSULTANT shall inform the City Attorney, no more than fifteen (15) days after the judgment, decision or order becomes final or of learning of the final judgment, decision or order. CONSULTANT and its subcontractors shall promptly satisfy and comply with any such judgment, decision, or order, and shall provide the City Attorney with documentary evidence of compliance with the final judgment, decision or order within five (5) days of satisfying the final judgment, decision or order. The City reserves the right to require CONSULTANT to enter into an agreement with the City regarding the manner in which any such final judgment, decision, or order will be satisfied.

City’s Right to Withhold Payment: Where CONSULTANT or any subcontractor it employs to perform work under this Agreement has been found in violation of any applicable wage and hour law by a final judgment, decision or order of a court or government agency, the City reserves the right to withhold payment to CONSULTANT until such judgment, decision or order has been satisfied in full.

Material Breach: Failure to comply with any part of this Section constitutes a material breach of this Agreement. Such breach may serve as a basis for immediate termination of this Agreement and/or any other remedies available under this Agreement and/or law.

Notice to City Related to Wage Theft Prevention: Notice provided to the City Attorney as required under this Section shall be addressed to: City Attorney, City of Morgan Hill, 17575 Peak Avenue, Morgan Hill, CA 95037. The Notice provisions of this Section are separate from any other notice provisions in this Agreement and, accordingly, only notice provided to the above address satisfies the notice requirements in this Section.

10. **Independent Contractor.** CONSULTANT is an independent contractor and not an agent or employee of CITY.
11. **Confidentiality.** All data, documents, or other information received by CONSULTANT from CITY or prepared in connection with CONSULTANT'S services under this Agreement are deemed confidential and shall not be disclosed to any third party by CONSULTANT without prior written consent by CITY.
12. **Conflict of Interest and Reporting.** CONSULTANT shall at all times avoid conflict of interest or appearance of conflict of interest in performance of this Agreement.
13. **Notices.** All notices shall be personally delivered or mailed, via first class mail to the below listed address. These addresses shall be used for delivery of service of process. Notices shall be effective five (5) days after date of mailing, or upon date of personal delivery.

Address of CONSULTANT is as follows:

Geographic Technologies Group
1202 Parkway Drive
Goldsboro, NC 27534

Address of CITY is as follows:

GIS Manager	with a copy to:
City of Morgan Hill	City Clerk
17575 Peak Avenue	City of Morgan Hill
Morgan Hill, CA 95037	17575 Peak Avenue
	Morgan Hill, CA 95037

14. **Licenses, Permits and Fees.** CONSULTANT shall obtain a City of Morgan Hill Business License, all permits and licenses to the extent required by ordinances, codes and regulations of the federal, state and local government.

15. **Maintenance of Records.**

- 15.1. **Maintenance.** CONSULTANT shall prepare, maintain, and preserve all reports and records that may be required by federal, state, and CITY rules and ordinances related to services provided under this Agreement. CONSULTANT shall maintain records for a period of at least 3 years after receipt of final payment under this Agreement. If any litigation, claim, negotiation, audit exception, or other action relating to this Agreement is pending at the end of the 3-year period, then CONSULTANT shall retain said records until such action is resolved.

- 15.2. **Access to and Audit of Records.** The CITY shall have the right to examine, monitor and audit all records, documents, conditions, and activities of the CONSULTANT and its subcontractors related to services under this Agreement. Pursuant to Government Code Section 8546.7, if this Agreement involves the expenditure of public funds in excess of \$10,000, the Parties to this Agreement may be subject, at the request of the CITY or as part of any audit of the CITY, to the examination and audit of the State Auditor pertaining to matters connected with the performance of this Agreement for a period of three years after final payment under the Agreement.
- 15.3. **Ownership of Work Product.** All documents or other information developed or received by CONSULTANT for work performed under this Agreement shall be the property of CITY. CONSULTANT shall provide CITY with copies of these items upon demand or upon termination of this Agreement.
16. **Familiarity with Work.** By executing this Agreement, CONSULTANT represents that: (1) it has investigated the work to be performed; (2) it has investigated the site of the work and is aware of all conditions there; and (3) it understands the difficulties and restrictions of the work under this Agreement. Should CONSULTANT discover any conditions materially differing from those inherent in the work or as represented by CITY, it shall immediately inform CITY and shall not proceed, except at CONSULTANT'S risk, until written instructions are received from CITY.
17. **Time of Essence.** Time is of the essence in the performance of this Agreement.
18. **No Assignment.** Neither this Agreement nor any portion shall be assigned by CONSULTANT, without prior written consent of CITY. Any attempted assignment not first approved by CITY shall be void and, at CITY's option, shall terminate this Agreement effective as of the date of such attempted assignment.
19. **Attorney Fees.** In any legal action, dispute or arbitration arising out of or relating to this Agreement, the prevailing party shall be entitled to an award of its reasonable attorney fees, costs and expenses incurred.
20. **Defense and Indemnification.**
- 20.1. **Defense and Indemnification.** CONSULTANT shall, to the fullest extent permitted by law, indemnify, defend and hold harmless CITY, its elected or appointed officials, boards, agencies, officers, agents, employees, and volunteers ("INDEMNITEES") from and against any and all claims, liabilities, expenses, liens, or damages of any nature, including liability for bodily injury, property damage or personal injury, and including reasonable attorneys' fees and expenses, that arise out of, pertain to, or relate to the performance of this Agreement or the failure to comply with any obligations contained in this Agreement by CONSULTANT, and/or its agents, officers, employees, subcontractors, or independent contractors ("CLAIM").
- 20.2. **Exceptions.** CONSULTANT is not required to indemnify INDEMNITEES against liability for bodily injury, property damage or personal injury, or any other loss, damage or expense arising from the sole negligence or willful misconduct of the CITY.
- 20.3. **Not limited by insurance.** The indemnity, defense and hold harmless provisions of this Agreement apply to all CLAIMs alleged against an INDEMNITEE, regardless of whether any insurance policies are applicable. Policy limits do not act as a limitation upon the amount of indemnification or defense to be provided by CONSULTANT.

20.4. **Right to Offset.** CITY shall have the right to offset against any compensation due CONSULTANT under this Agreement any amount due CITY from CONSULTANT as a result of CONSULTANT's failure to pay CITY promptly any indemnification arising under this Section (20) and any amount due CITY from CONSULTANT arising from CONSULTANT's failure either to (i) pay taxes on amounts received pursuant to this Agreement or (ii) comply with applicable workers' compensation laws.

20.5. **Interpretation.** This Section shall constitute an agreement or contract of indemnity, incorporating the interpretations under California Civil Code Section 2778. It is expressly understood and agreed that the obligation of the CONSULTANT to indemnify the INDEMNITEE shall be as broad and inclusive as permitted by the laws of the State of California and shall survive termination of this Agreement.

21. **Entire Agreement; Modification; Conflicting Provisions.** This Agreement constitutes the entire Agreement between the Parties and supersedes any previous agreements, oral or written. This Agreement may be modified or provisions waived only by a subsequent mutual written agreement executed by CITY and CONSULTANT. If the provisions contained in the main body of this Agreement conflict with any provision contained in an exhibit to this Agreement, the provisions of the main body of this Agreement shall govern and control over any provision contained in an exhibit to this Agreement.

22. **Governing Law and Venue.** This Agreement shall be construed in accordance with the laws of the State of California. This Agreement was entered into and is to be performed in the County of Santa Clara. Any action or dispute arising out of this Agreement shall only be brought in Santa Clara County.

23. **Interpretation.** This Agreement is a negotiated document and shall be deemed to have been drafted jointly by the Parties, and no rule of construction or interpretation shall apply against any particular Party based on a contention that the Agreement was drafted by one of the Parties including, but not limited to, California Civil Code § 1654, the provisions of which are hereby waived. This Agreement shall be construed and interpreted in a neutral manner.

24. **Preservation of Agreement.** If any term, provision, covenant, or condition of this Agreement is held by a court of competent jurisdiction to be invalid or unenforceable, the rest of the Agreement shall remain in full force and effect and shall in no way be affected or invalidated.

25. **Binding Agreement.** Notwithstanding the provisions of Section 18 above, this Agreement shall bind any and all successors in interest, legal representatives and/or other permitted assignees or transferees of CONSULTANT in the same manner as if those successors in interest, legal representatives or other permitted assignees or transferees had entered into this Agreement originally.

[Signatures on Next Page]

Attachment: GTG - First Amendment (2476 : A Amendment to GIS Services Contract)

26. **Authority to Execute.** Those individuals who are signing this Agreement on behalf of entities represent and warrant that they are, respectively, duly authorized to sign on behalf of the entities and to bind the entities fully to each and all of the obligations set forth in this Agreement.

IN WITNESS THEREOF, these Parties have executed this Agreement on the day and year shown below.

AS SET FORTH IN CA. CORP. CODE § 313, TWO SIGNATURES ARE REQUIRED FOR CALIFORNIA CORPORATIONS:

- (1) CHAIRPERSON OF THE BOARD, PRESIDENT, OR VICE PRESIDENT; AND
- (2) SECRETARY, ASSISTANT SECRETARY, CHIEF FINANCIAL OFFICER OR ASSISTANT TREASURER.

ATTEST:

Michelle Bigelow
City Clerk/Deputy City Clerk

Michelle Bigelow
Print Name

Date:

1/3/19

APPROVED AS TO FORM:

Donald A. Larkin
City Attorney

for Donald A. Larkin
Print Name

Date:

12-6-18

CITY OF MORGAN HILL

Christina J. Turner
City Manager

Christina J. Turner
Print Name

Date:

12/20/18

GEOGRAPHIC TECHNOLOGIES GROUP

By:

Curtis A. Hinton Jr.
Curtis A. Hinton Jr.
President

Print Name and Title of Signer.
If Corporate: Chairman, President or
Vice President

Date:

11/28/2018

By:

Robin Hinton
Robin Hinton, Secretary

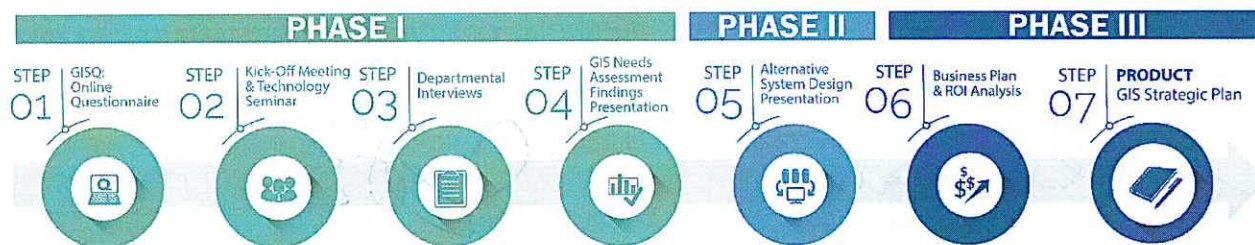
Print Name and Title of Signer.
If Corporate: Secretary, Assistant
Secretary, Chief Financial Officer or
Assistant Treasurer

Date:

11/28/2018

A. SCOPE OF SERVICES

Geographic Technologies Group (GTG) will use a Three Phase/Seven Step methodology for an enterprise, sustainable, scalable and enduring GIS. GTG's GIS strategic planning methodology will guarantee the very best Enterprise GIS Strategic Plan for the City of Morgan Hill. It includes new and innovative ways to collect stakeholder data, interview City departments, evaluate GIS needs and priorities, benchmark the City's existing GIS activities, identify Best Business Practices, hold local government and GIS technology seminars, monitor improvements and successes, identify gaps and opportunities, and present the findings to stakeholders and elected officials as follows:



Task 1: Enterprise GIS Strategic Plan

Task 1 is the development of an enterprise GIS Strategic Plan for the City of Morgan Hill. The project methodology includes: **Phase I: GIS Needs Assessment - Steps 1-4**, **Phase II: System Design - Step 5**, and **Phase III: Final Strategic Assessment- Steps 6-7**.

Phase I: GIS Needs Assessment

- **STEP 1 – Online GIS Questionnaire** – GTG will plan, design and deploy an online GIS questionnaire to be completed by key stakeholders.
 - **Deliverable: Online Questionnaire Results and Summary**
- **STEP 2 – Kick-Off Meeting and Technology Seminar** – GTG will conduct a two hour GIS Strategic Plan Kick-Off Meeting/Presentation and a “GIS Local government Technology” Seminar.
 - **Deliverable: Kick-off Presentation and GIS Technology Seminar**

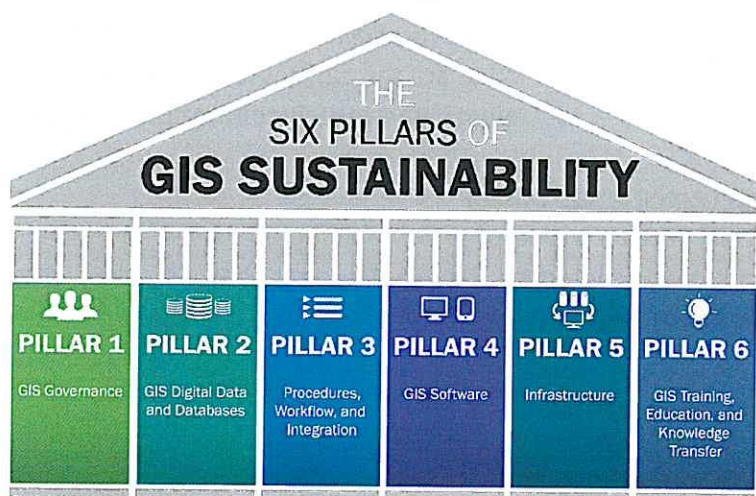
- **STEP 3 – Departmental Interviews, Benchmarking, SWOT Analysis, GAP Analysis, and Consensus Building** – GTG will conduct on-site stakeholder interviews (incorporating and updating needs analysis data acquired by the GIS Manager in 2017), GIS benchmarking, a SWOT analysis, a GAP analysis, and promote consensus building. The GTG team will meet with key representatives of each City department between 1 to 2 hours.
 - **Deliverable: Departmental Interviews**
 - **Deliverable: SWOT Analysis**
 - **Deliverable: GAP Analysis**
 - **Deliverable: Benchmarking Analysis**
- **STEP 4 – GIS Assessment Findings and Recommendations**– GTG will detail and document the existing GIS conditions within the City, and detail all of the geospatial needs and future recommendations.
 - **Deliverable: GIS Assessment Documentation**

Phase II: System Design

- **STEP 5 – Future System Design**– GTG will develop a system level design that will attempt to meet all of the needs of the organization in terms of performance, effectiveness, sustainability, and economics. GTG will use the following to describe the recommended future GIS design.

Six GIS Pillars of Sustainability

1. Governance
 2. Data and Databases
 3. Integration, Workflow, and Interoperability
 4. GIS Software
 5. IT Infrastructure
 6. Training, Education, and Knowledge Transfer
- **Deliverable: A Future Enterprise GIS Solution as it relates to the Six Pillars of Sustainability.**



Phase III: Final Assessment Report and Presentation

- **STEP 6 – Business Plan and ROI Analysis** – GTG will address the Return on Investment (ROI) and value proposition of all recommendations described in the GIS Strategic Plan.
 - **Deliverable:** ROI and Value Proposition Analysis
- **STEP 7 – Final Strategic Assessment (Plan of Action)** – GTG will develop a clear and concise GIS plan of action that will offer a step by step 3-5 year methodology for continued enterprise GIS implementation.
 - **Deliverable:** GIS Strategic Plan and Final Action Plan

Task 2: GIS Architecture Assessment and Enterprise Implementation

GTG will conduct an assessment of the City's IT infrastructure with the goal of implementing a reliable, secure, and enterprise GIS. The following steps include:

A. Existing System Evaluation

GTG will evaluate the readiness of the system infrastructure to support the planned enterprise GIS. This is a Network suitability analysis using Esri's Capacity Planning Tool (CPT). Tasks will include:

- Conduct on-site testing to establish peak network traffic, latency and bandwidth constraints between servers and GIS user locations in four City buildings and recommend any needed fixes, additions or upgrades to the system.
 - Questions to Answer
 - How many users can you support with your existing hardware?
 - What hardware needs to be purchased?
 - How many servers (cores) are needed?
 - What are the software licensing requirements?
 - What workflow loads should be used for existing applications?
 - What are the current workflow service times?
 - What is the capacity of the current system?

B. System Architecture Design

GTG will design an enterprise GIS architecture based upon the user and business needs already documented by the GIS Manager that will allow integration with each City department. Key tasks include:

- The design of a system that must be able to support: high availability servers, ArcGIS desktop users in four City buildings, centralized Enterprise data storage and editing, separate and secure GIS system for Police department (this might be solely ArcGIS Online), internal ArcGIS Online map viewed by 324 staff, public ArcGIS Online maps, mobile applications, field data collection on tablets, using Collector or Survey 123, emergency operations mapping and collaboration, and access points or integration with business applications.

Items to consider during the design:

- Workflow loads analysis
- Technical architecture strategy (user locations, network connectivity, and data center server locations)
- Network suitability analysis
 - GTG will create detailed specifications and cost for all needed hardware, software, and network purchases (the scope will be subject to city IT policies)
- System Implementation and Deployment
 - GTG will evaluate workflows, identify bottlenecks and implement fixes. Tasks include the implementation of all needed fixes and re-test infrastructure to ensure capacity goals are met. It will include system procurement authorization, based on the design budget and deployment timeline, and data acquisition and database deployment
 - GTG will deploy an enterprise system. GTG will test the solution for efficiency and effectiveness. GTG will train City staff on the system. Key tasks include:
 - Initial deployment and operational testing
 - Final system delivery, user training, and workflow migration
 - System maintenance operations (database compression, etc.)
- Deliverable: Plan, Design and implementation of the IT infrastructure to sustain an Enterprise GIS

Task 3: Configuration and Customization of Web Applications

The City of Morgan Hill uses an existing GIS centric MapGuide application to view important digital data layers. It is the intent of the City to replace MapGuide with an Esri based "web app" solution. GTG will use the Esri Web AppBuilder software to develop a browser solution with the intention that it will completely replace the City's existing MapGuide application (note that GTG has not analyzed the existing application's functionality, therefore the scope is subject to change). Where feasible, GTG will replace all custom features and functionality that exists within MapGuide, including template layout printing and notification functionality. New functionality will be added as time allows. This task includes 45 hours of a GIS programmer/ specialist's time to develop the new web app solution.

- **Deliverable: 45 GIS Programming/Specialist's hours to develop a GIS Brower Solution that Replaces or Prototypes a new version of the City's MapGuide solution**

Task 4: On-going Support Services (2 Years)

GTG will offer the City of Morgan Hill a 2 year general GIS support services contract under a new initiative called GAP. GAP is a GIS Advantage Program that allows clients to use credit for any support service. GTG has key staff that specializes in all components of GIS implementation. The City of Morgan Hill will be assigned a GAP advisor to coordinate all requested services, including IT/GIS infrastructure, GIS planning, GIS application development, data conversion services and more.

B. PROJECT TEAM AND BUDGET

The City of Morgan Hill project team includes the following:



- David Holdstock



- Mike Chenevey



- Curt Hinton



- Matt McLamb



- Technical PM: Jason Marshall



- Jonathan Welker
- GIS Technician
- GIS Technician

Hourly Rates - Monitor and maintain through on-call support.

- GTG Principal - \$125/hr.
- CTO - \$120/hr.
- Development Director - \$120/hr.
- Senior Project Manager - \$105/hr.
- GIS Developer - \$95/hr.
- Senior GIS Analyst - \$85/hr.
- GIS Analyst - \$75/hr.
- GIS Technician – \$65/hr.

Scope of Services

Task 1: GIS Strategic Plan	\$20,000
Task 2: GIS Architecture Assessment and Enterprise Implementation	\$24,000
Task 3: Configuration and Customization of Web Applications	\$5,000
Task 4: Support Services	\$10,000
Total Fee	\$59,000

C. SCHEDULE OF PERFORMANCE

Task 1: GIS Strategic Plan	2 Months: Jan-Feb 2019
Task 2: GIS Architecture Assessment and Enterprise Implementation	1 Month: Feb-Mar 2019
Task 3: Configuration and Customization of Web Applications	50 hours: Jan – Mar 2019
Task 4: Support GAP Services (2 Years)	24 Months: 2019-2021

Organization	City of Morgan Hill
State/Province	California
Project Title	GIS Services Project: Additional Tasks

Table of Contents

A. Scope of Services.....	1
• Task 5 : Setting up central GIS data repository on the City network	1
• Task 6: Implement testing (staging) and development zones in system architecture	3
• Task 7 :Produce a master address database for emergency response	4
• Task 8: Addressing editing workflow and Configure the City's enterprise geodatabase and GIS	6
• Task 9: Integrate Sedaru with Enterprise GIS.....	8
• Task 10: Integrate Trakit with Enterprise GIS	9
• Task 11: Integrate the new addressing database with EIS (Police CAD Dispatch) and Northrop Grumman Altaris (Fire CAD Dispatch)	10
• Task 12: Integrate the new address database with the City business applications: Trakit, TylerTech and RecPro	11
• Task 13: Integrate sewer software POSM with Enterprise GIS.....	12
• Task 14: Integrate GIS with re-designed City website	13
• Task 15: Implement public My Government Services app.....	14
• Task 16: Open Data (public portal)	15
• Task 17: Hold ROI workshop.....	16
• Task 18: Evaluate GIS user computers for upgrade/replacement in Years 2 and 3.....	17



B. Proposed Project Team	18
C. Budget	19
D. Schedule	20

A. SCOPE OF SERVICES

(Task 1-4 are included in the original contract scope)

- If any work is requested that is not included in this scope of services, a change order may be required.
- This scope assumes all work is performed remotely. Please contact GTG if on-site work is preferred.

Task 5 (Tactical Plan # 51, \$2,500): Assist with setting up central GIS data repository on the City network.

Lead: Morgan Hill GIS

Support: GTG

GTG will assist Morgan Hill with setting up a central GIS data repository on the City network. GTG will recommend enterprise database design and best practices on data migration and change management. GTG will assist the Morgan Hill GIS Manager in establishing all important GIS data in a central City network location with a dedicated letter drive accessible to teammates with City network access. Morgan Hill staff will reserve the drive permanently for GIS only and map the same letter for everyone on the network. GTG will make recommendations on specs such as location and capacity of the new drive.

GTG will advise on pros and cons of single vs. multiple Enterprise databases. GTG will advise on the establishment of data stewards including recommending formal agreements. GTG will provide documentation outlining steps and considerations for migrating key data layers and cleaning up legacy or unused data. GTG will assist the Morgan Hill GIS Manager with migrating selected GIS data from multiple City network drives to the new single network drive.

GTG will recommend a standardized model for the master utilities database, such as the Local Government Information Model (LGIM), Utility Network Management



Extension, or some combination of models. Morgan Hill GIS staff will migrate the database to the new model. GTG will recommend best practices for maintaining the data.



Task 6 (Tactical Plan # 39, \$10,000): Implement testing (staging) and development zones in system architecture

Lead: GTG

Support: Morgan Hill GIS

GTG will complete the recommended system architecture by adding the testing and development environments that were strongly recommended in the system design to provide greater stability and reliability to the GIS system. GTG will provide knowledge transfer documentation and provide a user training webinar for City staff in use and maintenance.



Task 7 (Tactical Plan # 31, \$15,000): Produce a master address database for emergency response that contains points for 15,000 Morgan Hill addresses.

Lead: Morgan Hill GIS

Support: GTG

Addresses will be added to the database by land use type, with residential addresses first, then commercial addresses, in the order specified per Morgan Hill's GIS Manager. The remainder of Morgan Hill addresses will be added to the database by City staff using the workflow to be developed in Task 8.

Consolidate addresses from multiple sources and assign weights for accuracy to each address using Esri, FME or other tools. Weights will be assigned globally to each data source and will be applied to all addresses from that source. In the case of duplicate addresses at a single location the weights will be used to automatically select the address from the most accurate data source and eliminate the others. The Morgan Hill GIS Manager will provide the methodology and weights for placing address points. Sources will be provided by City staff and will include: County address points and parcel data, Fire address information, Utilities water meters, RecPro membership, and others.

The new address point database must meet formatting requirements for NG 911 emergency response and be easily maintained, updated, used for geocoding, and integrated with City business applications including those used by Fire and Police. The master address database schema will be provided by the Morgan Hill GIS Manager and will be modeled on that produced by the Santa Clara County addressing group. GTG will recommend schema modifications as needed to facilitate integration with City applications defined in Task 11. Integration of the new database with City applications will be accomplished under Task 11. Integration with City CAD dispatch for Fire and Police will be scoped in future as an additional task if staff determines that assistance is needed.

Points are to be placed manually for emergency responder access using a point placement protocol to be specified by the Morgan Hill GIS Manager, likely at the driveway entrance or front door for most single family and commercial addresses as visible on aerial imagery. Imagery to be used to be agreed on by GTG and the GIS Manager and will need to be of adequate quality and resolution to allow reliable



point placement. Point accuracy should be within 2 feet of driveway or door as specified.

Perform pilot project of an initial 500 addresses to be reviewed and approved by the Morgan Hill GIS Manager prior to proceeding with the remainder of the points. Placement protocol to be modified as needed following the pilot. GTG will work with the Morgan Hill GIS Manager to develop protocol for point placement and attributes for multi-address locations such as apartments, condos, etc. This protocol will be used by City staff with the addressing workflow in Task 8.

Produce a data dictionary and metadata for new database.

Database to be provided in Enterprise geodatabase and shape file formats along with appropriate metadata.



Task 8 (Tactical Plan # 66, \$5000):

Design and document an addressing editing workflow that will allow City staff to create and maintain the City's master address GIS data . Configure the City's enterprise geodatabase and GIS to enable workflow to be implemented.

Lead: GTG

Support: Morgan Hill GIS

GTG will design, document, and configure a GIS address maintenance workflow to allow key City stakeholders to edit and maintain the City's new master address GIS data. GTG will implement the workflow utilizing and configuring ArcGIS Desktop. The deliverables will include a detailed SOP for staff that walks them through the processes step by step, and a 60-minute webinar/remote training session. The webinar will be recorded and provided to the City for future reference. GTG will document the technical requirements for the workflow and configure the City's GIS Address feature class and enterprise geodatabase to enable the workflow. GTG will make recommendations on automating workflow requirements where needed and write custom code as needed (required support must remain within task budget). The designed workflow and technical solution will enable to following requirements:

- Several GIS editors will be able to edit the database at the same time;
- The workflow will be as simple as possible within the constraints of the technology and budget for use by non-technical staff;
- The solution will allow City staff to add, review, flag, move, edit, retire, export addresses and submit them to the County;
- The solution will allow a central data administrator to QA/QC all changes before they are accepted to the database;
- Editors must be able to upload multiple addresses at a time;
- The solution must enforce data validation and standardized address syntax during data entry through autofill, domains, etc. where feasible;
- The solution must allow for newly created addresses to be entered as placeholders before/during construction when only incomplete or preliminary data is available. (this requirement will require a schema change to the Address GIS layer);



- The solution will allow editors to enter address points as a placeholder for new parcels from development/tracts maps before/during construction and before they are available in the County parcel layer (this requirement will require a schema change to the Address GIS layer);
- The solution must utilize editor tracking (track time and username for any address edits made). GTG will configure the necessary geodatabase users and enable editor tracking in the Address feature class;
- Each record reviewed should have an action category recommended by the reviewer, such as flag for further review, change, add, retire, submit to County, to facilitate review by the data administrator. (this requirement will require a schema change to the Address GIS layer);
- Ability to be able to draw preliminary/under construction streets, name them, and export to GIS file.



Task 9 (Tactical Plan # 53, \$5,000): Integrate Sedaru with Enterprise GIS

Lead: Morgan Hill GIS

Support: GTG

This is an in-house task with GTG additional support. Estimate reflects GTG additional support only. An evaluation of integration/interoperability costs would have to be made if item is fully outsourced.

The Morgan Hill GIS Manager, Utilities and other City staff will integrate Sedaru with Enterprise GIS. GTG will support this effort. GTG will participate as technical advisor during phone meetings and email communications between City staff and Sedaru staff to establish and define integration requirements within budget at the beginning of the task. GTG will provide technical support on implementing the integration.

GTG will advise on technical aspects of syncing with the Enterprise GIS Utilities database so that database office edits flow to Sedaru office and field applications and redlines flow from field to office in real time. GTG will train GIS Manager in technical GIS tasks as needed during implementation within task budget. GTG will make recommendations on automating workflows where needed and write custom code as needed (required support must remain within task budget). GTG will advise on establishing and testing procedures and workflows for editing and red-lining and provide technical support as needed. GTG will advise on enabling notifications of system problems and recommend workflows needed to maintain and troubleshoot integration.



Task 10 (Tactical Plan # 54, \$5,000): Integrate Trakit with Enterprise GIS

Lead: Morgan Hill GIS

Support: GTG

Integrate Trakit with Enterprise GIS

This is an in-house task with GTG additional support. Budget reflects GTG additional support only. An evaluation of integration/interoperability costs would have to be made if item is fully outsourced.

The Morgan Hill GIS Manager and other City staff will integrate Trakit with Enterprise GIS. GTG will support this effort. GTG will participate as technical advisor during phone meetings and email communications between City staff and Trakit staff to establish and define integration requirements within budget at the beginning of the task. GTG will provide technical support on implementing the integration.

GTG will make recommendations on how best to integrate given City business requirements as communicated by GIS Manager and City staff during the first phase of the task work. GTG will train GIS Manager in technical GIS tasks as needed during integration within task budget. GTG will make recommendations on automating workflows where needed and write custom code as needed, including integrating City parcel data updates produced by GIS Manager (required support must remain within task budget). GTG will advise on enabling notifications of system problems and recommend workflows needed to maintain and troubleshoot integration.



Task 11 (\$5,000): Integrate the new addressing database with EIS (Police CAD Dispatch) and Northrop Grumman Altaris (Fire CAD Dispatch)

Lead: Morgan Hill GIS

Support: GTG

This is an in-house task with GTG additional support. Budget reflects GTG additional support only. An evaluation of integration/interoperability costs would have to be made if item is fully outsourced.

EIS (Police CAD Dispatch) Integration

GTG will facilitate a feasibility and requirements gathering meeting with EIS to determine if it is possible to add the new address layer to the EIS map module. If this is not possible, Morgan Hill will want to provide automatic address data updates to PD dispatch staff that they can view easily. This may be through the new MHMaps application or other possible solution. GTG will assess Morgan Hill's options and recommend a solution (budget may need to be adjusted based on level of effort). GTG will work with Morgan Hill GIS to implement the solution.

Northrop Grumman Altaris (Fire CAD Dispatch) Integration

GTG will coordinate with Morgan Hill GIS and Cal Fire Sacramento IT staff to add the new address point layer as a layer in the existing Northrop Grumman Altaris CAD display.



Task 12 (Tactical Plan # 55, \$7,500): Integrate the new address database with the City business applications: Trakit, TylerTech and RecPro.

Lead: GTG

Support: Morgan Hill GIS

GTG will determine requirements for integration with three business applications, develop integration plan with detailed steps, assist with needed scripting and automating workflows as defined in the integration plan and write custom code as needed (required support must remain within task budget). Implement integration and troubleshoot any technical issues that arise. Design workflows needed for synching business applications with address database updates. Provide documentation on procedures and workflows.



Task 13 (\$5,000): Integrate sewer software POSM with Enterprise GIS

Lead: Morgan Hill GIS

Support: GTG

This is an in-house task with GTG additional support. Estimate reflects GTG additional support only. An evaluation of integration/interoperability costs would have to be made if item is fully outsourced.

GTG will advise and support the Morgan Hill GIS manager during this task. Morgan Hill will be upgrading the existing CCTV platform to a SQL Server based system. This process will primarily be handled by the Morgan Hill IT Team, but GTG will provide technical advice and assistance to the Morgan Hill GIS Manager to integrate GIS with the new system so that the sewer videos can be accessed.

Budget may need to be adjusted based on discovery and level of effort needed.



Task 14 (Tactical Plan # 52, \$1,000): Integrate GIS with re-designed City website

Lead: Morgan Hill GIS

Support: GTG

GTG will assist the Morgan Hill GIS Manager, other City staff, and City website contractor in integrating Enterprise GIS with the re-designed City website. This involves multiple pages for web maps, apps and static maps including a “My Government Services” app and a GIS Open Data portal. Assist with GIS content planning efforts.



Task 15 (Tactical Plan # 68, \$7,500): Implement public My Government Services app

Lead: GTG

Support: Morgan Hill GIS

GTG will produce a “My Government Services” app using Esri’s standard template for public use on the City website. The purpose is to provide a “go-to” place for residents to look up information on City services available at their address or in their area, such as water and trash service, schools, parks, etc. (data must be available in advance; task does not include data creation, modification, or editing). In addition, if there are not technical or internal City preference/policy limitations identified during the requirements gathering portion of the task, the app is to be positioned to be capable of serving as a “go-to” source of mapped information/resources for residents during an EOC incident.

Design app and make recommendations on best practices. Perform testing. Produce detailed documentation on maintaining and updating the app.



Task 16 (Tactical Plan # 65, \$7,500): Open Data (public portal)

Lead: GTG

Support: Morgan Hill GIS

Design and deploy a GIS Open Data portal for public sharing/download of non-sensitive City GIS data. The Open Data portal will be created and hosted on the City's ArcGIS Online Organization. The City will make the portal accessible through the City website via a link. Design portal and make recommendations on layers to include. Publish open data GIS layers as a map service for public consumption. Train the City GIS Manager in portal maintenance and update as well as best practices. Produce portal knowledge transfer documentation.



Task 17 (Tactical Plan # 99, \$2,000): Hold ROI workshop

Lead: Morgan Hill GIS

Support: GTG

GTG will assist GIS Manager in presenting an ROI workshop on GIS for the City. Provide education materials to educate GIS Manager on ROI. Assist in planning a workshop, provide presentation materials, make recommendation on best practices and next steps. Outline process for incorporating ROI in GIS program workplan.



Task 18 (Tactical Plan # 40, \$500): Evaluate GIS user computers for upgrade/replacement in Years 2 and 3

GTG will evaluate GIS user computers including EOC GIS laptop for upgrade and/or replacement to meet ArcGIS Pro and other GIS program requirements based on existing machine specifications provided by City IT staff. GTG will make recommendations on anticipated performance requirements for next five years. GTG will make recommendations for upgrade or purchase and provide detailed hardware specifications to the City GIS Manager.



B. PROPOSED PROJECT TEAM

The proposed City of Morgan Hill project team includes the following:



- Jason Marshall



- Ethan Credle



- Rives Deuterman



- Andrew Valenski



- Jessy Van horn



- Jonathan Welker



- Sam Stokes



- Austin Thompson



- Sierra Simms



C. BUDGET

Task 5 (Tactical Plan # 51,) Assist with setting up central GIS data repository on the City network.	\$2,500
Task 6 (Tactical Plan # 39) Implement testing (staging) and development zones in system architecture	\$10,000
Task 7 (Tactical Plan # 31) Produce a master address database for emergency response that contains points for 15,000 Morgan Hill addresses.	\$15,000
Task 8 (Tactical Plan # 66) Design and document an addressing editing workflow that will allow City staff to create and maintain the City's master address GIS data. Configure the City's enterprise geodatabase and GIS to enable workflow to be implemented.	\$5,000
Task 9 (Tactical Plan # 53) Integrate Sedaru with Enterprise GIS	\$5,000
Task 10 (Tactical Plan # 54) Integrate Trakit with Enterprise GIS	\$5,000
Task 11 Integrate the new addressing database with EIS (Police CAD Dispatch) and Northrop Grumman Altaris (Fire CAD Dispatch)	\$5,000
Task 12 (Tactical Plan # 55) Integrate the new address database with the City business applications: Trakit, TylerTech and RecPro.	\$7,500
Task 13 Integrate sewer software POSM with Enterprise GIS	\$5,000
Task 14 (Tactical Plan # 52) Integrate GIS with re-designed City website	\$1,000
Task 15 (Tactical Plan # 68) Implement public My Government Services app	\$7,500
Task 16 (Tactical Plan # 65) Open Data (public portal)	\$7,500
Task 17 (Tactical Plan # 99) Hold ROI workshop	\$2,000
Task 18 (Tactical Plan # 40) Evaluate GIS user computers for upgrade/replacement in Years 2 and 3	\$500
Total:	\$78,500



D. SCHEDULE

Task 5: Assist with setting up central GIS data repository on the City network.

October 2019 – November 2019

Task 6: Implement testing (staging) and development zones in system architecture

November 2019

Task 7: Produce a master address database for emergency response that contains points for 15,000 Morgan Hill addresses.

October 2019 – December 2019

Task 8: Design and document an addressing editing workflow that will allow City staff to create and maintain the City's master address GIS data . Configure the City's enterprise geodatabase and GIS to enable workflow to be implemented.

October 2019 – December 2019

Task 9: Integrate Sedaru with Enterprise GIS

October 2019 – November 2019

Task 10: Integrate Trakit with Enterprise GIS

November 2019 – January 2020

Task 11: Integrate the new addressing database with EIS (Police CAD Dispatch) and Northrop Grumman Altaris (Fire CAD Dispatch)

January 2020 – February 2020

Task 12: Integrate the new address database with the City business applications: Trakit, TylerTech and RecPro.

January 2020 – June 2020

Task 13: Integrate sewer software POSM with Enterprise GIS

February 2020 – March 2020

Task 14: Integrate GIS with re-designed City website



January 2020

Task 15: Implement public My Government Services app

January 2020 – March 2020

Task 16: Open Data (public portal)

January 2020 – February 2020

Task 17: Hold ROI workshop

April 2020 – May 2020

Task 18: Evaluate GIS user computers for upgrade/replacement in Years 2 and 3

February 2020 – March 2020



CITY COUNCIL STAFF REPORT

MEETING DATE: October 23, 2019

PREPARED BY: Chris Ghione, Public Services Director
APPROVED BY: City Manager

ADOPT ORDINANCE OF THE CITY OF MORGAN HILL AMENDING CHAPTER 17.28 (“LAND DEDICATIONS AND RESERVATIONS”) IN TITLE 17 (“SUBDIVISIONS”) OF THE MORGAN HILL MUNICIPAL CODE TO UPDATE PARK DEDICATION REQUIREMENTS

RECOMMENDATION(S)

Waive the reading, adopt Ordinance No. 2305, New Series, and declare that said title, which appears on the agenda, shall be determined to have been read by title and further reading waived.

COUNCIL PRIORITIES, GOALS & STRATEGIES

Ongoing Priorities

Maintaining Fiscal Responsibility
Supporting Our Youth
Seniors
and Entire Community

2019 Strategic Priorities

Financial Stewardship

GUIDING DOCUMENTS

Bikeways
Trails
Parks and Recreation Masterplan

REPORT NARRATIVE:

On October 2, 2019, the City Council introduced Ordinance No. 2305 New Series, by the following roll call vote: AYES: Carr, McKay, Spring, Martinez Beltran, Constantine; NOES: None; ABSTAIN: None; ABSENT: None.

At the meeting the City Council received comment from one developer relating to potential amendments to the ordinance to allow for a greater number of projects to be eligible for private park space credit. The City is interested in further pursuing this, but it is important that proposed changes to the ordinance be coordinated with other development related changes to the code that are forthcoming. City staff intends to bring forward additional changes to Section 17.28.130 of the code by December 2019. City staff do not recommend delaying adoption of the ordinance as it would delay implementation of the fee to a date later than January 1.

COMMUNITY ENGAGEMENT: Inform

On September 19, 2019, City staff held a public meeting to discuss the update to the Municipal Code with developers. Two members of the development community

attended along with one member of the general public. Notice of the proposed ordinance and public meeting were sent to the development community.

ALTERNATIVE ACTIONS:

The City Council may choose to provide additional feedback on the future proposed changes to the ordinance. The City Council could request changes to the ordinance be made before adoption, but this alternative is not recommended as it would delay implementation of the fee.

PRIOR CITY COUNCIL AND COMMISSION ACTIONS:

In relation to park dedication, the Municipal Code was last updated in 1995.

FISCAL AND RESOURCE IMPACT:

It is anticipated that the update to the Municipal Code and collection of Quimby fees will bring similar levels of revenue to the City as what was previously collected through park impact fees. These funds will have more flexibility in use and provide for renovation of existing park and recreation facilities. This flexibility will allow for the Council to make policy decisions that may ultimately result in potential savings to the General Fund, due to a reduced need to fund renovation projects. It may also result in a smaller amount of funds being available for the construction of new parks and recreation facilities, should the Council dedicate greater percentages of the funds for renovation.

CEQA (California Environmental Quality Act):

Not a Project.

This ordinance is not a project and does not require environmental review under the California Environmental Quality Act pursuant to California Code of Regulations, Title, Section 15378(b)(4) (The creation of government funding mechanisms or other government fiscal activities which do not involve any commitment to any specific project which may result in a potentially significant physical impact on the environment.)

LINKS/ATTACHMENTS:

1. Ordinance 2305 Park Fee Final

ORDINANCE NO. 2305, NEW SERIES

AN ORDINANCE OF THE CITY OF MORGAN HILL AMENDING CHAPTER 17.28 (“LAND DEDICATIONS AND RESERVATIONS”) IN TITLE 17 (“SUBDIVISIONS”) OF THE MORGAN HILL MUNICIPAL CODE TO UPDATE PARK DEDICATION REQUIREMENTS

THE CITY COUNCIL OF THE CITY OF MORGAN HILL, CALIFORNIA DOES ORDAIN AS FOLLOWS:

Section 1. Declaration of Purpose and Intent.

The purpose of this Ordinance is to amend Section 17.28 of the City of Morgan Hill Municipal Code to update park land dedication requirements.

Section 2. Section 17.28.030 (“Statutory authority”) of Chapter 17.28 (“Land Dedications and Reservations”) in Title 17 (“Subdivisions”) of the Morgan Hill Municipal Code is hereby amended to read as follows:

17.28.030 - Statutory authority.

This chapter is enacted pursuant to the authority granted by the Subdivision Map Act of the state. The park and recreational facilities for which dedication of land and/or payment of a fee is required by this chapter agree in accordance with the bikeways, trails, parks, and recreation master plan (recreation element) of the city, adopted by the city on July 20, 2017, and any amendments thereto.

Section 3. Section 17.28.050 (“Acreage required—Per number of persons”) of Chapter 17.28 (“Land Dedications and Reservations”) in Title 17 (“Subdivisions”) of the Morgan Hill Municipal Code is hereby amended to read as follows:

17.28.050 - Acreage required—Per number of persons.

It is found and determined that the public interest, convenience, health, welfare, and safety require that five acres of property for each one thousand persons residing within the city be devoted to local park and recreational purposes.

Section 4. Section 17.28.060 (“Acreage required—Formula”) of Chapter 17.28 (“Land Dedications and Reservations”) in Title 17 (“Subdivisions”) of the Morgan Hill Municipal Code is hereby amended to read as follows:

17.28.060 - Acreage required—Formula.

Where a park or recreational facility has been designated in the city's park and bikeways master plan, an element of the general plan of the city, and is to be located in whole or in part within the proposed subdivision to serve the immediate and future needs of the residents of the subdivision, the subdivider shall dedicate land for a local park sufficient in size and topography to serve the

residents of the subdivision. The amount of land to be provided shall be determined pursuant to the following standards and formula:

Formula Based on Population Estimate

$$\text{Average number of persons/unit} \div \frac{1,000 \text{ Population}}{\text{Park Acreage Standard (from Section 17.28.060)}} = \text{Minimum acreage dedication}$$

Example for single-family dwelling unit (DU):

$$3.02 \div \frac{1,000}{5} = .0151 \text{ acres/DU}$$

The average number of persons per household by units in a structure shall be established by City Council resolution in accordance with the most recent available Federal Census.

Section 5. Section 17.28.070 (“Fees in lieu of land dedication—General formula”) of Chapter 17.28 (“Land Dedications and Reservations”) in Title 17 (“Subdivisions”) of the Morgan Hill Municipal Code is hereby amended to read as follows:

17.28.070 - Fees in lieu of land dedication—General formula.

If there is no park or recreational facility designated in the city's bikeways, trails, parks and recreation master plan to be located in whole or in part within the proposed subdivision to serve the immediate and future needs of the residents of the subdivision the subdivider shall, in lieu of dedicating land, pay a fee equal to the value of the land prescribed for dedication in Section 17.28.060 hereof and in an amount determined in accordance with the provisions of Section 17.28.110 of this chapter, such fee to be used for a local park which will serve the residents of the area being subdivided.

Section 6. Section 17.28.090 (“Fees in lieu of land dedication—Use of money”) of Chapter 17.28 (“Land Dedications and Reservations”) in Title 17 (“Subdivisions”) of the Morgan Hill Municipal Code is hereby amended to read as follows:

17.28.090 - Fees in lieu of land dedication—Use of money.

The money collected under this chapter shall be used only for the purpose of acquiring necessary land and developing new or rehabilitating existing neighborhood and community park or recreation facilities reasonably related to serving the subdivision.

Section 7. Section 17.28.130 (“Credit for private recreation or open space—Replacement of existing development”) of Chapter 17.28 (“Land Dedications and Reservations”) in Title 17 (“Subdivisions”) of the Morgan Hill Municipal Code is hereby amended to read as follows:

17.28.130 - Credit for private recreation or open space—Replacement of existing development.

A. No credit shall be given for private open space in a subdivision except as provided in this section. Where a substantial private park and recreational area is provided in a proposed subdivision and such space is to be privately owned and maintained by the future residents of the subdivision, partial credit, not to exceed 40 percent, shall be given against the requirement of land dedication or payment of fees in lieu thereof if the City Manager or designee finds that all the following standards are met:

1. That yards, court areas, setbacks and other open areas required to be maintained by the zoning and building ordinances and regulations shall not be included in the computation of such private open space;
2. That the private ownership and maintenance of the open space is adequately provided for by the reported written agreement, conveyance, or restrictions;
3. That the use of the private open space is restricted for park and recreational purposes by recorded covenant, which runs with the land in favor of the future owners of property and which cannot be defeated or eliminated without the consent of the city or its successor;
4. That the proposed private open space is reasonably adaptable for use for park and recreational purposes, taking into consideration such factors as size, shape, topography, geology, access, and location;
5. That facilities proposed for the open space are in substantial accordance with the provisions of the recreational element of the general plan; and
6. That the open space for which credit is given is a minimum of two acres and provides a minimum of four of the local park basic elements listed below, or a combination of such and other recreational improvements that will meet the specific recreational park needs of the future residents of the area:

Criteria List	Acres
Children's play apparatus area	.50— .75
Landscape park-like and quiet areas	.50—1.00
Family picnic area	.25— .75
Game court area	.25— .50
Turf playfield	1.00—3.00
Swim pool (42' × 75' with adjacent deck and lawn areas)	.25— .50
Recreation center building	.15— .25

- B. Where the proposed subdivision will replace existing previously occupied dwelling units, credits shall be given against the requirement of land dedication or payment of fees in lieu thereof if the City Manager or designee finds that existing previously occupied dwelling units will be removed. Credit shall be given on a unit-by-unit basis.
- C. Before credit is given the City Manager or designee shall make written findings that the standards set out in subsections A and B of this section are met.
- D. A developer receiving credit for private open space through this Chapter shall not be permitted to utilize the same private open space towards any other park, recreation and open space requirements or credits with the City.

Section 8. Section 17.28.140 (“Determination of land or fee—Procedure”) of Chapter 17.28 (“Land Dedications and Reservations”) in Title 17 (“Subdivisions”) of the Morgan Hill Municipal Code is hereby amended to read as follows:

17.28.140 - Determination of land or fee—Procedure.

- A. At the time of approval of the tentative subdivision map, the City Manager or designee shall determine, after a report, pursuant to Section 17.28.120 of this chapter, whether the land is to be dedicated or in lieu fees are to be paid by the subdivider or any combination of land and fees.
- B. The recommendation by the City Manager or designee shall include the following:
 - 1. The amount of land required; or
 - 2. That a fee be charged in lieu of land; or
 - 3. That land and a fee be required; and/or
 - 4. That a stated amount of credit be given for private recreation facilities or unique natural and special features, etc.;
 - 5. The location of the park land to be dedicated or use of in lieu fees;
 - 6. The approximate time when development of the park or recreation facility shall commence.
- C. This action shall be reviewed by the planning commission for concurrence. If concurrence is not obtained, this matter will be forwarded to the city council for final determination. In making its determination, the council shall be guided by the same standards contained in this chapter where applicable.
- D. At the time of the filing of the final subdivision map, the subdivider shall dedicate the land and/or pay the fees as determined by the city.

- E. Open space covenants for private park or recreational facilities shall be submitted to the city prior to approval of the final subdivision map and shall be recorded concurrently with the final subdivision map.

Section 9. CEQA Exemption

The city finds that this Ordinance and actions taken hereafter pursuant to this Ordinance are not a project and do not require environmental review under the California Environmental Quality Act pursuant to California Code of Regulations, Title, Section 15378(b)(4) (The creation of government funding mechanisms or other government fiscal activities which do not involve any commitment to any specific project which may result in a potentially significant physical impact on the environment.)

Section 10. Severability.

Should any provision of this ordinance be deemed unconstitutional or unenforceable by a court of competent jurisdiction, such provision shall be severed from the ordinance, and such severance shall not affect the remainder of the ordinance.

Section 11. Effective Date; Posting.

THE FOREGOING ORDINANCE WAS INTRODUCED AT A MEETING OF THE CITY COUNCIL HELD ON THE 2ND DAY OF OCTOBER 2019 AND WAS FINALLY ADOPTED AT A MEETING OF THE CITY COUNCIL HELD ON THE 23RD DAY OF OCTOBER 2019 AND SAID ORDINANCE WAS DULY PASSED AND ADOPTED IN ACCORDANCE WITH THE LAW BY THE FOLLOWING VOTE:

AYES: COUNCIL MEMBERS:
NOES: COUNCIL MEMBERS:
ABSTAIN: COUNCIL MEMBERS:
ABSENT: COUNCIL MEMBERS:

APPROVED:

RICH CONSTANTINE, Mayor

ATTEST:

IRMA TORREZ, City Clerk

DATE: _____

Effective: November 23, 2019

∞ CERTIFICATE OF THE CITY CLERK ∞

I, IRMA TORREZ, CITY CLERK OF THE CITY OF MORGAN HILL, CALIFORNIA, do hereby certify that the foregoing is a true and correct copy of Ordinance No. 2305, New Series, adopted by the City Council of the City of Morgan Hill, California at their regular meeting held on the 23rd day of October 2019.

WITNESS MY HAND AND THE SEAL OF THE CITY OF MORGAN HILL.

DATE: _____

IRMA TORREZ, City Clerk

Attachment: Ordinance 2305 Park Fee Final (2501 : Adopt Ordinance 2305 - Park Fee Ordinance)



CITY COUNCIL STAFF REPORT

MEETING DATE: October 23, 2019

PREPARED BY: Anthony Eulo, Program Administrator
APPROVED BY: City Manager

INTRODUCE ORDINANCE ADDING CHAPTER 15.63 (PROHIBITION OF NATURAL GAS INFRASTRUCTURE IN NEW BUILDINGS) TO THE MORGAN HILL MUNICIPAL CODE REDUCING CLIMATE IMPACTS BY REQUIRING NEW BUILDINGS TO BE ALL-ELECTRIC

RECOMMENDATION(S)

1. Waive the first and second reading of the ordinance; and
2. Introduce ordinance.

COUNCIL PRIORITIES, GOALS & STRATEGIES

Ongoing Priorities

Protecting the Environment

REPORT NARRATIVE:

The purpose of this agenda item is to introduce an ordinance requiring all new buildings to rely solely on electricity for their energy.

The following developments from the past two years have precipitated this report:

- The growing body of evidence that the Climate Crisis is real and demands action;
- The abdication of the federal government in taking action to address the Climate Crisis – which necessitates that state and local governments play a leading role in steering societal changes that may lead to climate stability; and
- The successful decarbonization of the region's electricity supply, via Silicon Valley Clean Energy (SVCE), which clearly makes electricity the cleanest fuel for building energy. Natural gas combustion in dual-fuel buildings is now the second largest source (after transportation) of climate-changing emissions in our community.

When taken in total, the above three developments have led City and agency staff throughout the region to conclude that local government actions to reduce or eliminate natural gas emissions from buildings are the next logical frontier in addressing the Climate Crisis.

What is the Problem

Emissions from natural gas combustion, and propane in areas unserved by natural gas, have become the largest source of greenhouse gas emissions associated with buildings. These emissions make up about one-third of the greenhouse gas emissions

in our region. Of these emissions in a typical dwelling, about 49% come from water heating, 37% from space heating, and 7% from cooking, with the remainder being pool heating, clothes drying, etc. While the exact numbers for nonresidential buildings vary widely with the type of occupancy, the aggregate nonresidential numbers are 32% for water heating, 36% for space heating, 23% for cooking, and 9% miscellaneous.

Advantages of Electrification (Using electricity to heat and cook)

Many of us grew up hearing that natural gas was superior to electricity because it was more efficient. While this used to be true, three modern electric appliances (heat pump water heaters, heat pump space heaters, and induction cooktops) now offer enhanced efficiency and performance.

In terms of construction costs, avoiding the installation of gas pipelines into a development can save approximately \$7,000 per unit. While the increased cost of installing larger electrical transformers will reduce the net savings, depending on the location, all-electric construction is expected to be less expensive on average. One developer in the community, City Ventures, typically already chooses to construct all-electric homes without natural gas.

On the operational cost side, it is difficult to definitively determine whether an all-electric building will cost more or less to operate because the relative costs of electricity and natural gas fluctuate over time. What is certain is that property owners have the opportunity to own their own solar energy systems, which can offset some or all of their electricity use, and the same cannot be said for their natural gas use. The only practical way to “zero-out” your gas utility bill is to rely solely on electricity.

Lastly, all-electric homes are considered substantially safer than their dual-fuel counterparts because there are no emissions within the home from gas combustion and there are no gas pipes that can leak due to wear, age, or earthquake.

Why Focus on New Buildings?

The greatest opportunities for electrifying buildings are present when the building is being designed and constructed. In fact, if one assumes that all buildings will need to be eventually converted to electricity, each new dual-fuel building being constructed is creating a future retrofit liability for either the government or private property owners.

The proposed ordinance generally requires all new buildings to rely solely on electricity as their energy source if they apply for a building permit after March 1, 2020. The delayed implementation date allows the public and developers time to continue with their existing plans, for projects that are close to submission, and ample time to adjust their plans to the all-electric design for projects that are still many months away from applying for a permit.

While the ordinance, if adopted, will apply to the vast majority of new buildings, buildings could still be constructed with dual fuels if they meet one of the following exemptions:

- The Energy Code does not provide an all-electric prescriptive compliance approach for the specific building type and the building is unable to achieve the performance compliance standard using commercially available technology; or
- The City Council determines that it is in the public interest for the specific building to be constructed with natural gas.

What about Construction Costs?

Some people, who are unfamiliar with the housing market, have remarked that these efforts will increase the already-high cost of housing. This is ultimately not the case because:

- a) The market sets the price of housing – not the costs of construction; and
- b) Even if housing construction costs impacted the price of new homes, all-electric construction is less expensive so, if anything, this requirement will reduce the price of new homes.

What about Power Outages?

The recent power shutoff initiated by PG&E serves as a good reminder that we have all grown accustomed to having uninterrupted electricity. Some may question whether having an all-electric house makes one more inconvenienced by power outages. While this is partly true, the dynamic is largely mitigated by the fact that modern gas appliances typically rely on electricity for their control and ignition systems, so they are also unavailable during a power outage. The day-to-day advantages of the all-electric home vastly outweigh this slight disadvantage. Similarly, a large percentage of the population no longer has a classic nonelectronic phone that will function during a power outage when paired with a landline. People are abandoning both their nonelectronic phones and their landlines in high numbers - even though it makes their phone service less resilient.

Staff recommends that the Council introduce the attached ordinance.

COMMUNITY ENGAGEMENT: Consult

Based on the Council's policy direction on September 4th, staff shared the proposed ordinance with members of the development community. At the time this report was prepared, staff had only heard from one developer, Dick Oliver, and has attached the e-mail conversation.

ALTERNATIVE ACTIONS:

Instead of introducing the proposed ordinance, the Council could alternatively direct staff to suspend efforts to require new development to be greener or to return to the Council with a different ordinance.

PRIOR CITY COUNCIL AND COMMISSION ACTIONS:

The proposed ordinance follows the policy guidance received from the Council on September 4, 2019. Prior to that meeting, the Council had last adopted a green building ordinance in 2009.

FISCAL AND RESOURCE IMPACT:

There are no direct fiscal impacts from this item and no budget adjustment is requested at this time. Evaluating program options is included in the work program of the Community Services Department.

CEQA (California Environmental Quality Act):

Not a Project.

In accordance with CEQA Guidelines section 15378(b)(5), action on this item is not a project subject to CEQA because policy direction is an administrative action that will not result in a physical change to the environment.

LINKS/ATTACHMENTS:

1. Morgan Hill Natural Gas Ordinance for Introduction
2. Input and Response to Dick Oliver

ORDINANCE NO. __, NEW SERIES

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF MORGAN HILL ADDING CHAPTER 15.63 (PROHIBITION OF NATURAL GAS INFRASTRUCTURE IN NEW BUILDINGS) TO TITLE 15 (BUILDINGS AND CONSTRUCTION) TO THE MORGAN HILL MUNICIPAL CODE PROHIBITING NATURAL GAS INFRASTRUCTURE IN NEW BUILDINGS EFFECTIVE JANUARY 1, 2020

THE CITY COUNCIL OF THE CITY OF MORGAN HILL DOES ORDAIN AS FOLLOWS:

Section 1. Chapter 15.63 of the Morgan Hill Municipal Code is hereby added to read as follows:

Chapter 15.63

PROHIBITION OF NATURAL GAS INFRASTRUCTURE IN NEW BUILDINGS

Sections:

15.63.010 Findings and Purpose.

15.63.020 Applicability.

15.63.030 Definitions.

15.63.040 Prohibited Natural Gas Infrastructure in Newly Constructed Buildings.

15.63.050 Public Interest Exemption.

15.63.060 Periodic Review of the Ordinance.

15.63.070 Severability.

15.63.080 Effective Date.

15.63.010 Findings and Purpose.

The Council finds and expressly declares as follows:

- A. Scientific evidence has established that natural gas combustion, procurement and transportation produce significant greenhouse gas emissions that contribute to global warming and climate change.
- B. The following addition to the Morgan Hill Municipal Code is reasonably necessary because of local climatic, geologic and topographical conditions as listed below:
 - (1) Morgan Hill is situated along a wildland-urban interface and is extremely vulnerable to wildfires and firestorms, and human activities releasing greenhouse gases into the atmosphere cause increases in worldwide average temperature, drought conditions, vegetative fuel, and length of fire seasons.
 - (2) Morgan Hill relies on water imported into the region for groundwater recharge and climate change is already causing changes in rainfall and snowfall which threaten to interrupt the supply of imported water.
 - (3) Structures in Morgan Hill are located along or near the Calaveras fault and the City is close enough to the San Andreas and Hayward faults. All of these faults are capable of producing large earthquakes in the Bay Area.
- C. The following addition to the Morgan Hill Municipal Code is also reasonably necessary because of health and safety concerns as Morgan Hill residents s

- from asthma and other health conditions associated with poor indoor and outdoor air quality exacerbated by the combustion of natural gas.
- D. Substitute electric heating and cooling infrastructure in new buildings fueled by less greenhouse gas intensive electricity is linked to significantly lower greenhouse gas emissions and is cost competitive because of the cost savings associated with all- electric designs that avoid new gas infrastructure.
 - E. All-electric building design benefits the health, welfare, and resiliency of Morgan Hill and its residents.
 - F. The most cost-effective time to integrate electrical infrastructure is in the design phase of a building project because building systems and spaces can be designed to optimize the performance of electrical systems and the project can take full advantage of avoided costs and space requirements from the elimination of natural gas piping and venting for combustion air safety.
 - G. It is the intent of the council to eliminate obsolete natural gas infrastructure and associated greenhouse gas emissions in new buildings where all-electric infrastructure can be most practicably integrated, thereby reducing the environmental and health hazards produced by the consumption and transportation of natural gas.

15.63.020 Applicability.

- A. The requirements of this Chapter shall apply to Building Permit Applications submitted on or after the effective date of this Chapter for all Newly Constructed Buildings proposed to be located in whole or in part within the City.
- B. The requirements of this Chapter shall not apply to the use of portable propane appliances for outdoor cooking and heating.
- C. This chapter shall in no way be construed as amending California Energy Code requirements under California Code of Regulations, Title 24, Part 6, nor as requiring the use or installation of any specific appliance or system as a condition of approval.

15.63.030 Definitions.

- A. "Applicant" shall mean an applicant for a Building Permit Application.
- B. "Energy Code" shall mean the California Energy Code as amended and adopted in MHMC Chapter 15.12.
- C. "Greenhouse Gas Emissions" mean gases that trap heat in the atmosphere.
- D. "Natural Gas" shall have the same meaning as "Fuel Gas" as defined in California Plumbing Code and Mechanical Code.
- E. "Natural Gas Infrastructure" shall be defined as fuel gas piping, other than service pipe, in or in connection with a building, structure or within the property lines of premises, extending from the point of delivery at the gas meter as specified in the California Mechanical Code and Plumbing Code.
- F. "Newly Constructed Building" shall be defined as a building that has never before been used or occupied for any purpose.

15.63.040 Prohibited Natural Gas Infrastructure in Newly Constructed Buildings.

- A. Natural Gas Infrastructure shall be prohibited in Newly Constructed Buildings.
 - 1. Exception: Natural Gas Infrastructure may be permitted in a Newly Constructed Building if the Applicant establishes that it is not physically feasible to construct the building without Natural Gas Infrastructure. For purposes of this exception, "physically feasible" to construct the building means either an all-electric prescriptive compliance approach is available for the building under the Energy Code or the building is able to achieve the performance compliance standards under the Energy Code using

commercially available technology and an approved calculation method.

- B. To the extent that Natural Gas Infrastructure is permitted, it shall be permitted to extend to any system, device, or appliance within a building for which an equivalent all-electric system or design is not available.
- C. Newly Constructed Buildings shall nonetheless be required at a minimum to have sufficient electric capacity, wiring and conduit to facilitate future full building electrification.
- D. The requirements of this section shall be deemed objective planning standards under Government Code section 65913.4 and objective development standards under Government Code section 65589.5.

15.63.050 Public Interest Exemption.

- A. Notwithstanding the requirements of this Chapter and the Greenhouse Gas Emissions and other public health and safety hazards associated with Natural Gas Infrastructure, minimally necessary and specifically tailored Natural Gas Infrastructure may be allowed in a Newly Constructed Building provided that the entitling body establishes that the use serves the public interest. In determining whether the construction of Natural Gas Infrastructure is in the public interest, the City may consider:
 - 1. The availability of alternative technologies or systems that do not use natural gas;
 - 2. Any other impacts that the decision to allow Natural Gas Infrastructure may have on the health, safety, or welfare of the public.
- B. If the installation of Natural Gas Infrastructure is granted under a public interest exemption, the Newly Constructed Buildings shall nonetheless be required at the minimum to have sufficient electric capacity, wiring and conduit to facilitate future full building electrification.

15.63.060 Periodic Review of Ordinance.

The City shall review the requirements of this ordinance every 18 months for consistency with the California Energy Code and the Energy Commission's mid-cycle amendments and triennial code adoption cycle as applicable.

Section 2. This Ordinance shall be submitted to the California Building Standards Commission following adoption as consistent with state law.

Section 3. Severability. Should any provision of this ordinance be deemed unconstitutional or unenforceable by a court of competent jurisdiction, such provision shall be severed from the ordinance, and such severance shall not affect the remainder of the ordinance.

Section 4. This Ordinance shall take effect on March 1, 2020. The City Clerk is hereby directed to publish this Ordinance or a summary thereof pursuant to Government Code Section 36933.

This ordinance was introduced at a meeting of the City Council held on the _____ day of _____, 20____, and adopted at a meeting held on the _____ day of _____, 20____, and said ordinance was duly passed and adopted in accordance with law by the following vote:

AYES: COUNCIL MEMBERS:
 NOES: COUNCIL MEMBERS:
 ABSTAIN: COUNCIL MEMBERS:
 ABSENT: COUNCIL MEMBERS:

APPROVED:

 RICH CONSTANTINE, Mayor

ATTEST:

 IRMA TORREZ, City Clerk

DATE: _____

Effective: xxxxxx

CERTIFICATE OF THE CITY CLERK

I, IRMA TORREZ, CITY CLERK OF THE CITY OF MORGAN HILL, CALIFORNIA, do hereby certify that the foregoing is a true and correct copy of Ordinance No. xxxx, New Series, adopted by the City Council of the City of Morgan Hill, California at their regular meeting held on the 6TH day of November 2019.

WITNESS MY HAND AND THE SEAL OF THE CITY OF MORGAN HILL.

DATE: _____

 IRMA TORREZ, City Clerk

Input and Response to Dick Oliver, Dividend Homes

From: Anthony Eulo
 Sent: Wednesday, October 2, 2019 10:07 AM
 To: Dick Oliver
 Subject: RE: Draft Morgan Hill Electrification Ordinance

Thanks much for clarifying.

It will be interesting to see how the Andalusia bids come in. I'm excited to hear that you are already building an all-electric project. Of course, labor availability and other factors are going to make a 1:1 comparison impossible - unless two projects are bid in the same community at the same time. We both know that real life doesn't always lend itself to controlled experiments.

Sometimes the challenge with relying on market solutions is that we have an imperfect market. Without a carbon tax or other method to capture the external cost of pollution, the true costs of burning natural gas aren't being realized by the producers or consumers of the gas.

 Anthony Eulo
 Program Administrator

From: Dick Oliver <ROliver@dividendhomes.com>
 Sent: Wednesday, October 2, 2019 9:46 AM
 To: Anthony Eulo <Anthony.Eulo@morganhill.ca.gov>
 Subject: RE: Draft Morgan Hill Electrification Ordinance

Tony: We are bidding the Andalusia project shortly, which will be all electric. We have a project in Mt. View which is both gas and electric, and I hopefully will have some comparative results that I can share with you. What I was alluding to was the cost to the owner of a larger home (e.g. like Mission Ranch), when comparing the cost of heating the home and the water with all electric vs. gas, currently there would be a significant increase in the utility costs. As solar becomes more of a standard, that will start to mitigate the electric, but as yet, not enough when including the cost of heating the house. One of the problems with the small townhomes, which are three story and tight for room...the tankless gas fired instant hot water works better (and takes less room) than an electric water heater. There are some tough trade-offs, which will likely be sorted out in the open marketplace, which I think would be a better solution than just legislating a result.

I'll let you know if I can get some cost comparisons.

Regards,

Dick

Attachment: Input and Response to Dick Oliver (2508 : Building Electrification)

From: Anthony Eulo <Anthony.Eulo@morganhill.ca.gov>
 Sent: Wednesday, October 2, 2019 9:37 AM
 To: Dick Oliver <ROliver@dividendhomes.com>
 Subject: RE: Draft Morgan Hill Electrification Ordinance

Thanks much Dick.

With regard to construction costs, everything I'm hearing is that the cost of construction is lower for an all-electric home. If you are finding this not to be the case, I'd be very interested in learning more so we can further analyze the issues.

 Anthony Eulo
 Program Administrator

From: Dick Oliver <ROliver@dividendhomes.com>
 Sent: Wednesday, October 2, 2019 9:32 AM
 To: Anthony Eulo <Anthony.Eulo@morganhill.ca.gov>
 Subject: RE: Draft Morgan Hill Electrification Ordinance

Tony: Thanks for providing me with a copy of the proposed ordinance and an opportunity to opine. I have always had serious reservations about legislating the market place. The intent and purpose is certainly worthy and I support it. However, I believe that it would be much better to create an incentive to go all-electric, rather than make it mandatory. All electric works well in the smaller homes, but it is not economically viable, as yet, for larger single family homes. It may be in the near future, but if we let the market place still play a role, when the price of electricity come down, when the electric appliance become more efficient, then the marketplace will follow and we will accomplish the desired "all electric". When we legislate the result, then the electric industry has less an incentive to lower price and we then, without intent, the cost to the consumer. I also believe that given the possibility of natural disasters and rogue man-made disasters which could affect the power grid and interrupt the supply of electricity, with might otherwise be mitigated with alternative gas solutions.

Regards, Dick

From: Anthony Eulo <Anthony.Eulo@morganhill.ca.gov>
 Sent: Tuesday, October 1, 2019 8:40 PM
 To: Anthony Eulo <Anthony.Eulo@morganhill.ca.gov>
 Subject: FW: Draft Morgan Hill Electrification Ordinance

Dear Members of the Local Development Community,

As you know, the City of Morgan Hill is currently working on an ordinance that requires new buildings to be all-electric construction. Since electricity in our region is being produced and delivered carbon-free, emissions from natural gas are now responsible for up to one-third of the

Attachment: Input and Response to Dick Oliver (2508 : Building Electrification)

community's remaining carbon footprint. The City's efforts are consistent with the actions being taken in many communities throughout the State. In addition to being greener, all-electric construction is considered safer, more efficient, and less expensive to construct.

I've attached a copy of the draft ordinance for your review. Please feel free to provide me with any input you may have.

Thank you.

Anthony Eulo
Program Administrator



CITY COUNCIL STAFF REPORT

MEETING DATE: October 23, 2019

PREPARED BY: Eric Blomquist, Building Official
APPROVED BY: City Manager

INTRODUCE AN ORDINANCE OF THE CITY OF MORGAN HILL AMENDING TITLE 15 (BUILDING AND CONSTRUCTION) TO ADOPT BY REFERENCE, THE 2019 CALIFORNIA STATE BUILDING STANDARDS CODE KNOWN AND DESIGNATED AS CALIFORNIA CODE OF REGULATIONS, TITLE 24 AND THE 2018 INTERNATIONAL PROPERTY MAINTENANCE CODE; AND TO AMEND, DELETE AND ADD CERTAIN OTHER BUILDING AND CONSTRUCTION STANDARDS

RECOMMENDATION(S)

1. Waive the first and second reading of the Ordinance; and
2. Introduce ordinance.

COUNCIL PRIORITIES, GOALS & STRATEGIES

Ongoing Priorities

Enhancing Public Safety
Protecting the Environment

REPORT NARRATIVE:

Pursuant to the California Health and Safety Code, the California Building Standards Commission ("Commission") is required to adopt certain uniform codes triennially. This code is the 2019 California Building Standards Code located in California Code of Regulations, Title 24 of the California Health and Safety Code. This consists of twelve different parts and provides the uniform building standards throughout California. These parts include administrative, building, residential, electrical, mechanical, plumbing, energy, historical, existing, fire, green and building referenced standards. Local agencies may amend the uniform codes adopted by the Commission upon making findings related to local geographic, topographic, and climatic conditions. If local agencies do not act to amend the code, the versions adopted by the Commission shall govern.

In order to maintain the existing Morgan Hill local code amendments that were made to the previous edition of the California Building Standards Code and to adopt additional new code amendments, it is necessary to revise certain Chapters of Title 15 (Building and Construction) of the City's Municipal Code. The majority of these revisions are required to provide title and section conformance to the 2019 California Building Standards Code. The remaining revisions are necessary to adopt building standards specific for geographic, topographic, and climatic conditions of Morgan Hill. The

proposed amendments are included in the proposed ordinance. A copy of the California Building Standards Code and proposed amendments will be kept on file and available for public review at the office of the City Building Official.

This ordinance also achieves the following:

- Adopts the 2018 International Property Maintenance Code, which is not adopted by the Commission. This model code provides the standards to ensure health, safety and welfare for existing structures and premises. This ordinance will eliminate the outdated Municipal Code Chapter 15.24 (Housing Code) that was based on the 1997 Uniform Housing Code.
- Makes minor changes to sections in Chapters 15.40 (Building Security) of Title 15 of the Morgan Hill Municipal Code. This change will provide an average and minimum exterior lighting requirement for parking lots.
- Makes a change to a section in Chapter 15.64 (Wood-burning Appliances) of Title 15 of the Morgan Hill Municipal Code. This provision will provide consistency with the regulations and standards of the Bay Area Air Quality Management District.

COMMUNITY ENGAGEMENT: Inform

The Building Division will provide building code update outreach to the local development community, contractors, and homeowners.

ALTERNATIVE ACTIONS:

Not Applicable.

PRIOR CITY COUNCIL AND COMMISSION ACTIONS:

On November 2, 2016, Council adopted Ordinance 2221 adopting the 2016 California State Building Standards Code.

FISCAL AND RESOURCE IMPACT:

Periodic reviews and updates of the City's Municipal Code, including Building Standards, are part of the staff's annual workplan. The primary resources allocated to this update were from the Development Services Department.

CEQA (California Environmental Quality Act):

Pursuant to Title 14 of the California Code of Regulations, Section 15061(b) (3), the adoption of this Ordinance is exempt from the requirements of the California Environmental Quality Act (CEQA) because it can be seen with certainty that there is no potential for causing a significant effect on the environment. The California codes adopted by this ordinance will automatically become effective within the City's jurisdiction with the exception of the local amendments proposed for the City. The local amendments, serve to strengthen the codes to provide greater protection for public health, safety, and the environment, and provide for clearer administration of these codes.

LINKS/ATTACHMENTS:

1. MHMC Title 15-Building and Construction
2. Building Code Ordinance redlined
3. Building Code Ordinance Clean

ORDINANCE NO. _____, NEW SERIES

AN ORDINANCE OF THE CITY OF MORGAN HILL AMENDING CHAPTERS 15.08 (BUILDING CODE), 15.12 (ELECTRICAL CODE), 15.16 (MECHANICAL CODE), 15.20 (PLUMBING CODE), 15.24 (HOUSING CODE), 15.25 (PROPERTY MANAGEMENT), 15.40 (BUILDING SECURITY), ~~—AND—~~15.44 (FIRE CODE), AND 15.64 (WOOD-BURNING APPLIANCES) TO ADOPT BY REFERENCE THE 2019 CALIFORNIA STATE BUILDING STANDARDS CODES KNOWN AND DESIGNATED AS CALIFORNIA CODE OF REGULATIONS, TITLE 24 AND TO AMEND, DELETE, AND ADD CERTAIN OTHER BUILDING AND CONSTRUCTION STANDARDS AND TO MAKE MINOR CHANGES TO SECTIONS IN CHAPTERS 15.40 (BUILDING SECURITY) AND 15.64 (WOOD-BURNING APPLIANCES) OF TITLE 15 (BUILDING AND CONSTRUCTION) OF THE MORGAN HILL MUNICIPAL CODE

WHEREAS, Health and Safety Code Section 17922 requires that the State adopt building standards and rules and regulations (“State Building Standards Code”) and that such State Building Standards Code impose substantially the same requirements as are contained in the most recent editions of specified uniform industry codes; and

WHEREAS, Health and Safety Code Section 17958 allows the City Council to adopt ordinances or regulations which impose the same requirements as the State Building Standards Code or make changes or modifications to the State Building Standards Code upon express findings that that such modifications or changes are reasonably necessary because of local climatic, geological, or topographical conditions; and

WHEREAS, the Building Standards, along with any changes or modifications made by the City Council, become effective 180 days after publication by the California Building Standards Commissions; and

WHEREAS, the City Council desires to adopt the 2019 State Building Standards Code, including the California Building Code, the California Electrical Code, the California Mechanical Code, the California Plumbing Code, and the California Fire Code, as published by the California Building Standards Commission, along with changes and modifications reasonably necessary because of local climatic, geological, or topographical conditions, based on findings set forth in this ordinance; and

WHEREAS, the City Building Official and the Fire Department have determined that local amendments to the State Building Standards Codes are necessary due to unique conditions that exist in the City of Morgan Hill; and

WHEREAS, amendments related to fire and life-safety contained in the 2019 State Building Standards Code as recommended by the City Building Official and the Fire Department are hereby found to be reasonably necessary due to the following local conditions, along with additional express findings that are already on file with the California Building Standards Commission:

A. Climatic Conditions

Santa Clara County and the City of Morgan Hill are located in a semi-arid Mediterranean type climate which predisposes all fuels to rapid ignition and spread of fire. Hot, dry winds and low humidity~~ies~~ are common to all areas within the City of Morgan Hill and Santa Clara County in general. Winter rains promote the growth of grass and brush. This vegetation presents heavy dry fuel loads in the summer months. These conditions are conducive to the ready ignition, propagation, and spread of grass, brush, and structure fires. These conditions, which can cause small brush fires that spread quickly, are a contributing factor to the high fire danger in the area and create the need for an increased level of fire protection. This added protection will supplement normal fire department response and provide immediate protection for life and safety of multiple occupancy occupants during fire occurrences.

B. Topographic Conditions

The topography of Morgan Hill has hillside homes on each side of the City with long response times for safety equipment. The City foothills cause many problems for firefighters, including long response times, inadequate water supply, and unlimited fuel. Fog, heavy rains, mud slides, and earthquakes are other common occurrences which negatively affect the ability of the City's public safety resources to respond to emergency situations. The City is in a Category D seismic activity classification. Many traffic corridors such as Highway 101, Monterey Road, Union Pacific Railroad, related bridges, underpasses, and crossings are subject to obstruction in the event of an earthquake, traffic accident, hazardous material spill, or other disaster.

C. Geographic Conditions

1. Santa Clara County and the City of Morgan Hill are located within the seismically active San Francisco Bay region. The significant earthquakes in the region are generally associated with the crustal movements along well-defined, active fault zones. The nearest known active faults are the San Andreas Fault, approximately 12 miles southwest of Morgan Hill and the Calaveras Fault, approximately one mile northeast. Both faults have produced major earthquakes in the past and have estimated maximum credible Richter magnitudes of 8.3 and 7.3, respectively. The Sargent-Berrocal Fault, a potentially active fault, lies approximately ten miles away and has an estimated maximum credible Richter magnitude of 7.3. The Coyote Creek Fault is located in Morgan Hill and is classified as potentially active as well. In addition, several unnamed faults traverse the western slopes of the upland areas.
2. Regional planning for reoccurrence is recommended by the State Department of Conservation. The October 17, 1989 Santa Cruz earthquake resulted in only one major San Francisco fire in the Marina district but, when combined with the 34 other fires and over 500 responses, the fire department was taxed to its full capabilities.

The Marina fire was difficult to contain because mains supplying water to the district burst during the earthquake. If more fires had been ignited by the earthquake, it would have been difficult for the fire department to contain them. Experts predict a major earthquake in our area. This situation creates the need for both additional fire protection measures and automatic on-site fire protection for building occupants since a multitude of fires may result from breakage of gas lines and electric lines as a result of an earthquake.

3. Traffic and circulation congestion presently existing in the City of Morgan Hill often places fire department response time to fire occurrences at risk. This condition will be exacerbated by any major disaster, including any earthquake where damage to the highway system will occur. This condition makes the need for additional on-site protection for property occupants necessary.
4. The City of Morgan Hill is located in an area subject to a climatic condition of high winds and low humidity. This combination of events creates an environment which is conducive to rapidly spreading fires. Control of such fires requires rapid response. Obstacles generated by a strong wind, such as fallen trees, street-lights, and utility poles, greatly impact the response time to reach an incident scene.
5. The City of Morgan Hill is located in the middle of a seismically active area. The viability of the public water system would be questionable at best after a major seismic event. A severe seismic event has the potential to negatively impact any rescue or fire suppression activities because it is likely to create obstacles similar to those indicated under the high wind section above. With the probability of strong aftershocks, there exists a need to provide increased protection for anyone on upper floors.
6. The City of Morgan Hill is located approximately sixteen miles from the ocean. The City's typical ground water level is between ten and twenty feet. This condition makes the City more prone to subsidence issues than most inland communities; and

WHEREAS, the 2019 Building Standards corrects unnecessary and duplicative provisions of the Municipal Code; and

WHEREAS, the 2018 International Property Maintenance Code corrects unnecessary duplicative provisions of the Municipal Code Housing Code Chapter (Chapter 15.24) and;

WHEREAS, minor changes are also proposed by the Building Official to two sections in the Building Security Chapter (Chapter 15.40) and one section in the Wood-Burning Appliance Chapter (Chapter 15.64) of the Morgan Hill Municipal Code.

THE CITY COUNCIL OF THE CITY OF MORGAN HILL DOES HEREBY ORDAIN AS FOLLOWS:

SECTION 1. Chapter 15.08 (Building Code) of Title 15 (Buildings and Construction) of the Morgan Hill Municipal Code is hereby amended to read (additions in underline, deletions in ~~strikeout~~):

"Chapter 15.08 - BUILDING CODE

Sections:

- 15.08.010 Adoption ~~of the~~ of the 20196 California Building ~~Code~~ and the 20196 California Residential Code, and other parts of the State Buildings Standards Code.
- 15.08.020 Short title.
- 15.08.030 Organization, enforcement, fees, and inspections.
- 15.08.040 Additions, amendments, and deletions.
- 15.08.050 Sections 1505.1.4 and R902.1.4.1 amended – Construction of r o o f coverings in wildland-urban interface areas.
- 15.08.060 Building over utility easements.
- 15.08.070 Section R313.1 and R313.2 amended – Automatic Fire Sprinklers Systems
- ~~15.08.070 Section 310.1 amended – Single room occupancies (SRO).~~
- 15.08.080 Section 2308.6.3 and R602.10.45 , amended – Braced wall panel methods~~Alternate bracing~~ (gypsum board and Portland cement plaster).
- 15.08.090 Section 1907A.1 and R506.1 amended - Minimum slab provisions.
- ~~15.08.100 Section 1808A.1 amended – Foundations.~~
- 15.08.1010 Violation—Penalty.

15.08.010 - Adoption of the 20196 California Building Code, the 20196 California Residential Code and other parts of the State Building Standards Code.

There is hereby adopted by reference that certain code known and designated as the California Code of Regulations, Title 24, Parts 1, 2, 2.5, 3, 4, 5, 6, 7, 8, 10, 11, and 12 as published by the California Building Standards Commission, as further described and including the following:

- 20196 California Administrative Code (California Code of Regulations Title 24, Part 1).
- 20196 California Building Code (California Code of Regulations Title 24, Part 2) based on the 20185 International Building Code~~®~~; as prepared by the International Code Council, and as amended by the State of California.
- 20196 California Residential Code (California Code of Regulations Title 24, Part 2.5) based on the 20185 International Residential Code~~®~~; as prepared by the International Code Council, and as amended by the State of California.
- 20196 California Energy Code (California Code of Regulations Title 24, Part 6).
- 20196 California Historical Building Code (California Code of Regulations Title 24, Part 8).
- 20196 California Existing Building Code (California Code of Regulations Title 24, Part 10) based on the 20185 International Existing Building Code~~®~~; as prepared by the International Code Council, and as amended by the State of California.
- 20196 California Green Building Standards Code (California Code of Regulations Title 24, Part 11).

- 2019⁹⁶ California Referenced Standards Code (California Code of Regulations Title 24, Part 12).

Such code shall include those sections requiring enforcement by the Morgan Hill Building Department, and, as further amended by the City of Morgan Hill, provisions intended to address local climatic, geologic, and topographic conditions as permitted by state law. Adoption of said code shall include the adoption of Appendices B, ~~I, and~~ I, and ~~J~~, including Division II Scope and Administration, contained in the 2019⁹⁶ California Building Code.

Such code shall be and become the City of Morgan Hill Building Code regulating the erection, construction, alteration, repair, relocation, demolition, occupancy, use, height, area, and maintenance of all buildings and structures and certain equipment therein specifically regulated. The provisions of said code shall provide for the issuance of permits and certificates of occupancy, the collection of fees thereof, and penalties for violation of such code.

At least one copy of the City of Morgan Hill Building Code has been deposited in the office of the city building official and is available for public inspection.

15.08.020 - Short title.

This chapter shall be known as the "building code" and may be cited as such.

15.08.030 - Organization, enforcement, fees, and inspections.

The organization, enforcement, fees, and inspections shall comply with the 2019⁹⁶ California Building Code. The building official shall use the building valuation data from the International Code Council building standards publication for "cost per square foot." ~~For residential construction, two general classes, one for "average" and one for "good" construction, will be used by the building official with adjustments for special architectural or structural features and location of the project.~~

15.08.040 - Additions, amendments, and deletions.

The following provisions of the California Building Code and California Residential Code shall be added, amended, or deleted as follows:

- A. The following sections in the California Building Code are amended by this chapter: 1505.1.4, ~~310.1~~, 2308.6, ~~35~~, and 1907A.1, ~~and 1808A.1~~.
- B. The following section in the California Residential Code is amended by this chapter: R506.1, R602.10.4 and R902.1.4.

15.08.050 - Sections 1505.1.4 and R902.1.4 amended—Construction of roof coverings in wildland-urban interface areas.

- A. Section 1505.1.4 of the 2019⁹⁶ California Building Code is hereby amended to read in its entirety:

1505.1.4 Roofing requirements in a Wildland-Urban Interface Fire Area. Roofing requirements for structures located in a Wildland-Urban Interface Fire Area shall comply with Section 705A. The entire roof covering of every existing structure where more than 50 percent of the total roof area is replaced within any one-year period, the entire roof covering of every new structure, and any roof covering applied in the alteration, repair or replacement of the roof of every existing structure, shall be a fire-retardant roof covering that is at least Class A.

- B. Section R902.1.4 of the 2019⁹⁶ California Residential Code is hereby amended to read in its entirety:

R902.1.4 Roofing requirements in a wildland-urban interface fire area. Roofing requirements for structures located in a Wildland-Urban Interface Fire Area shall comply with Section R337.5. The entire roof covering of every existing structure where more than 50 percent of the total roof area is replaced within any one-year period, the entire roof covering of every new structure, and any roof covering applied in the alteration, repair or replacement of the roof of every existing structure, shall be a fire-retardant roof covering that is at least Class A.

- C. Findings.

1. The council finds and declares that the areas as defined in the open space and conservation element of the general plan are considered a hazardous fire area and that it is, therefore, necessary to establish special minimum fire-resistive requirements in these areas for the protection of life and property. The fire hazard of untreated wood roofs has long been recognized by the National Fire Protection Association. The city's foothills cause many problems for firefighters including long response times, inadequate water supply, and unlimited fuel. The city is in a region which experiences high winds and low humidity during summer months. Winter rains promote the growth of grass and brush. This vegetation presents heavy dry fuel loads in the summer months. These conditions are conducive to the ready ignition, propagation, and spread of grass, brush, and structure fires. Fog, heavy rains, mud slides, and earthquakes are other common occurrences which negatively affect the ability of the city's public safety resources to respond to emergency situations. The topography of Morgan Hill has hillside homes on each side of the city, causing long response time for safety equipment. The city is in a Category D seismic activity classification. Many traffic corridors, such as Highway 101 and Monterey Road, Union Pacific Railroad, and related bridges, underpasses, and crossings are subject to obstruction in the event of an earthquake, traffic accident, hazardous material spill, or other disaster.
2. Any of the above factors could quickly exhaust the fire department's resources and prevent the assistance of mutual aid resources. Therefore, Class A roofing would provide the fire protection needed through this amendment.

15.08.060 - Building over utility easements.

It is unlawful for any person, firm, or corporation to erect, construct, or maintain any structure, building, garage, carport, storage shed, or other similar building over or within the boundary of any utility~~public~~ easement. "~~UPublic~~ utility easement" as used in this section includes any easement for a gas line, water line, storm drainage line, sewer line or buried or overhead electrical or telephone lines.

~~15.08.070 – Section 310.1 amended – Single room occupancies (SRO).~~

15.08.070 – Section R313.1 and R313.2 amended – Automatic Fire Sprinkler Systems.

A. Section R313.1 of the California Residential Code, is hereby amended to read in its entirety: R313.1 Townhouse automatic fire sprinkler systems. An automatic residential fire sprinkler system shall be installed in townhouses.

Exception: An automatic residential fire sprinkler system shall not be required where additions or alterations are made to existing townhouses if the addition does not exceed

1200 square feet or result in a total building area of more than 3600 square feet and an existing automatic residential fire sprinkler system is not installed.

B. Section R313.2 of the California Residential Code is amended to read in its entirety:
R313.2 One- and two-family dwellings automatic fire sprinkler systems. An automatic residential fire sprinkler system shall be installed in one- and two-family dwellings.

Exception:

1. An automatic residential fire sprinkler system shall not be required where additions or alterations are made to existing buildings if the addition does not exceed 1200 square feet or result in a total building area of more than 3600 square feet and an existing automatic residential fire sprinkler system is not installed.

2. Accessory Dwelling Unit, provided that all of the following are met:

2.1. The unit meets the definition of an Accessory Dwelling Unit as defined in the Government

Code Section 65852.2.

2.2. The existing primary residence does not have automatic fire sprinklers.

2.3. The accessory detached dwelling unit does not exceed 1,200 square feet in size.

2.4. The unit is on the same lot as the primary residence.

C. Findings. The City of Morgan Hill is located in an area subject to a climatic condition of high winds and low humidity. This combination of events creates an environment which is conducive to rapidly spreading fires. Control of such fires requires rapid response. Obstacles generated by a strong wind, such as fallen trees, street-lights, and utility poles, greatly impact the response time to reach an incident scene. This condition makes the ~~requirement~~requirement for additional on-site protection for property occupants necessary.

A. — Section 310.1 of the 2016 California Building Code is hereby amended to read in its entirety:

310.1 Residential Group R. The SRO unit shall have a living room of not less than 150 square feet (13.9m²) of superficial floor area. An additional 100 square feet (9.3m²) of superficial floor area shall be provided for each occupant of such SRO unit in excess of two.

The SRO unit shall be provided with a separate closet.

The SRO unit may be provided with a kitchen sink, cooking appliance and refrigeration facilities, each having a clear working space of not less than 30 inches (762 mm) in front. Light, ventilation and emergency egress conforming to this Code shall be provided.

Every building shall be provided with at least one water closet. Every hotel or subdivision thereof where both sexes are accommodated shall contain at least two separate toilet facilities which are conspicuously identified for male and female use, each of which contains at least one water closet.

Exception: Hotel guest rooms may have one unidentified toilet facility.

Additional water closets shall be provided on each floor for each sex at the rate of one for every additional ten guests, or fractional part thereof, in excess of ten.

Every SRO unit shall be provided with a kitchen equipped with a kitchen sink; however, that single room occupancy living unit facilities and single room occupancy residential hotels may

~~contain partial kitchen facilities so long as a sink is provided and laundry facilities and kitchen facilities are provided on each floor accessible from a public hallway.~~

~~Every SRO unit and every lodging house shall be provided with a bathroom equipped with facilities consisting of a water closet, lavatory and either a bathtub or shower; however, that single room occupancy residential hotels may contain partial bathroom facilities. If individual bath facilities are not provided, common bath facilities must be provided as follows:~~

~~Where private water closets, lavatories and baths are not provided there shall be provided on each floor, for each sex, at least one water closet and lavatory and one bath, accessible from a public hallway. Additional water closets, lavatories and baths shall be provided on each floor for each sex at the rate of one for every additional ten guests or fractional number thereof in excess of ten. Such facilities shall be clearly marked for "men" or "women." As an alternative, adequate unisex facilities may be provided. Each sink, lavatory and either a bathtub or shower shall be equipped with hot and cold running water necessary for its normal operation.~~

~~When SRO units are required by state law to be accessible or adaptable, appropriate sections of state law for access requirements must be followed.~~

~~B. This amendment is made pursuant to the authority set forth in California Health and Safety Code Section 17958.1.~~

15.08.080 - Section 2308.6.3 and R602.10.45 amended—Braced wall panel methods~~Alternate bracing~~ (gypsum board and Portland cement plaster).

A. Section 2308.6.35 of the 20196 California Building Code, which allows the use of gypsum board and Portland cement plaster for wall bracing, is hereby amended to read in its entirety:

2308.6.3 Braced wall panel methods

Construction of braced wall panels shall be by one or a combination of the methods in Table 2308.6.3(1). Braced wall panel length shall be in accordance with Section 2308.6.4 or 2308.6.5. The use of Gypsum Board (GB) or Portland Cement Plaster (PCP) type braced wall panels are not allowed.

B. Section R602.10.4 of the California Residential Code, which allows the use of gypsum board and Portland cement plaster for wall bracing, is hereby amended to read in its entirety:

R602.10.4 Construction methods for braced wall panels.

Intermittent and continuously sheathed braced wall panels shall be constructed in accordance with this section and the methods listed in Table R602.10.4. The use of Gypsum Board (GB) or Portland Cement Plaster (PCP) type braced wall panels are not allowed.

~~2308.6.5 Alternative Bracing. The use of gypsum board and Portland cement is not allowed in the City of Morgan Hill.~~

CB. Findings. The city is in a Category D seismic activity classification. Gypsum wallboard and exterior Portland cement plaster have performed poorly during California seismic events. Shear values for gypsum wallboard and Portland cement plaster stucco contained in the code are based on monodirectional testing. It is appropriate to eliminate the use of these materials until cyclic loading tests are performed and evaluated.

15.08.090 - Section 1907A.1 and R506.1 amended—Minimum slab provisions.

A. Section 1907A.1 of the 2019~~6~~ California Building Code is hereby amended to read in its entirety:

1907.1 General. The thickness of concrete floor slabs supported directly on the ground shall be not less than 3-1/2 inches (89 mm). The slab shall be reinforced with not less than six inches by six inches ten-gauge wire mesh or an approved alternate. A 6-mil (0.006 inch; 0.15 mm) polyethylene vapor retarder with joints lapped not less than 6 inches (152 mm) shall be placed between the base course or subgrade and the concrete floor slab, or other approved equivalent methods or materials shall be used to retard vapor transmission through the floor slab.

Exception: A vapor retarder is not required:

1. For detached structures accessory to occupancies in Group R-3, such as garages, utility buildings or other unheated facilities.
2. For unheated storage rooms having an area of less than 70 square feet (6.5 m2) and carports attached to occupancies in Group R-3.
3. For buildings of other occupancies where migration of moisture through the slab from below will not be detrimental to the intended occupancy of the building.
4. For driveways, walks, patios and other flatwork that will not be enclosed at a later date.
5. Where approved based on local site conditions.

B. Section R506.1 of the 2019 California Residential Code is hereby amended to read in its entirety:

R506.1 General. Concrete slab-on-ground floors shall be designed and constructed in accordance with the provisions of this section or ACI 332. Floors shall be a minimum 3-1/2 inches (89 mm) thick (for expansive soils, see Section R403.1.8). The slab shall be reinforced with not less than six inches by six inches ten-gauge wire mesh or an approved alternate. The specified compressive strength of concrete shall be as set forth in Section R402.2.

~~1907A.1 General. The minimum thickness of concrete floor slabs supported on base rock shall not be less than 3-1/2" thick. The slab shall be reinforced with not less than six inches by six inches ten-gauge wire mesh or an approved alternate installed at mid height of the slab over 4" of approved base or as designed by a licensed professional engineer.~~

CB. Findings. To avoid damage due to soil expansion, shrinkage and seismic activity which causes damage to concrete slab flooring throughout the city, imposing the above requirements eliminates the need for a soils report for some small projects.

~~15.08.100—Section 1808A.1 amended—Foundations.~~

~~A.—Section 1808A.1 of the 2016 California Building Code is hereby amended to read in its entirety:~~

~~1808A.1 General. A minimum of one top and one bottom continuous bar of 1/2" diameter reinforcing steel shall be required in all continuous concrete or masonry bearing foundations of Group R residential occupancies. Other occupancies shall be based on design.~~

~~B.—Findings. The city is within a very active seismic area and local soil conditions can be highly expansive (clay soils). Damage to plain concrete footings is extremely expensive to repair, in~~

~~contrast to the nominal expense of providing footing reinforcement. Footing reinforcement is also necessary to help prevent damage due to shrinking and swelling during seasonal drying and wetting conditions.~~

15.08.1010 - Violation.

- A. A violation of the code adopted by this chapter occurs when a person:
 1. Fails to comply with this code;
 2. Violates or fails to comply with any order made under this code;
 3. Builds in violation of any detailed statement of specifications or plans submitted and approved thereunder or any certificate or permit issued thereunder and from which no appeal has been taken; or
 4. Fails to comply with such an order as affirmed or modified by the city council or by a court of competent jurisdiction, within the time fixed in this chapter.
- B. The imposition of one penalty for any violation shall not excuse the violation or permit it to continue and all such persons shall be required to correct or remedy such violations or defects within a reasonable time.
- C. The application of the above penalty shall not be held to prevent the enforced removal of prohibited conditions.

SECTION 2. Chapter 15.12 (Electrical Code) of Title 15 (Buildings and Construction) of the Morgan Hill Municipal Code is hereby amended to read (additions in underline, deletions in ~~strikeout~~):

"Chapter 15.12 - ELECTRICAL CODE

Sections:

- 15.12.010 **Short title.**
 15.12.020 **Adoption of the 20196 California Electrical Code.**
 15.12.030 **Scope, organization, enforcement, fees, and inspections.**
~~15.12.040 **Additions, amendments, and deletions.**~~
~~15.12.050 **Article 334.12 amended—Uses not permitted.**~~
 15.12.0460 **Violation.**

15.12.010 - Short title.

This chapter shall be known as the "electrical code" and may be cited as such.

15.12.020 - Adoption of the 20196 California Electrical Code.

There is adopted by reference that certain code known and designated as the California Code of Regulations, Title 24, Part 3, further described and referred to as the 20196 California Electrical Code published by the California Building Standards Commission and based on the National Electric Code~~®~~, 20174 Edition, prepared by the National Fire Protection Association. Adoption of said code shall include those sections and annexes requiring enforcement by the Morgan Hill Building Department and, as further amended by the City of Morgan Hill, provisions

intended to address local climatic, geologic, and/or topographic conditions, as permitted by state law. Adoption of said code shall include adoption of the following annexes of the California Electrical Code: Annex A, Annex B, Annex C, Annex D, Annex E, and Annex F, ~~and Annex H with local amendments~~. Such code shall be and become the Morgan Hill Electrical Code, regulating and controlling the design, construction, installation, quality of materials, location, operation, and maintenance of electrical systems, equipment, and appliances. The provisions of said Code shall provide for the issuance of permits and collection of fees thereof and penalties for violation of such code.

At least one copy of the city electrical code has been deposited in the office of the city building official and is available for public inspection.

15.12.030 - Scope, organization, enforcement, fees, and inspections.

The scope, organization, enforcement, fees, and inspections of the 20196 California Electrical Code must comply with those set forth in the 20196 California Building Code and 20174 National Electrical Code.

~~15.12.040 - Additions, amendments, and deletions.~~

~~The following provisions of the 2016 Electrical Code shall be amended or deleted:~~

~~A. The following sections of the 2016 California Electrical Code are amended by this chapter: Article 334.12.~~

~~15.12.050 - Article 334.12 amended - Uses not permitted.~~

~~A. Article 334.12 of the 2016 California Electrical Code is hereby amended to read in its entirety:~~

~~Article 334.12 Uses Not Permitted. Type NM or NMC. Type NM and NMC cables shall not be used: (1) in any dwelling or structure exceeding three floors above grade; (2) as service entrance cable; (3) embedded in poured concrete; or (4) in any non-residential occupancy. For the purpose of this article, the first floor of the building shall be that floor that has 50 percent or more of the exterior wall surface area level with or above finish grade. One additional level that is the first level and not designated for human habitation and used only for vehicle parking, storage, or similar use shall be permitted.~~

~~B. Findings. Morgan Hill is in an active seismic zone and has experienced two large seismic events in the past twenty-five years. Structural damage to commercial buildings in the business community was severe; electrical wiring within these commercial buildings was severely damaged, causing fire and creating electrical shock hazards to the occupants. Requiring that all electrical building wiring be protected in an approved electrical raceway as described in the California Electrical Code will minimize fire and life safety hazards to the occupants and rescue personnel caused by damaged exposed electrical wiring.~~

15.12.0460 - Violation.

A. A violation of the code adopted by this chapter occurs when a person:

1. Fails to comply with this code;
2. Violates or fails to comply with any order made under this code;
3. Builds in violation of any detailed statement of specifications or plan submitted and approved thereunder or any certificate or permit issued thereunder and from which no appeal has been taken; or

4. Fails to comply with such an order as affirmed or modified by the city council or by a court of competent jurisdiction, within the time fixed in this chapter.
- B. Such person shall be liable severally and for each and every violation and noncompliance respectively.
- C. The imposition of one penalty for any violation shall not excuse the violation or permit it to continue and all such persons shall be required to correct or remedy such violations or defects within a reasonable time.
- D. The application of the above penalty shall not be held to prevent the enforced removal of prohibited conditions.

SECTION 3. Chapter 15.14 (Mechanical Code) of Title 15 (Buildings and Construction) of the Morgan Hill Municipal Code is hereby amended to read (additions in underline, deletions in ~~strikeout~~):

"Chapter 15.16 - MECHANICAL CODE

Sections:

- 15.16.010** **Short title.**
- 15.16.020** **Adoption of the 20196 California Mechanical Code.**
- 15.16.030** **Scope, organization, enforcement, fees, and inspections.**
- 15.16.040** **Violation—Penalty.**

15.16.010 - Short title.

This chapter shall be known as the "mechanical code" and may be cited as such.

15.16.020 - Adoption of the 20196 California Mechanical Code.

There is hereby adopted by reference that certain code known and designated as the California Code of Regulations, Title 24, Part 4, further described and referred to as the 20196 California Mechanical Code published by the California Building Standards Commission and based on the Uniform Mechanical Code®, 20185 Edition, prepared by the International Association of Plumbing and Mechanical Officials. The adoption of said Code shall include those sections requiring enforcement by the Morgan Hill Building Department. Such code shall be and become the Morgan Hill Mechanical Code, regulating heating, ventilating, comfort cooling, refrigeration systems, and other miscellaneous heating appliances, prescribing conditions under which such work may be performed within the city, and providing for the issuance of permits and the collection of fees therefore and penalties for violation of such code.

At least one copy of the city mechanical code has been deposited in office of the city building official and is available for public inspection.

15.16.030 - Scope, organization, enforcement, fees, and inspections.

The scope, organization, enforcement, fees, and inspections of the California Mechanical Code must comply with those set forth in the 20196 California Building Code.

15.16.040 - Violation.

- A. A violation of the code adopted by this chapter occurs when a person:
 - 1. Fails to comply with this code;
 - 2. Violates or fails to comply with any order made under this code;
 - 3. Builds in violation of any detailed statement of specifications or plans submitted and approved thereunder or any certificate or permit issued thereunder and from which no appeal has been taken; or
 - 4. Fails to comply with such an order as affirmed or modified by the city council or by a court of competent jurisdiction, within the time fixed in this chapter.
- B. Such person shall be liable severally and for each and every such violation and noncompliance respectively.
- C. The imposition of one penalty for any violation shall not excuse the violation or permit it to continue and all such persons shall be required to correct or remedy such violations or defects within a reasonable time.
- D. The application of the above penalty shall not be held to prevent the enforced removal of prohibited conditions.

SECTION 4. Chapter 15.20 (Plumbing Code) of Title 15 (Buildings and Construction) of the Morgan Hill Municipal Code is hereby amended to read (additions in underline, deletions in ~~strikeout~~):

"Chapter 15.20 - PLUMBING CODE

Sections:

- 15.20.010 Short title.
- 15.20.020 Adoption of the 201~~96~~ California Plumbing Code.
- 15.20.030 Scope, organization, fees, and inspections.
- 15.20.040 Amendments and deletions.
- 15.20.050 Section 604.3 amended--Copper tube.
- ~~15.20.060 Section 608.2 amended--Pressure regulators.~~
- 15.20.0~~67~~0 Sections 609.3 amended-- Under concrete slab.
- ~~15.20.080 Section 710.1 amended--Backwater valves.~~
- ~~15.20.090 Sections 1002.1, 1002.2, and 1002.3 amended--Vents and Traps.~~
- 15.20.0~~71~~00 Violation-Penalty.

15.20.010 - Short title.

This chapter shall be known as the "plumbing code" and may be cited as such.

15.20.020 - Adoption of the 201~~96~~ California Plumbing Code.

There is hereby adopted by reference that certain code known and designated as the California Code of Regulations, Title 24, Part 5, further described and referred to as the 201~~96~~ California Plumbing Code published by the California Building Standards Commission and based on the Uniform Plumbing Code~~®~~, 201~~85~~ Edition, prepared by the International Association of Plumbing and Mechanical Officials. The adoption of said code shall include those sections

requiring enforcement by the local building department as mandated by the State and as further amended by the City of Morgan Hill with provisions intended to address local climatic, geologic, and topographic conditions, as permitted by state law. Such code shall be and become the Morgan Hill Plumbing Code, regulating plumbing and drainage systems, house sewers, private sewage disposal, drainage systems, and prescribing conditions under which such work may be carried on within the city and providing for the issuance of permits and the collection of fees therefore.

At least one copy of the city plumbing code has been deposited in the office of the city building official and is available for public inspection.

15.20.030 - Scope, organization, fees, and inspections.

The scope, organization, enforcement, fees, and inspections of the 2019⁹⁶ California Plumbing Code must comply with those set forth in the 2019⁹⁶ California Building Code.

15.20.040 - Amendments and deletions.

The following provisions of the 2019⁹⁶ California Plumbing Code shall be amended or deleted:

- A. The following sections of the California Plumbing Code are amended by this chapter:
604.3, ~~608.2~~, 609.3, 710.1 and 1002.1 - 1002.3.

15.20.050 - Section 604.3 amended—Copper tube.

- A. Section 604.3 of the 2019⁹⁶ California Plumbing Code is hereby amended to read in its entirety:

604.3 Copper or Copper Alloy Tube. Copper or copper alloy tube for potable water piping shall have a weight of not less than type "L."

- B. Finding. Due to water hardness in the city, type "L" copper shall be required.

~~15.20.060—Section 608.2 amended—Pressure regulators.~~

- ~~A.—Section 608.2 of the 2016 California Plumbing Code is hereby amended to read in its entirety:~~

~~608.2 Excessive Water Pressure. An approved type pressure regulator preceded by an adequate bypass strainer shall be installed and the pressure reduced to fifty-five pounds per square inch or less for all occupancies.~~

~~Provision shall be made to prevent pressure on the building side of the regulator from exceeding main supply pressure. Each such regulator shall be accessibly located and shall have the strainer readily accessible for cleaning without removing the regulator or strainer body or disconnecting the supply piping.~~

- ~~B.—Findings. Due to the topography of Morgan Hill, water supply tanks are located on top of local hills, causing high water pressure in the system. This velocity of water causes water pipes to deteriorate faster than normal. With this problem, requiring pressure regulators to areas in excess of fifty-five psi provides protection to each structure of pipe breakage and therefore necessitates this amendment.~~

15.20.0670 - Sections 609.3 amended—Under concrete slab.

- A. Section 609.3 of the 2019⁹⁶ California Plumbing Code is hereby amended to read in its entirety:

609.3 Under Concrete Slab. Water piping shall not be installed directly in or under a concrete floor slab within a building without prior approval of the Building Official.

B. Findings.

1. Most of the surface soils in Morgan Hill are relatively young and unconsolidated sedimentary materials formed from a wide variety of parent materials. The varying chemical composition, degree of weathering, and the relatively acid environment have created soils of varying types, which are peculiarly corrosive in nature.
2. Much of the surface soil in Morgan Hill is characterized by peculiarly high expansivity (i.e., shrink-swell behavior) and low bearing strength. There are two types of expansive soils in the area:
 - a. The organic silty clays which are the recent bay muds; and
 - b. The plastic silty clays which weather from the shale found in the hills surrounding Santa Clara Valley.
3. The local climate is characterized by markedly delineated rainy and dry seasons, which tend to maximize the volume changes occurring within the soil.
4. Areas of the city have hard water, which may be corrosive to ferrous pipe.
5. The groundwater table is unusually high in many places.

6. Morgan Hill is a seismically active region. ~~15.20.080 — Section 710.1 amended — Backflow protection.~~

~~A. — Section 710.1 of the 2016 California Plumbing Code is hereby amended to read in its entirety:~~

~~Section 710.1 Backflow Protection. Drainage piping serving fixtures which have flood level rims less than twelve (12) inches (304.8 mm) above the elevation of the next upstream manhole and/or flushing inlet cover at the public or private sewer system serving such drainage piping shall be protected from backflow of sewage by installing an approved type backwater valve. Fixtures above such elevation shall not discharge through the backwater valve, unless first approved by the Building Official.~~

~~B. — Findings. The local topography includes mountainous and foothill areas with intermittent steep slopes. The City of Morgan Hill is located in a seismically active area, which increases the likelihood of breakage of building sewers and laterals, leading to an above average potential of sewage back up into buildings without adequate protection.~~

~~15.20.090 — Sections 1002.1, 1002.2, and 1002.3 amended — Vents and traps.~~

~~A. — Section 1002.1 of the 2016 California Plumbing Code is hereby amended to read in its entirety:~~

~~1002.1 Vent Pipes. In all new installations to buildings and in all existing installations to buildings where the outlet of a trap for a plumbing fixture is installed or located at an elevation which is less than two feet from the rim of the nearest manhole uphill from the point of connection of the building sewer to the lateral sewer, approved types of trap, vent, and cleanout shall be installed in the building sewer at a point as close as possible to the building being served.~~

~~B. Section 1002.2 of the 2016 California Plumbing Code is hereby amended to read in its entirety:~~

~~1002.2 Fixture Traps. The installation shall include a back water overflow device with 4" plastic two way cleanout. In lieu of a two way cleanout, a combination Wye and 1/8 bend with cleanout plug brought to grade may be installed, provided the main building drain is in a straight line with an exterior cleanout plug at grade on the opposite end of the main building drain line.~~

~~C. Section 1002.3 of the 2016 California Plumbing Code is hereby amended to read in its entirety:~~

~~1002.3 Change of Direction. Every existing installation which includes a plumbing fixture trap outlet which is less than two feet from the rim of the nearest manhole uphill from the point of connection of the building sewer to the lateral sewer is hereby declared to be dangerous, unsanitary, and a menace to life, health and property. Whenever it shall come to the attention of the inspector that such an installation exists, the inspector is hereby authorized and empowered to order and require that such plumbing outlet be immediately plugged or capped or that the equipment described in the preceding paragraphs in this section be installed immediately.~~

~~D. Findings. The changes or modifications in the requirements of the 2016 California Plumbing Code, as set out in this section, are necessary because many parts of the city are susceptible to flooding. The possibility of this undue strain upon existing city waste collection facilities and the attendant hazard of contamination of the city's water system requires that additional safeguards be imposed upon the installation of plumbing fixtures.~~

15.20.07100 - Violation.

- A. A violation of the code adopted by this chapter occurs when a person:
 - 1. Fails to comply with this code;
 - 2. Violates or fails to comply with any order made under this code;
 - 3. Builds in violation of any detailed statement of specifications or plans submitted and approved thereunder or any certificate or permit issued thereunder and from which no appeal has been taken; or
 - 4. Fails to comply with such an order as affirmed or modified by the city council or by a court of competent jurisdiction, within the time fixed in this chapter.
- B. Such person shall be liable severally and for each and every such violation and noncompliance respectively.
- C. The imposition of one penalty for any violation shall not excuse the violation or permit it to continue and all such persons shall be required to correct or remedy such violations or defects within a reasonable time.
- D. The application of the above penalty shall not be held to prevent the enforced removal of prohibited conditions.

SECTION 5. Chapter 15.24 (Housing Code) of Title 15 (Buildings and Construction) of the Morgan Hill Municipal Code is hereby deleted in its entirety:

~~"Chapter 15.24—HOUSING CODE~~

Sections:	15.24.010
Short Title.	15.24.020
Adoption of the Uniform Housing Code.	15.24.030
Scope, organization, enforcement, fees and inspections.	15.24.040
Additions, amendments and deletions.	15.24.050
Violation.	

~~15.24.010—Short title.~~

~~This chapter shall be known as the "Uniform Housing Code" and may be cited as such.~~

~~15.24.020—Adoption of the Uniform Housing Code.~~

~~Pursuant to Sections 50022.1 through 50022.4, inclusive, of the Government Code of the state of California, the text of that certain publication copyrighted and published by the International Conference of Building Officials entitled "Uniform Housing Code, 1997 Edition" is adopted as the rules, regulations, and standards within this city as to all matters therein contained except as otherwise provided in this chapter. One copy of the Uniform Housing Code will at all times be kept on file in the office of the building official, and is available for public inspection.~~

~~15.24.030—Scope, organization, enforcement, fees and inspections.~~

~~The scope, organization, enforcement, fees and inspections of the Uniform Housing Code must comply with those set forth in the 1997 Uniform Administrative Code (see Chapter 15.04 of this title).~~

~~15.24.040—Additions, amendments and deletions.~~

~~A.—The following provisions of the Uniform Housing Code shall be deleted: Sections 104, 203, 204, 302 and 303 shall be deleted.~~

~~B.—Findings. The council finds that the requirements contained in Sections 104, 203, 204, 302 and 303 of the Uniform Housing Code are redundant because they are contained in the 1997 Administrative Code, which has been adopted by the council.~~

~~15.24.050—Violation.~~

~~A.—A violation of the code adopted by this chapter occurs when a person:~~

- ~~1.—Fails to comply with this code;~~
- ~~2.—Violates or fails to comply with any order made under this code;~~
- ~~3.—Builds in violation of any detailed statement of specifications or plans submitted and approved thereunder or any certificate or permit issued thereunder and from which no appeal has been taken; or~~
- ~~4.—Fails to comply with such an order as affirmed or modified by the city council or by a court of competent jurisdiction, within the time fixed in this chapter.~~

~~B.—Such person may be liable severally and for each and every such violation and noncompliance respectively.~~

~~C.—The imposition of one penalty for any violation shall not excuse the violation or permit it to continue and all such persons shall be required to correct or remedy such violations or defects within a reasonable time.~~

~~D.—The application of the above penalty shall not be held to prevent the enforced removal of prohibited conditions.~~

SECTION 6. Chapter 15.25 (Property Management) of Title 15 (Buildings and Construction) of the Morgan Hill Municipal Code is hereby amended to read (additions in underline, deletions in ~~strikeout~~):

"Chapter 15.25 - PROPERTY MAINTENANCE"

Sections:

15.25.010

Short title.

15.25.020

Adoption of the International Property Maintenance Code.

~~—15.25.030~~ **Scope, organization, enforcement, fees and inspections.**

15.25.040 **Additions, amendments, and deletions.**

~~—15.25.050~~ **Section 101.1 amended – Title.**

~~—15.25.060~~ **Section 102.3 amended – Application of other codes.**

~~—15.25.070~~ **Section 103.5 amended - Fees.**

15.25.080 **Section 112.4 amended - Failure to comply.**

~~—15.25.090~~ **Section 302.4 amended – Weeds.**

~~—15.25.100~~ **Section 303.2 amended – Enclosures.**

15.25.110 **Section 304.14 amended – Insect screens.**

15.25.120 **Section 602.3 amended – Heat supply.**

15.25.130 **Section 602.4 amended – Occupiable workspaces.**

15.25.140 **Violation.**

15.25.010 - Short title.

This chapter shall be known as the "Property Maintenance Code" and may be cited as such.

15.25.020 - Adoption of the International Property Maintenance Code.

Pursuant to Sections 50022.1 through 50022.4, inclusive, of the Government Code of the state of California, the text of that certain publication copyrighted and published by the ICC entitled "2018~~09~~ International Property Maintenance Code" is adopted as the rules, regulations, and standards within this city as to all matters therein contained except as otherwise provided in this chapter. Adoption of said code shall include adoption of Appendix A. One copy of the International Property Maintenance Code will at all times be kept on file in the office of the city building official and is available for public inspection.

15.25.030 - Scope, organization, enforcement, fees and inspections.

The scope, organization, enforcement, fees and inspections of the ~~Uniform Housing Code~~ 2018~~09~~ International Property Maintenance Code must comply with those set forth in the 2019~~23~~ California Building Code (see Chapter 15.08~~4~~ of this Title).

15.25.040 – Amendments and deletions.

The following sections of the 2018 International Property Maintenance Code shall be amended or deleted: 101.1, 102.3, 103.5, 112.4, 302.4, 303.2, 304.14 602.3, and 602.4.

15.25.050 – Section 101.1 amended – Title.

A. Section 101.1 of the International Property Maintenance Code is hereby amended to read in its entirety:

101.1 Title. These regulations shall be known as the International Property Maintenance Code of the City of Morgan Hill, hereinafter referred to as “this code.”

15.25.060 – Section 102.3 amended – Application of other codes.

A. Section 102.3 of the International Property Maintenance Code is hereby amended to read in its entirety:

102.3 Application of other codes. Repairs, additions or alterations to a structure, or changes of occupancy, shall be done in accordance with the procedures and provisions of the California Building Code, California Existing Building Code, California Energy Code, California Fire Code, California Plumbing Code, California Mechanical Code, California Residential Code, and California Electrical Code. Nothing in this code shall be construed to cancel, modify or set aside any provision of the Zoning Code.

15.25.070 – Section 103.5 amended - Fees.

A. Section 103.5 of the International Property Maintenance Code is hereby amended to read in its entirety:

103.5 Fees. The fees for activities and services performed by the department in carrying out its responsibilities under this code shall be the fully burdened hourly rate.

15.25.080 – Section 112.4 amended - Failure to comply.

A. Section 112.4 of the International Property Maintenance Code is hereby amended to read in its entirety:

112.4 Failure to comply. Any person who shall continue any work after having been served with a stop work order, except such work as that person is directed to perform to remove a violation or unsafe condition, shall be liable to a fine of not less than \$100 dollars.

15.25.090 – Section 302.4 amended – Weeds.

A. Section 302.4 of the International Property Maintenance Code is hereby amended to read in its entirety:

302.4 Weeds. Premises and exterior property shall be maintained free from weeds or plant growth in excess of 10 inches. Noxious weeds shall be prohibited. Weeds shall be defined as all grasses, annual plants and vegetation, other than trees or shrubs provided; however, this term shall not include cultivated flowers and gardens. Upon failure of the owner or agent having charge of a property to cut and destroy weeds after service of a notice of violation, they shall be subject to prosecution in accordance with Section 106.3 and as prescribed by the authority having jurisdiction. Upon failure to comply with the notice of violation, any duly authorized employee of the jurisdiction or contractor hired by the jurisdiction shall be authorized to enter upon the property in violation and cut and destroy the weeds growing thereon, and the costs of such removal shall be paid by the owner or agent responsible for the property.

15.25.100 – Section 303.2 amended – Enclosures.

A. Section 303.2 of the International Property Maintenance Code is hereby amended to read in its entirety:

303.2 Enclosures. Private swimming pools, hot tubs and spas, containing water more than 24 inches (610 mm) in depth shall be completely surrounded by a fence or barrier not less than 60 inches (1219 mm) in height above the finished ground level measured on the side of the barrier

away from the pool. Gates and doors in such barriers shall be self-closing and self-latching. Where the self-latching device is less than 60 inches (1372 mm) above the bottom of the gate, the release mechanism shall be located on the pool side of the gate. Self-closing and self-latching gates shall be maintained such that the gate will positively close and latch when released from an open position of 6 inches (152 mm) from the gatepost. An existing pool enclosure shall not be removed, replaced or changed in a manner that reduces its effectiveness as a safety barrier.

Exception: Spas or hot tubs with a safety cover that complies with ASTM F1346 shall be exempt from the provisions of this section.

15.25.110 – Section 304.14 amended – Insect screens.

A. Section 304.14 of the International Property Maintenance Code is hereby amended to read in its entirety:

304.14 Insect screens. Every door, window and other outside opening required for ventilation of habitable rooms, food preparation areas, food service areas or any areas where products to be included or utilized in food for human consumption are processed, manufactured, packaged or stored shall be supplied with approved tightly fitting screens of minimum 16 mesh per inch (16 mesh per 25 mm), and every screen door used for insect control shall have a self-closing device in good working condition.

Exception: Screens shall not be required where other approved means, such as air curtains or insect repellent fans, are employed.

15.25.120- Section 602.3 amended – Heat supply.

A. Section 602.3 of the International Property Maintenance Code is hereby amended to read in its entirety:

602.3 Heat supply. Every owner and operator of any building who rents, leases or lets one or more dwelling units or sleeping units on terms, either expressed or implied, to furnish heat to the occupants thereof shall supply heat to maintain a minimum temperature of 68°F (20°C) in all habitable rooms, bathrooms and toilet rooms.

15.25.130 – Section 602.4 amended – Occupiable workspaces.

A. Section 602.4 of the International Property Maintenance Code is hereby amended to read in its entirety:

602.4 Occupiable workspaces. Indoor occupiable workspaces shall be supplied with heat to maintain a minimum temperature of 65°F (18°C) during the period the spaces are occupied.

Exceptions:

1. Processing, storage and operation areas that require cooling or special temperature conditions.
2. Areas in which persons are primarily engaged in vigorous physical activities.

15.25.01440 - Violation.

- A. A violation of the code adopted by this chapter occurs when a person:
1. Fails to comply with this code;
 2. Violates or fails to comply with any order made under this code;
 3. Builds in violation of any detailed statement of specifications or plans submitted and approved thereunder or any certificate or permit issued thereunder and from which no appeal has been taken; or
 4. Fails to comply with such an order as affirmed or modified by the city council or by a court of competent jurisdiction, within the time fixed in this chapter.
- B. Such person may be liable severally and for each and every such violation and noncompliance respectively.
- C. The imposition of one penalty for any violation shall not excuse the violation or permit it to continue and all such persons shall be required to correct or remedy such violations or defects within a reasonable time.
- D. The application of the above penalty shall not be held to prevent the enforced removal of prohibited conditions.

SECTION 7. Sections 15.40.310 and 15.40.400 of Chapter 15.40 (Building Security) of Title 15 (Buildings and Construction) of the Morgan Hill Municipal Code are hereby amended to read (additions in underline, deletions in ~~strikeout~~):

15.40.310 - Open parking lots.

Open parking lots and access thereto, for the use of the general public, shall be provided with a maintained average of two foot-candles and a minimum of five tenths (.5) foot-candles ~~of minimum~~-maintained lighting on the parking surface from dusk until the beginning of business every operating day.

15.40.400 - Open parking lots.

Open parking lots and carports shall be provided with a maintained average ~~minimum~~ of two foot-candles and a minimum of five tenths (.5) foot-candles of light on the parking surface during the hours of darkness. Lighting devices shall be protected by vandalism-resistant covers.

SECTION 8. Chapter 15.44 (Fire Code) of Title 15 (Buildings and Construction) of the Morgan Hill Municipal Code is hereby amended to read (additions in underline, deletions in ~~strikeout~~):

"Chapter 15.44 FIRE CODE**Sections:**

- 15.44.010 Adoption of the 20196 California Fire and 20185 International Fire Codes.
- 15.44.015 Adoption of appendix chapters
- 15.44.020 Short title; International Fire Code and California Fire Code Defined.
- 15.44.030 Establishment and duties of the bureau of fire prevention.

- 15.44.040 Modification of provisions by chief.
- 15.44.050 Establishment of limits of districts.
- 15.44.060 Additions, amendments, and deletions.
- 15.44.070 Scope and general requirements~~Modifications relating to permits.~~
- 15.44.080 Modification relating to violations~~Inspections.~~
- 15.44.090 Inspections~~Modification relating to violations.~~
- 15.44.100 Chapter 2 - Definitions.
- 15.44.110 Chapter 3 - General Precautions Against Fire.
- 15.44.120 Chapter 54 – Fire Service Features~~Emergency Planning and Preparedness.~~
- 15.44.130 Chapter 65 – Electrical Equipment, Wiring and Hazards~~Fire Service Features.~~
- 15.44.140 Chapter 96 – Fire Protection Systems~~Electrical Equipment, Wiring, and Hazards.~~
- 15.44.150 Chapter 228 – Combustible Dust-Producing Operations~~Interior Finish, Decorative Materials, and Furnishings.~~
- 15.44.160 Chapter 339 - Fire Safety During Construction and Demolition~~Protection Systems.~~
- 15.44.170 Chapter 3248 – Indoor Storage Arrangements ~~Lumber Yards and Woodworking Facilities.~~
- 15.44.180 Chapter 353 – Fire Safety Requirements~~During Construction and Demolition.~~
- 15.44.190 Chapter 49 – Requirements for Wildland-Urban Interface Fire Areas.
- 15.44.200 Chapter 50 - Hazardous Materials - General Provisions.
- 15.44.210 Chapter 567 – Explosives and Fireworks~~Flammable and Combustible Liquids.~~
- 15.44.220 Chapter 5760 – Flammable and Combustible Liquids~~Highly Toxic and Toxic Materials.~~
- 15.44.230 Chapter 5864 – Flammable Gases and Flammable Cryogenic Fluids~~Pyrophoric Materials.~~
- 15.44.240 Chapter 64 – Pyrophoric Materials.
- 15.44.250 Appendix B.
- 15.44.260 Violation.

15.44.010 - Adoption of the 20196 California and 20185 International Fire Codes.

There is hereby adopted by reference that certain code known and designated as the California Code of Regulations, Title 24, Part 9, further described and referred to as the 20196 California Fire Code published by the California Building Standards Commission and based on the International Fire Code®, 20185 Edition, prepared by the International Code Council, including Appendix Chapters B, C, and K, save and except such portions as are hereinafter deleted, modified, or amended by this chapter. Such code shall be and become the Morgan Hill Fire Code, regulating and governing the safeguarding of life and property from fire and explosion hazards arising from the storage, handling, and use of hazardous substances, materials, and devices, and from conditions hazardous to life or property in the occupancy of buildings and premises in the City of Morgan Hill.

One (1) copy of the code shall be kept on file at all times in the office of the city building official and the administrative offices of the Morgan Hill Fire Department for use and examination by the public.

15.44.015 - Adoption of appendix chapters.

The following Appendix Chapters from the 2019⁹⁶ California Fire Code are hereby adopted:

Appendix B: Fire Flow Requirements for Buildings.

Appendix C: Fire Hydrant Locations and Distribution.

Appendix K: Temporary Haunted Houses, Ghost Walks and Similar Amusement Uses.

15.44.020 - Short Title; International Fire Code and California Fire Code Defined.

This chapter shall be known as the "Fire Code" and may be cited as such. Whenever the phrase "International Fire Code" appears in this code or any ordinance of the city, such phrase shall be deemed and construed to refer to and apply to the International Fire Code, 2018⁸⁵ Edition, as adopted and amended by this chapter. Whenever the phrase "California Fire Code" appears in this code or any ordinance of the city, such phrase shall be deemed and construed to refer to and apply to the 2019⁹⁶ California Fire Code, as adopted and amended by this chapter. Sections amended or modified in this chapter shall refer to the sections of the California Fire Code unless otherwise specified.

15.44.030 - Establishment and duties of bureau of fire prevention.

The California Fire Code and International Fire Code shall be enforced by the bureau of fire prevention in the Morgan Hill Fire Department, which shall be operated under the supervision of the chief of the fire department.

15.44.040 - Modification of provisions by chief.

- A. The Chief of the Morgan Hill Fire Department shall have power to modify any of the provisions of the fire code upon application in writing by the owner or lessee, or their duly authorized agent, when there are practical difficulties in the way of carrying out the strict letter of the codes, provided that the spirit of the codes shall be observed, public safety secured, and substantial justice done.
- B. The particulars of such modification, when granted or allowed, and the decision of the chief shall be entered in the records of the fire department and a signed copy shall be furnished to the applicant for modification.

15.44.050 - Establishment of limits of districts.

- A. Storage of stationary tanks of flammable cryogenic fluids are to be prohibited. The limits referred to in Section 5806.2 of the 2019⁹⁶ California Fire Code, in which the storage of flammable cryogenic fluids in stationary containers is prohibited, are hereby established as to all locations of the City of Morgan Hill which are residential and congested commercial areas as determined by the fire code official.
- B. Storage of Class I and II liquids in outside aboveground tanks is prohibited. The limits referred to in Section 5704.2.9.6.1 of the 2019⁹⁶ California Fire Code, in which the storage of flammable or combustible liquids in aboveground tanks is prohibited, are hereby established as to all locations of the City of Morgan Hill that are residential or congested commercial areas as determined by the fire code official.
- C. Storage of Class I and II liquids in aboveground tanks is prohibited. The limits referred to in Section 5706.2.4.4 of the 2019⁹⁶ California Fire Code, in which the storage of flammable or combustible liquids in aboveground tanks is prohibited, are hereby established as to all locations of the City of Morgan Hill that are residential or other locations as determined by the fire code official.

- D. Storage of liquefied petroleum gases ("LPG") is prohibited. The limits referred to in Section 6104.2 of the 2019⁹⁶ California Fire Code, in which storage of liquefied petroleum gas is restricted, are hereby established as to all locations of the City of Morgan Hill that are residential or congested commercial areas as determined by the fire code official.

Exceptions: LPG may be used for industrial operations or when natural gas is not available or would not provide a viable substitute for LPG. Portable containers for temporary heating and/or cooking uses may be permitted if stored and handled in accordance with this code. Facilities in commercial areas for refueling portable or mobile LPG containers may be approved by the fire code official on a case by case basis.

15.44.060 - Additions, amendments, and deletions.

- A. In accordance with California Health and Safety Code Section 17958.7, certain modifications to the California Fire Code as set forth in this Chapter are reasonably necessary because of local climatic, geologic, or topographical conditions.

B. Climatic Conditions

Santa Clara County and the City of Morgan Hill are located in a semi-arid Mediterranean type climate which predisposes all fuels to rapid ignition and spread of fire. Hot, dry winds-, and low humidityities, are common to all areas within the City of Morgan Hill and Santa Clara County in general. Winter rains promote the growth of grass and brush. This vegetation presents heavy dry fuel loads in the summer months. These conditions are conducive to the ready ignition, propagation and spread of grass, brush and structure fires. These conditions, which can cause small brush fires which spread quickly, are a contributing factor to the high fire danger in the area, and create the need for an increased level of fire protection. This added protection will supplement normal fire department response available and provide immediate protection for life and safety of multiple occupancy occupants during fire occurrences.

C. Topographic Conditions

The topography of Morgan Hill has hillside homes on each side of the city with long response times for safety equipment. The city foothills cause many problems for firefighters, including long response times, inadequate water supply and unlimited fuel. Fog, heavy rains, mud slides and earthquakes are other common occurrences which negatively affect the ability of the city's public safety resources to respond to emergency situations. The City is in a Category D seismic activity classification. Many traffic corridors such as Highway 101 and Monterey Road, Southern Pacific Railroad, related bridges, underpasses and crossings are subject to obstruction in the event of an earthquake, traffic accident, hazardous material spill or other disaster.

D. Geographic Conditions

1. Santa Clara County and the City of Morgan Hill are located within the seismically active San Francisco Bay region. The significant earthquakes in the region are generally associated with the crustal movements along well-defined, active fault zones. The nearest known active faults are the San Andreas Fault, approximately 12 miles southwest of Morgan Hill, and the Calaveras Fault, approximately 1 mile northeast. Both faults have produced major earthquakes in the past, and have estimated maximum credible Richter magnitudes of 8.3 and 7.3, respectively. The Sargent-Berrocal Fault, a potentially active fault, lies approximately 10 miles away and has an estimated

maximum credible Richter magnitude of 7.3. The Coyote Creek Fault is located in Morgan Hill and is classified as potentially active as well. In addition, several unnamed faults traverse the western slopes of the upland areas.

2. Regional planning for reoccurrence is recommended by the State of California, Department of Conservation. The October 17, 1989, Santa Cruz earthquake resulted in only one major San Francisco fire in the Marina district, but when combined with the 34 other fires and over 500 responses, the department was taxed to its full capabilities. The Marina fire was difficult to contain because mains supplying water to the district burst during the earthquake. If more fires had been ignited by the earthquake, it would have been difficult for the fire department to contain them. Experts predict a major earthquake in our area within the next 50 years. This situation creates the need for both additional fire protection measures and automatic on-site fire protection for building occupants since a multitude of fires may result from breakage of gas lines and electric lines as a result of an earthquake.
3. Traffic and circulation congestion presently existing in the City of Morgan Hill often places fire department response time to fire occurrences at risk. This condition will be exacerbated by any major disaster, including any earthquake where damage to the highway system will occur. This condition makes the need for additional on-site protection for property occupants necessary.
4. The City of Morgan Hill is located in an area subject to a climatic condition of high winds and low humidity. This combination of events creates an environment which is conducive to rapidly spreading fires. Control of such fires requires rapid response. Obstacles generated by a strong wind, such as fallen trees, street-lights and utility poles greatly impact the response time to reach an incident scene.
5. The City of Morgan Hill is located in the middle of a seismically active area. The viability of the public water system would be questionable at best after a major seismic event. A severe seismic event has the potential to negatively impact any rescue or fire suppression activities because it is likely to create obstacles similar to those indicated under the high wind section above. With the probability of strong aftershocks, there exists a need to provide increased protection for anyone on upper floors.
6. The City of Morgan Hill is located approximately sixteen miles from the ocean. The City's typical ground water level is between ten and twenty feet. This condition makes the City more prone to subsidence issues than most inland communities.

15.44.070– Scope and general requirements.

A. Section 101.1 of the 2019 California Fire Code is hereby amended to read in its entirety:

[A] 101.1 Title. These regulations shall be known as the *Fire Code* of Morgan Hill, hereinafter referred to as "this code."

B. Findings: The City of Morgan Hill experiences low humidity, high winds, and warm temperatures during the summer months, creating conditions which are particularly conducive to

the ignition and spread of grass, brush, and structure fires. The remoteness and steepness of hillside areas in the city significantly impact the ability of emergency responders to extinguish or control wildland or structure fires. These factors cumulatively mandate special provisions for the creation of defensible space around homes and ignition-resistant construction. Additional express findings either already on file with the California Building Standards Commission or will be filed prior to the effective date of the ordinance codified in this chapter.

15.44.0870 - Modifications relating to permits.

A. Section 105.6.53 9 of the 20196 California Fire Code is hereby ~~added~~amended to read ~~in its entirety~~:

~~105.6.9 Compressed Gases. An operational permit is required for the storage, use or handling at normal temperature and pressure ("NPT") of compressed gases in excess of the amounts listed in Table 105.6.9 to install any piped distribution system for compressed gases or to install a non-flammable medical gas manifold system. A permit is required to install, repair, abandon, remove, place temporarily out of service, close, or substantially modify a compressed gas system.~~

~~Exceptions:~~

- ~~1. Vehicles equipped for and using compressed gas as a fuel for propelling the vehicle.~~
- ~~2. Routine maintenance.~~
- ~~3. For emergency repair work performed on an emergency basis, application for permit shall be made within two working days of commencement of work.~~
- ~~4. Inert and simple asphyxiants at or below the amounts listed in Table 105.6.9.~~

~~The permit applicant shall apply for approval to close storage, use, or handling facilities at least 30 days prior to the termination of the storage, use, or handling of compressed or liquefied gases. Such application shall include any change or alteration of the facility closure plan. This 30-day period may be waived by the Chief if there are special circumstances requiring such waiver.~~

B. Table 105.6.9 of the 2016 California Fire Code is hereby amended to read in its entirety:

TABLE 105.6.9
PERMIT AMOUNTS FOR COMPRESSED GASES¹

TYPE OF GAS	AMOUNT(cubic feet) ²
	X 0.0283 for m ³
Corrosive	200
Flammable (except cryogenic and liquefied petroleum gases)	200
Highly toxic	Any amount
Inert and simple asphyxiant	6,000
Irritant	200
Moderately toxic	20
Other health hazards	650

Oxidizing (including oxygen)	504
Pyrophoric	Any amount
Radioactive	Any amount
Sensitizer	200
Toxic	Any Amount
Unstable (reactive)	Any amount

¹—Refer to Chapters 27, 30, 32, 35, 37, 40 and 41 for additional requirements and exceptions.

²—Cubic feet measured at normal temperature and pressure.

C.—Table 105.6.21 of the 2016 California Fire Code is hereby amended to read in its entirety:

TABLE 105.6.21—PERMIT AMOUNTS FOR HAZARDOUS MATERIALS

TYPE OF MATERIAL	AMOUNT
Carcinogens	10 pounds
Combustible liquids	See Section 105.6.17
Corrosive materials:	See Section 105.6.9
Gases	55 gallons
Liquids	500 pounds
Solids	
Cryogens	See Section 105.6.11
Explosive materials	See Section 105.6.15
TYPE OF MATERIAL	AMOUNT
Flammable materials:	See Section 105.6.9
Gases	See Section 105.6.17
Liquids	10 pounds
Solids	
Highly toxic materials: Gases	Any amount
Liquids	Any amount
Solids	Any amount
Moderately toxic gas	20 cubic feet
Organic peroxides:	Any Amount

Liquids: Class I-IV	No Permit Required
Liquids: Class V	Any Amount
Solids: Class I-IV	No Permit Required
Solids: Class V	
Oxidizing materials:	504 Cubic Feet
Gases	Any amount
Liquids	Any amount
Solids	
Pyrophoric materials:	Any amount
Gases	Any amount
Liquids	Any amount
Solids	
Toxic materials:	Any amount
Gases	Any amount
Liquids	Any amount
Solids	
Unstable (reactive) materials:	Any amount
Gases	Any amount
Liquids	Any amount
Solids	
Water-reactive materials:	
Liquids	Any amount
Solids	

105.6.53 Lithium batteries. An operational permit is required to store or handle lithium batteries or cells in quantities exceeding 1,000 pounds.

For SI: 1 gallon = 3.785 L, 1 pound = 0.454 kg.

a. 20 gallons when table 5003.1.1(1) Note k applies and hazard identification signs in accordance with Section 5003.5 are provided for quantities of 20 gallons or less.

b. 200 pounds when table 5003.1.1(1) Note k applies and hazard identification signs in accordance with Section 5003.5 are provided for quantities of 200 gallons or less.

D. Section 105.6.49(4) of the 2016 California Fire Code is hereby added to read:

~~4.—Day Care Facility. An operational permit is required to operate a business as a day care facility for more than 6 people.~~

~~E.—Section 105.6.49(5) of the 2016 California Fire Code is hereby added to read:~~

~~5.—Institutional. A permit is required to operate, maintain, or use any institutional type occupancy. For the purpose of this Section, an institution shall be, but is not limited to, a hospital, children's home, home or institution for persons with intellectual disabilities, home or institution for the care of aged or senile persons, sanitarium, nursing or convalescent home, certified family care home, residential care home for the elderly, out of home placement facility, halfway house, and day care nursery, or similar facility of any capacity.~~

~~F.—Section 105.6.49(6) of the 2016 California Fire Code is hereby added to read:~~

~~6.—Radioactives. To store or handle at any installation more than one microcuri (37,000 becquerel) of radioactive material not contained in a sealed source or sources, or any amount of radioactive material for which a specific license from the nuclear regulatory commission.~~

~~G.—Section 105.7.3 of the 2016 California Fire Code is hereby amended to read in its entirety:~~

~~105.7.3 Compressed gases. A construction permit is required to install any piped distribution system for compressed gasses or to install a non-flammable medical gas manifold system. A construction permit is required to install, repair damage to, abandon, remove, place temporarily out of service, close, or substantially modify a compressed gas system.~~

~~Exceptions:~~

~~1.—Routine maintenance.~~

~~2.—For emergency repair work performed on an emergency basis, an application for a permit shall be made within two working days of commencement of work.~~

~~The permit applicant shall apply for approval to close storage, use or handling facilities at least 30 days prior to the termination of the storage, use or handling of compressed or liquefied gases. Such application shall include any change or handling of compressed or liquefied gases. Such application shall include any change or alteration of the facility closure plan. This 30-day period may be waived by the Chief if there are special circumstances requiring such waiver.~~

~~H.—Section 105.7.4 of the 2016 California Fire Code is hereby amended to read in its entirety:~~

~~105.7.4 Cryogenic Fluids. A construction permit is required for installation of or alteration to cryogenic fluid storage systems where the system capacity exceeds the amounts listed in Table 105.6.10. Maintenance performed in accordance with this code is not considered an alteration and does not require a construction permit.~~

15.44.0980 - Inspections.

A. Section 1076.5 of the 20196 California Fire Code is hereby added to read:

1076.5 Final Inspection. No final inspection as to all or any portion of a development shall be deemed completed until the installation of the required fire protection facilities and access ways have been completed and approved. No final certificate of occupancy may be granted until the fire

department issues notice of final clearance of such fire protection facilities and access ways to the building department.

15.44.10015.44.090—Modification relating to violations.

~~A.—Section 109.3 of the 2016 California Fire Code is hereby deleted.~~

- Chapter 2—Definitions.

A. The following definitions in Section 202 of the 2019~~16~~ California Fire Code is hereby added to read:

3D PRINTER. A machine used in the additive manufacturing process for fabricating objects through the deposition of a material using a print head, nozzle, or another printer technology.

ADDITIVE MANUFACTURING. A process of joining materials to make objects from 3D model data, usually layer upon layer, sometimes referred to as 3D printing. The Code recognizes two types of additive manufacturing:

1. Industrial additive manufacturing. 3D printing operations that typically utilize combustible powders or metals, an inert gas supply, a combustible dust collection system, or that create a hazardous (classified) location area or zone outside of the equipment.

2. Non-industrial additive manufacturing. 3D printing operations that do create a hazardous (classified) location area outside of the equipment, and do not utilize an inert gas supply or a combustible dust collection system.

CORROSIVE LIQUID. Corrosive liquid is

- 1) any liquid which, when in contact with living tissue, will cause destruction or irreversible alteration of such tissue by chemical action; or
- 2) any liquid having a pH of 2 or less or 12.5 or more; or
- 3) any liquid classified as corrosive by the U.S. Department of Transportation; or
- 4) any material exhibiting the characteristics of corrosivity in accordance with Title 22, California Code of Regulations §66261.22.

DUST COLLECTION SYSTEM. A combination of equipment designed to contain, capture and collect airborne combustible dusts.

MODERATELY TOXIC GAS. A chemical or substance that has a median lethal concentration (LC50) in air more than 2000 parts per million but not more than 5000 parts per million by volume of gas or vapor, when administered by continuous inhalation for an hour, or less if death occurs within one hour, to albino rats weighing between 200 and 300 grams each.

OTHER HEALTH HAZARD MATERIAL. A hazardous material which affects target organs of the body, including but not limited to, those materials which produce liver damage, kidney damage, damage to the nervous system, act on the blood to decrease hemoglobin function, deprive the body tissue of oxygen or affect reproductive capabilities, including mutations (chromosomal damage), sensitizers or teratogens (effect on fetuses).

SECONDARY CONTAINMENT. Secondary containment is that level of containment that is

external to and separate from primary containment and is capable of safely and securely containing the material, without discharge, for a period of time reasonably necessary to ensure detection and remedy of the primary containment failure.

SPILL CONTROL. That level of containment that is external to and separate from the primary containment and is capable of safely and securely containing the contents of the largest container and prevents the materials from spreading to other parts of the room.

WORKSTATION. A defined space or an independent principal piece of equipment using hazardous materials with a hazard rating of 3 or higher as ranked by or 4 in accordance with NFPA 704 here a specific function, laboratory procedure or research activity occurs. Approved or listed hazardous materials storage cabinets, flammable liquid storage cabinets or gas cabinets serving a workstation are included as part of the workstation. A workstation is allowed to contain ventilation equipment, fire protection devices, detection devices, electrical devices and other processing and scientific equipment.

CARCINOGEN.

A substance that causes the development of cancerous growths in living tissue. A chemical is considered a carcinogen if:

1. It has been evaluated by the International Agency for Research on Cancer and found to be a carcinogen or potential carcinogen, or
2. It is listed as a carcinogen or potential carcinogen in the latest edition of the Annual Report on Carcinogens published by the National Toxicology program, or
3. It is regulated by OSHA as a carcinogen.

B. The following definition in Section 202 of the 2016 California Fire Code is hereby amended to read in its entirety:

CONTINUOUS GAS DETECTION SYSTEM.

An approved gas detection system where the analytical instrument is maintained in continuous operation and sampling is performed without interruption. Analysis is allowed to be performed on a cyclical basis at intervals not to exceed 30 minutes. In occupied areas where air is re-circulated and not exhausted to a treatment system (e.g. breathing zone), the Fire Code Official may require a cyclical basis at intervals not to exceed 5 minutes. The gas detection system shall be able to detect the presence of a gas at or below the permissible exposure limit in occupiable areas and at or below ½ IDLH (or 0.05 LC 50 if no established IDLH) in non-occupiable areas.

C. The following definition in Section 202 of the 2016 California Fire Code is hereby added to read:

CORROSIVE LIQUID.

1. Any liquid which, when in contact with living tissue, will cause destruction or irreversible alteration of such tissue by chemical action;
2. Any liquid having a pH of 2 or less or 12.5 or more;
3. Any liquid classified as corrosive by the U.S. Department of Transportation; or

~~4. Any material exhibiting the characteristics of corrosivity in accordance with Title 22, California Code of Regulations §66261.22.~~

~~D. The following definition in Section 202 of the 2016 California Fire Code is hereby added to read:~~

~~DEVICE.~~

~~An appliance or piece of equipment that plays an active part in the proper functioning of the regulated systems. Examples include, but are not limited to, the following: smoke detectors, heat detectors, flame detectors, manual pull stations, horns, alarms, bells, warning lights, hydrants, risers, FDCs, standpipes, strobes, control panels, transponders, and other such equipment used to detect, transmit, initiate, annunciate, alarm, or respond according to the system design criteria.~~

~~E. The following definition in Section 202 of the 2016 California Fire Code is hereby added to read:~~

~~MAXIMUM THRESHOLD QUANTITY ("MAX TQ").~~

~~The maximum quantity of a moderately toxic or toxic gas, which may be stored in a single vessel before a more stringent category or regulation is applied. The following equation shall be used to calculate the Max TQ:~~

$$\text{Max TQ (pounds)} = \text{LC50 (ppm)} \times 2 \text{ lb.}$$

~~For gas mixtures containing one or more toxic, highly toxic or moderately toxic components, LC50 shall be calculated using CGA Standards P-20 and P-23 as referenced in Appendix E, Section 103.1.3.1 in the California Fire Code.~~

~~F. The following definition in Section 202 of the 2016 California Fire Code is hereby added to read:~~

~~MODERATELY TOXIC GAS.~~

~~A chemical or substance that has a median lethal concentration (LC50) in air more than 2000 parts per million but not more than 5000 parts per million by volume of gas or vapor, when administered by continuous inhalation for an hour, or less if death occurs within one hour, to albino rats weighing between 200 and 300 grams each.~~

~~G. The following definition in Section 202 of the 2016 California Fire Code is hereby added to read:~~

~~OTHER HEALTH HAZARD MATERIAL.~~

~~A hazardous material which affects target organs of the body, including, but not limited to, those materials which produce liver damage, kidney damage, damage to the nervous system, act on the blood to decrease hemoglobin function, deprive the body tissue of oxygen or affect reproductive capabilities, including mutations (chromosomal damage) or teratogens (effect on fetuses).~~

~~H. The following definition in Section 202 of the 2016 California Fire Code is hereby amended to read in its entirety:~~

~~SECONDARY CONTAINMENT.~~

~~That level of containment that is external to and separate from primary containment and is capable of safely and securely containing the material, without discharge, for a period of time reasonably necessary to ensure detection and remedy of the primary containment failure.~~

~~I. The following definition in Section 202 of the 2016 California Fire Code is hereby added to read:~~

~~SENSITIZER.~~

~~A chemical that causes a substantial proportion of exposed people or animals to develop an allergic reaction in normal tissue after repeated exposure to the chemical.~~

~~J. The following definition in Section 202 of the 2016 California Fire Code is hereby added to read:~~

~~WILDLAND-URBAN INTERFACE FIRE AREA.~~

~~A geographical area identified by the State as "Fire Hazard Severity Zone" in accordance with the Public Resources Code Sections 4201 through 4204 and Government Code Sections 51175 through 51189, or other areas designated by the City to be at a significant risk from wildfire.~~

~~The Wildland-Urban Interface Fire Area shall be defined as all areas within the City of Morgan Hill as set forth and delineated on the map entitled "Wildland-Urban Interface Fire Area" which map and all notations, references, data, and other information shown thereon are hereby adopted and made a part of this Chapter. The map, properly attested, shall be on file in the Office of the City Clerk.~~

~~K. The following definition in Section 202 of the 2016 California Fire Code is hereby amended to read in its entirety:~~

~~WORKSTATION.~~

~~A defined space or independent principal piece of equipment using hazardous materials with a hazard rating of 3 or higher as ranked by NFPA 704 where a specific function, laboratory procedure or research activity occurs. Approved or listed hazardous materials storage cabinets, flammable liquid storage cabinets or gas cabinets serving a workstation are included as part of the workstation. A workstation is allowed to contain ventilation equipment, fire protection devices, electrical devices, and other processing and scientific equipment.~~

15.44.110 - Chapter 3—General Precautions Against Fire.

A. Section 31~~54.81~~ of the 201~~96~~ California Fire Code is hereby ~~added~~amended to read ~~in its entirety:~~

SECTION 315.8 LITHIUM BATTERY STORAGE AND HANDLING

315.8 Lithium Battery Storage and Handling. The storage and handling of lithium ion and lithium metal batteries or cells in quantities exceeding 1,000 pounds (4086 kg) shall comply with Section 315.8.1 through 315.8.10, and Chapter 32 where applicable.

315.8.1 Permits. Permits shall be required as set forth in Section 105.6.

315.8.2 Maximum quantity in a fire area. The aggregate amount of lithium batteries stored and

handled in a single fire area shall not exceed 9,000 pounds (4086 kg).

315.8.3 Construction requirements. Fire areas shall be separated from each other by fire barriers having not less than 2-hour fire resistance rating constructed in accordance with Section 707 of the Building Code and horizontal assemblies constructed in accordance with Section 711 of the Building Code.

315.8.4 Number of fire areas. The maximum number of fire areas within a building shall be four.

315.8.5 Group H, Division 2 occupancy. Storage and handling of more than 9,000 pounds of lithium batteries per fire area shall be in an approved Group H, Division 2 occupancy constructed in accordance with the Building Code and provided throughout with approved automatic smoke detection and radiant-energy detection systems.

315.8.6 Automatic sprinkler system. Buildings containing fire areas used for lithium battery storage or handling shall be equipped throughout with an approved automatic sprinkler system in accordance with Section 903.3.1.1. The design of the sprinkler system within each fire area shall not be less than that required for Extra Hazard Group 2 with a minimum design area of 2,500 square feet. Where the storage arrangement is required by other provisions of this code to be provided with a higher level of sprinkler system protection, the higher level of sprinkler system protection shall be provided.

315.8.7 Automatic smoke detection system. An approved automatic smoke detection system that activates an approved occupant notification system shall be provided throughout each fire area in accordance with Section 907.

315.8.8 Radiant energy detection. An approved radiant-energy detection system that activates an approved occupant notification system shall be installed throughout each fire area in accordance with Section 907.

315.8.9 Collection containers. Containers used to collect or store lithium batteries shall be noncombustible and shall not have an individual capacity exceeding 30 gallons (113.6 L), or be approved for transportation in accordance with the Department of Transportation (DOT~~H~~).

315.8.10 Storage configuration. Lithium batteries shall be considered a high-hazard commodity in accordance with Chapter 32 and where applicable, lithium battery storage shall comply with Chapter 32 in addition to Section 315.8.

~~311.1 General. Temporarily unoccupied buildings, structures, premises or portions thereof, including tenant spaces, shall be safeguarded and maintained in accordance with Sections 311.1 through 311.4.~~

B. Section ~~321~~146.7 of the 20196 California Fire Code is hereby added to read:

SECTION 321 ADDITIVE MANUFACTURING

321.1 General. Additive manufacturing equipment and operations shall comply with Section 321.

321.1.1 Scope. Additive manufacturing shall comply with one of the following:

1. Non-industrial additive manufacturing shall comply with Section 321.2.
2. Industrial additive manufacturing shall comply with Section 321.3.

321.1.2 Installation, operation and maintenance. 3D printers and associated additive manufacturing equipment shall be installed, operated and maintained in accordance with this Code, the listing and the manufacturer's instructions.

321.1.3 Production materials. Only the production materials listed for use with the equipment and included in the manufacturer's instructions shall be used.

321.2 Non-industrial additive manufacturing. Non-industrial additive manufacturing equipment and operations shall comply with Section 321.2.1 through 321.2.4. Additive manufacturing equipment and operations that do not comply with Section 321.2 shall comply with Section 320.3.

321.2.1 Listing. 3D printers used in non-industrial additive manufacturing shall be listed and labeled in accordance with UL 60950-1, UL 62368-1 or UL 2011. The listing shall also verify:

1. The 3D printers are self-contained and utilize maximum 30 liter pre-packaged production materials.
2. The operation of the 3D printers shall not create a hazardous (classified) electrical area or outside of the unit.
3. If any hazardous (classified) electrical area or zone exists inside of the unit's outer enclosure, the area shall be protected by intrinsically safe electrical construction or other acceptable protection methods.
4. The 3D printers shall not utilize inert gas or an external combustible dust collection.

321.2.2 Occupancies. Non-industrial additive manufacturing shall be permitted in all occupancy groups.

321.3 Industrial additive manufacturing. Industrial additive manufacturing equipment and operations shall comply with Section 321.3.1 through 321.3.13.

321.3.1 Permits required. Permits shall be obtained from the fire code official in accordance with Section 105.6 prior to engaging in industrial additive manufacturing operations.

321.3.2 Listing. 3D printers used in industrial additive manufacturing shall be listed and labeled in accordance with UL 2011 or approved for the application based on a field evaluation conducted by an approved agency.

321.3.3 Combustible dusts and metals. Industrial additive manufacturing operations that store, use or produce combustible dust, combustible particulate solids or combustible metals shall

comply with Chapter 22 and this section.

321.3.4 Powder evaluation. Printing powders used in industrial additive manufacturing operations shall be tested for combustibility in accordance with NFPA 484 or NFPA 652 as applicable. A copy of test reports shall be provided to the fire code official upon request.

321.3.5 Combustible (non-metallic) dusts. Industrial additive manufacturing that uses operations that store, use or produce combustible (non-metallic) dusts shall comply with NFPA 654.

321.3.6 Combustible metals. Industrial additive manufacturing operations that store or use combustible metals shall also comply with NFPA 484.

321.3.7 Ancillary equipment. Ancillary equipment provided for recycling, sieving, vacuuming or handling combustible powders shall be designed and approved for such use.

321.3.8 Hazardous materials. Industrial additive manufacturing operations that store or use hazardous materials exceeding the maximum allowable quantity limits shall comply with Chapter 50.

321.3.9 Inert Gas. Additive manufacturing processes that utilize inert gases shall comply with Chapter 53. Ventilation or gas detection shall be provided in accordance with Section 5307.

321.3.10 Technical assistance. Where required by the fire code official, a report evaluating the acceptability of technologies, processes, products, facilities, materials and uses associated with the operation shall be provided in accordance with 104.7.2 and approved.

321.3.11 Performance based design alternative. Where approved by the fire code official, buildings and facilities where industrial additive manufacturing is performed shall be permitted to comply with the performance-based design options in Section 5001.3 as an alternative to compliance with the other requirements set forth in this Section.

321.3.12 Occupancies. Industrial additive manufacturing shall only be conducted in the occupancy groups associated with manufacturing operations. The occupancy may be required by the fire code official to comply with Chapter 50 maximum allowable quantity tables. Where approved, the requirements in Sections 321.2.5 and 321.3.6 shall be permitted to provide the technical basis for determining compliance with Table 5003.1.1(1), footnote q.

321.3.13 Safety Certification. The equipment, process, training procedures and occupancy associated with industrial additive manufacturing may be required by the fire code official to receive a safety certification from Underwriter's Laboratory or equivalent.

~~316.7 Roof Guardrails at Interior Courts. Roof openings into interior courts that are bounded on all sides by building walls shall be protected with guardrails. The top of the guardrail shall not be less than 42 inches in height above the adjacent roof surface that can be walked on. Intermediate rails shall be designed and spaced such that a 12-inch diameter sphere cannot pass through.~~

Exception: Where the roof opening is greater than 600 square feet in area.

~~15.44.120—Chapter 4—Emergency Planning and Preparedness.~~~~A. Chapter 4 of the 2015 International Fire Code is not adopted.~~**15.44.1230 - Chapter 5—Fire Service Features.**A. Section 503.1 of the 2019~~96~~ California Fire Code is hereby amended to read in its entirety:

503.1 Where required. Fire apparatus access roads shall be provided and maintained in accordance with Sections 503.1.1 through 503.1.3 and as per Fire Department access road Standards.

B. Section 503.2.1 of the 2019~~96~~ California Fire Code is hereby amended to read in its entirety:

503.2.1 Dimensions. Fire apparatus access roads shall have an unobstructed width of not less than 20 feet (6096 mm), except for approved security gates in accordance with Section 503.6, and an unobstructed vertical clearance of 13 feet 6 inches (4115 mm).

Exception: When there are not more than two Group R, Division 3, or Group U occupancies, the access road width may be modified by the fire code official.

C. Section 503.2.2 of the 2019 California Fire Code is hereby amended to read in its entirety:

503.2.2 Authority. The fire code official shall have the authority to require or permit modifications to the required access widths and/or vertical clearance where they are inadequate for fire or rescue operations or where necessary to meet the public safety objectives of the jurisdiction.

~~D.~~ Section 504.5 of the 2019~~96~~ California Fire Code is hereby added to read:

504.5 Access control devices. When access control devices including bars, grates, gates, electric or magnetic locks or similar devices, which would inhibit rapid fire department emergency access to within and throughout the building, are installed, such devices shall be approved by the fire code official. All electrically powered access control devices shall be provided with an approved means for deactivation or unlocking from a single location or otherwise approved by the fire department. Access control devices shall also comply with Chapter 10 entitled Egress in the California Fire Code.

E. Section 507.5.1 of the 2019 California Fire Code is hereby amended to read in its entirety:

507.5.1 Where required. Where a portion of the facility or building hereafter constructed or moved into or within the jurisdiction is more than 400 feet (122 m) from a hydrant on a fire apparatus access road, as measured by an approved route around the exterior of the facility or building, on-site fire hydrants and mains shall be provided where required by the fire code official.

F. Section 507.5.2 of the 2019 California Fire Code is hereby amended to read in its entirety:

507.5.2 Inspection, testing and maintenance. Fire hydrant systems shall be maintained in an operative condition at all times and shall be repaired where defective. Additions, repairs, alterations and servicing shall comply with approved standards. Records of tests and required maintenance shall be maintained.

G. Section 508.1.2 of the California Fire Code is hereby amended to read in its entirety:

508.1.2 Separation. The fire command center shall be separated from the remainder of the building by not less than a 2-hour fire barrier constructed in accordance with Section 707 of the California Building Code or horizontal assembly constructed in accordance with Section 711 of the California Building Code, or both.

D. Section 510.1.1 of the 2016 California Fire Code is hereby added to read:

510.1.1 Obstruction by new buildings. When it is determined that a new structure obstructs the line of sight emergency radio communications to existing buildings or to any other locations, the developer of the structure shall provide and install the radio retransmission equipment necessary to restore communications capabilities. The equipment shall be located in an approved space or area within the new structure.

15.44.1340 - Chapter 6—Electrical Equipment, Wiring, and Hazards.

A. Section 603.4.2.1.1 of the 2019 California Fire Code is hereby amended to read in its entirety:

603.4.2.1.1 Prohibited locations. The storage or use of portable outdoor gas-fired heating appliances is prohibited in any of the following locations:

1. Inside of any occupancy where connected to the fuel gas container.
2. Inside of tents, canopies and membrane structures.
3. On exterior balconies, and rooftops.

BA. Section 6045.124.3 of the 20196 California Fire Code is hereby added to read:

605.13 Immersion heaters. All electrical immersion heaters used in dip tanks, sinks, vats and similar operations shall be provided with approved over-temperature controls and low liquid level electrical disconnects. Manual reset of required protection devices shall be provided.

15.44.150—Chapter 8—Interior Finish, Decorative Materials, and Furnishings.

A. Section 806.1.1 of the 2016 California Fire Code is hereby amended to read in its entirety:

806.1.1 Display inside buildings. The display of Christmas trees and other decorative vegetation shall be in accordance with Sections 806.1 through 806.5 and California Code of Regulations, Title 19, Division 1, Section 3.08.

Exceptions:

1. Trees located in areas protected by an approved automatic sprinkler system in accordance with Section 903.1.1 or 903.3.1.2 shall not be prohibited in Groups A, E, M, R-1, and R-2.
2. Trees shall be allowed within dwelling units in Group R-2 occupancies.

15.44.1460 - Chapter 9—Fire Protection Systems.

A. Section 901.6.3 of the 2019 California Fire Code is hereby amended to read in its entirety:

901.6.3 Records. Records of all system inspections, tests and maintenance required by the referenced standard shall be maintained on the premises for a minimum of five years. Inspections and tests performed on fire alarm systems shall be documented on NFPA 72 forms.

BA. Section 903.2 of the 2019~~96~~ California Fire Code is hereby amended to read in its entirety:

903.2 Where required. Approved automatic sprinkler systems in new and existing buildings and structures shall be provided in the locations described in this Section or in Sections 903.2.1 through 903.2.19 of the California Fire Code, whichever is the more restrictive.

For the purposes of this section, firewalls and fire barriers used to separate building areas shall be constructed in accordance with the California Building Code and shall be without openings or penetrations.

1. ~~In other than residential buildings which require the installation of fire sprinklers for all new buildings according to the California Residential Code, A~~an automatic sprinkler system shall be provided throughout all new buildings and structures greater than 1,~~2~~000 square feet of building area.

Exceptions:

- a. ~~Buildings and structures that do not exceed 1,000 square feet of building area and that are not located in the Wildland Urban Interface Fire Area.~~
- b. ~~Buildings and structures that are located in the Wildland Urban Interface Fire Area and do not exceed 500 square feet of building area.~~
- c. ~~Group S-2 or U occupancies that are not located in the Wildland Urban Interface and used exclusively for vehicle parking and meeting all of the following conditions:~~
 - i. ~~Noncombustible construction;~~
 - ii. ~~Maximum building area not to exceed 5,000 square feet;~~
 - iii. ~~Structure is open on three (3) or more sides; and~~
 - iv. ~~Minimum of 10 feet separation from existing buildings unless area is separated by fire walls~~
- ad. Group S-2 or U occupancies used exclusively for vehicle parking or solar arrays and meeting all of the following conditions:
 - i. Noncombustible construction;
 - ii. Maximum building areas not to exceed 5,000 square feet;
 - iii. Structure is open on three (3) or more sides; and
 - iv. Minimum of 10 feet separation from existing buildings unless area is separated by fire walls.

b. Accessory Dwelling Unit, provided that all of the following are met:

- i. The unit meets the definition of an Accessory Dwelling Unit as defined in the Government Code Section 65852.2.
- ii. The existing primary residence does not have automatic fire sprinklers.
- iii. The accessory detached dwelling unit does not exceed 1,200 square feet in size.
- iv. The unit is on the same lot as the primary residence.

2. An automatic sprinkler system shall be provided throughout existing Group A, B, E, F, I L, M, R, S and U buildings and structures, when additions are made that increase the building area by more than 1,200 square feet or where the resulting area exceeds to more than 3,600 square feet or that create conditions described in Sections 903.2.1 through 903.2.19 of the California Fire Code.
- ~~3. An automatic sprinkler system shall be provided throughout existing Group R occupancies, when additions are made and the building area is greater than 3,600 square feet.~~
34. An automatic sprinkler system shall be provided throughout all new basements regardless of size and throughout existing basements that are expanded by more than 50%.
45. Any change in the character of occupancy or in use of any building ~~with a building area equal to or greater than 3,600 square feet~~ which, in the opinion of the fire code official or building official, would place the building into a more hazardous division of the same occupancy group or into a different group of occupancies and constitutes a greater degree of life safety ¹ or increased fire risk ², shall require the installation of an approved fire automatic fire sprinkler system.

¹ Life Safety—Increased occupant load, public assembly areas, public meeting areas, churches, indoor amusement attractions, buildings with complex exiting systems due to increased occupant loads, large schools/daycare facilities, large residential care facilities with non-ambulatory.

² Fire Risks—High-piled combustible storage, woodworking operations, hazardous operations using hazardous materials, increased fuel loads (storage of moderate to highly combustible materials), increased sources of ignition (welding, automotive repair with use of flammable liquids and open flames).

C. Section 909.20.1 of the California Fire Code is hereby amended to read in its entirety:

909.20.1 Schedule. A routine maintenance and operational testing program shall be initiated immediately after the smoke control system has passed the acceptance tests. A written schedule for routine maintenance and operational testing shall be established and both shall occur at least annually.

15.44.1570 - Chapter 228—Combustible Dust-Producing Operations~~Lumber Yards and Woodworking Facilities.~~

A. Section ~~228033.8~~ of the 20196 California Fire Code is hereby ~~amended~~ to read in its entirety:

2203 DUST EXPLOSION PREVENTION

2203.1 Critical Depth Layer. The maximum dust layer on all surfaces, including but not limited to walls, ceilings, beams, equipment, furniture, pipes and ducts, shall not exceed the

Critical Depth Layer specified in Table 2203.1. The critical depth layer depth is permitted to be adjusted for explosion hazard further evaluated in accordance with one of the following:

1. Section 6.1.1.3 of NFPA 654.
2. Section 4.2.2 of NFPA 664 for wood flour.

Accumulated combustible dust shall be collected by one of the methods listed in 2203.5.

Table 2203.1 Critical Depth Layer

<u>Type of Dust</u>	<u>Critical Depth Layer (Inches)</u>
<u>Wood Flour</u>	<u>1/8</u>
<u>All Other Dusts</u>	<u>1/32</u>

For SI: 1 inch = 25.4 mm

2203.2 Dust Producing and Dust Handling Equipment. Dust producing equipment and dust handling equipment, including but not limited to vacuums, dust collection systems, dryers, mixers, blenders, separators, conveyors, storage containers, silos or other similar devices shall be listed and shall be maintained in accordance with the manufacturer's recommended standards.

2203.2.1 Signages and Markings. Signages and markings shall be provided in accordance with Section 2203.2.1.1 through 2203.2.1.3.

2203.2.1.1 Deflagration Vent Discharge Area Markings. Where dust collection systems and other equipment, systems, or systems components are provided with deflagration vents, the area within the deflagration vent's discharge area shall be marked in an approved manner.

2203.2.1.2 Caution Signs. Signs shall be posted near the dust containing equipment with deflagration vents that reads as follows:

CAUTION: THIS EQUIPMENT CAN CONTAIN EXPLOSIVE DUST.

KEEP OUTSIDE THE MARKED AREA WHILE EQUIPMENT IS OPERATING.

2203.2.1.3 Warning Signs. Where dust collection systems and other equipment, systems, or systems components are provided with deflagration vents, vent closures shall be clearly marked as follows:

WARNING: EXPLOSION RELIEF DEVICE. STAY CLEAR.

2203.3 Dust Collection and Conveying Systems. Dust collection and conveying systems shall be in accordance with Sections 2203.3.1 through 2203.3.3.

2203.3.1 Dust Collection Systems. Dust collection systems shall be designed to collect dust emissions from dust-producing equipment at the point of generation. Dust collection systems shall be in accordance with Section 511 of the ~~International~~ California Mechanical Code.

Exception: Closed systems using listed equipment and designed in accordance with manufacturer's recommendations and specifications, where cleanouts are provided in accordance with Section 2203.3.3.

Heating, ventilation, and air conditioning (HVAC) systems shall not be used as the means to collect dust from localized sources.

2203.3.1.1 Location. Dust collectors shall be located outside of buildings.

Exceptions:

1. Dust collectors inside of buildings complying with Section 511 of the California Mechanical Code.
2. Wet-type dust collectors when specifically listed for the type of dust conveyed shall be permitted inside of buildings where in accordance with the manufacturer's instructions and specifications.
3. Dust collectors designed to specific NFPA standards listed in Table 2204.1 for the specific type of dust conveyed.

2203.3.1.2 Minimum Conveying Velocities. The minimum velocities within ducts used as part of the dust collection system shall be in accordance with Table 2203.3.1.2.

Table 2203.3.1.2

Minimum Conveying Velocities

<u>Type of Product</u>	<u>Feet Per Minute</u>
<u>Fine light dust, such as cotton, lint, and wood flour (100 mesh and under)</u>	<u>2000 (10 m/s)</u>
<u>Dry dust such as fine rubber molding powder</u>	<u>2500 (13 m/s)</u>
<u>Average dust such as sawdust, grinding dust, coal dust</u>	<u>3500 (18 m/s)</u>
<u>Heavy dust such as metal turnings, including aluminum and magnesium powder</u>	<u>4000 (20 m/s)</u>

2203.3.2 Plastic Ducts and Conveying Systems. Plastic, fiberglass and other nonconductive ducts, duck liners or pipes shall not be used as a part of duct and conveying systems. Ductwork utilizing combustible lines shall be permitted only in high impact areas and where approved. Flexible hose shall be permitted if designed and installed in accordance with the following requirements:

- | | |
|--|----|
| 1. <u>Manufactured of static dissipative construction.</u> | 2. |
| <u>Used only for connections and isolation purposes.</u> | 3. |
| <u>Limited to 18 inches (457 mm) in length.</u> | 4. |
| <u>Properly grounded.</u> | |

2203.3 Cleanouts. Openings shall be provided in enclosed equipment and conveyors to allow access to all parts of the equipment and conveyors to permit inspection, cleaning, maintenance and the effective use of portable extinguishers or hose streams. Cleanouts for ducts uses as part of the dust collection system shall be in accordance with California Mechanical Code.

2293.4 Sources of Ignition. Sources of ignition shall be controlled in accordance with Sections 2203.4.1 through 2203.4.9.5.

2203.4.1 Classified Electrical. Classified electrical shall be in accordance with NFPA 70. Electric motors and electrical components of the equipment shall not be installed in the dust laden air stream unless listed for Class II, Division 1 locations.

2203.4.2 Static Electricity. Bonding and grounding is required to minimize accumulation of static electric charge in the following locations:

- | | |
|--|----|
| 1. <u>Dust producing equipment.</u> | 2. |
| <u>Dust collection system.</u> | 3. |
| <u>Pneumatic dust conveying systems conveying combustible dust from one location to another, combustible dust conveyors, piping and conductive components. Conveying systems include transport modes such as railcars, hopper cars, boxcars, tank cars and trucks into which or from which commodities or products are pneumatically conveyed.</u> | |
| <u>4. Conveying systems using metallic piping.</u> | |

2203.4.3 Hot Works. Hot work and similar spark-producing operations shall not be conducted in or adjacent to combustible dust producing areas unless precautions have been taken to provide safety. Hot work shall be permitted only in safe, designated areas in accordance with Chapter 35. Hot work is prohibited on equipment that is operating.

2203.4.3.1 Signs. Conspicuous signs with the following warning shall be posted in the vicinity of combustible dust producing areas or in the vicinity of combustible dust use:

NO WELDING. THE USE OF WELDING OR CUTTING EQUIPMENT IN OR NEAR THIS AREA IS DANGEROUS BECAUSE OF FIRE AND EXPLOSION HAZARDS. WELDING AND CUTTING SHALL BE DONE ONLY UNDER THE SUPERVISION OF THE PERSON IN CHARGE.

2203.4.4 Hot Surfaces and Hot Equipment. In areas where a dust explosion hazard or dust flash fire hazard exists, the temperature of external surfaces, shall be maintained below 80

percent (in degrees Celsius) of the lower of the dust surface ignition temperature or the dust-cloud ignition temperature for worst-case dusts. External surfaces shall include but not limited to:

1. Compressors.
2. Steam, water or process piping.
3. Ducts.
4. Conveyors.
5. Process equipment.

Where steam pipes or hot surfaces occur in dust producing or dust handling areas, accumulation of dust on the surfaces shall be minimized by an approved method.

Exception: Drying apparatus listed for the intended use and installed in accordance with the manufacturer's instructions.

2203.4.5 Powered Industrial Trucks. Powered industrial trucks used in electrically classified areas shall be listed for such use.

2203.4.6 Smoking Prohibited. Smoking shall be prohibited in or adjacent to dust producing or dust handling areas.

"No Smoking" signs complying with Section 310 shall be conspicuously posted in such areas. Smoking shall be permitted only in designated areas.

2203.4.7 Spark-Producing Devices. Spark-producing devices shall not be located within 20 feet (6096 mm) of areas requiring classified electrical unless separated by a permanent partition.

2203.4.8 Self-heating materials. Materials in silos and other large storage piles of particulates prone to self-heating shall be in accordance with Section 8.5.11 of NFPA 652.

2203.4.9 Open Flames and Fuel Fired Equipment. Open flames and fuel fired equipment shall be in accordance with Section 2203.4.9.1 through 2203.4.9.5.

2203.4.9.1 Release of Airborne Combustible dust. Production, maintenance or repair activities that have the potential to release or force combustible dust to become airborne shall not be conducted within 35 feet (11 m) of an open flame or pilot flame.

2203.4.9.2 Space Heaters. Fuel-fired space heaters drawing local ambient air shall not be located within electrically classified areas. Space heating appliances in dust producing or dust handling areas shall be located where not subject to accumulation of deposits of combustible dust.

2203.4.9.3 Equipment Listing. Fuel-fired process equipment shall be listed for its intended use and shall be operated and maintained in accordance with the manufacturer's instructions.

2203.4.9.4 Inspection and Preventative Maintenance. Inspection and maintenance of fuel-fired process equipment shall include verification that significant combustible dust accumulations do not exist within or around the equipment.

2203.4.9.5 Sources of Combustion Air. In Class II electrically classified locations, heating units shall be provided with a source of combustion air ducted directly from the building exterior or from an unclassified location.

2203.5 Housekeeping. Accumulation of combustible dust on surfaces inside buildings shall be maintained below the critical depth layer in Section 2203.1. Pressurized air or similar methods shall not be used to remove dust from surfaces. Accumulated combustible dust shall be collected by one of the following methods:

1. Portable vacuum cleaners listed for use in Class II, Group G, Division 1 atmospheres as defined in NFPA 70. 2.
- Dust collection systems. 3.
- Other approved means that will not place combustible dust into suspension in air.

2203.6 Standard Operational Procedures. Dust producing equipment and all associated equipment including dust collection equipment shall be maintained in accordance with the manufacturer's instructions and specifications and applicable codes. The inspection, testing and maintenance program shall include the following, as applicable:

1. Fire and explosion protection and prevention equipment, as applicable, in accordance with the applicable NFPA standards. 2.
- Dust control equipment. 3.
- Control of potential ignition sources. 4.
- Electrical, process and mechanical equipment, including applicable process interlocks.
5. Lubrication of bearings for dust collection, dust handling and dust producing equipment.
6. Additional maintenance in accordance with the manufacturer's instructions and specifications for dust collection, dust handling and dust producing equipment.
7. Records shall be kept of maintenance and repairs performed. The standard operating procedures shall be submitted to the fire code official for review and approval. The written standard operating procedures shall be signed by the person responsible for facility operations.

2203.7 Emergency Response Plan. A written emergency response plan shall be developed for preventing, preparing for and responding to work-related emergencies including but not limited to fire and explosion. The following information shall be developed into the plan:

1. Identification of dust hazards. 2.
- Identification and location of all utilities to affected areas. 3.
- Site plans or floor plans locating utility shut-off controls including water, gas and power.
4. Identify the potential for explosion. 5.
- Identify the location of fire extinguishing equipment compatible with the hazards present.
6. Any additional information required by the fire code official.

2203.8 Training. The plans and procedures required in Sections 2203.5, 2203.6 and 2203.7 shall be approved by the fire code official. The plans and procedures shall be reviewed annually and updated as required by process changes. Initial and annual refresher training shall be provided to employees who are involved in operating, maintaining and supervising facilities that handle combustible dust. Initial and annual re fresher training shall include:

1. Workplace hazards.
2. General orientation, plant diagrams and plant safety rules.
3. Process description or flowchart.
4. Equipment operation, safe startup and shutdown, and response to hazard conditions or an incident.
5. The location and use of all related fire and explosion protection and prevention systems.
6. Equipment maintenance requirements and practices, including visual inspections of conveyors and ducts. 7.
- Housekeeping requirements, including the maintenance of the critical depth layer in Section 2203.1. 8.
- Emergency response plans as required in Section 2203.7.
- The employer shall maintain records of initial and annual training and for review.

B. Section 2204 of the 2019 California Fire Code is hereby amended to read in its entirety:

2204 DUST EXPLOSION SCREENING TESTS

2204.1 Combustibility and Explosivity Tests. Where combustibility or explosivity screening tests are required to analyze the combustible dust as part of compliance with Section 414.1.3 of the California Building Code and Section 104.7 of this Code, it shall be in accordance with Section 5.4 of NFPA 652.

2204.2 Samples. Representative samples for the screening test shall be obtained in accordance with Section 5.5 of NFPA 652.

C. Section 2205 of the California Fire Code is hereby added to read:

2205 STANDARDS

2205.1 Specific Hazards Standards. The fire code official is authorized to enforce additional industry or material specific provisions of the codes and standards listed in Table 2205.1 as applicable to prevent and control dust explosions.

Table 2205.1 Explosion Protection Standards

<u>Standard</u>	<u>Subject</u>
<u>NFPA 61</u>	<u>Standard for the Prevention of Fires and Dust Explosions in Agricultural and Food Processing Facilities</u>
<u>NFPA 69</u>	<u>Standard on Explosion Prevention Systems</u>
<u>NFPA 70</u>	<u>National Electrical Code</u>
<u>NFPA 77</u>	<u>Recommended Practice on Static Electricity</u>
<u>NFPA 85</u>	<u>Boiler and Combustion System Hazards Code</u>
<u>NFPA 120</u>	<u>Standard for Fire Prevention and Control in Coal Mines</u>
<u>NFPA 484</u>	<u>Standard for Combustible Metals</u>
<u>NFPA 652</u>	<u>Standard on the Fundamentals of Combustible Dust</u>
<u>NFPA 654</u>	<u>Standard for Prevention of Fire and Dust Explosions from the Manufacturing, Processing and Handling of Combustible Particulate Solids</u>
<u>NFPA 655</u>	<u>Standard for the Prevention of Sulfur Fires and Explosions</u>
<u>NFPA 664</u>	<u>Standard for the Prevention of Fires and Explosions in Wood Processing and Woodworking Facilities</u>

2205.1.1 Dust Hazard Analysis. If a dust hazard analysis (DHA) is required by the fire code official to new or existing facilities and operations, it shall be in accordance with NFPA 652. The DHA for existing facilities shall be in accordance with Section 7.1.2 of NFPA 652.

2803.8 Fire protection water supply system. An approved fire protection water supply and hydrant system suitable for the fire hazard involved shall be provided for open storage yards and processing areas. Hydrant systems shall be installed in accordance with NFPA 24.

15.44.1680 - Chapter 33—Fire Safety During Construction and Demolition.

A. Section 3303.3 of the 2019 California Building Code is hereby amended to read in its entirety:
3303.3 LP-gas heaters. Fuel supplies for liquefied-petroleum gas-fired heaters shall comply with Chapter 61 and the International Fuel Gas Code.

3303.3.1 Use in Buildings. Propane containers may be used in buildings under construction or undergoing major renovation as a fuel source for temporary heating for curing concrete, drying plaster and similar applications in accordance with the following:

1. Heating elements (other than integral heater-container units) shall be located at least 6 feet from any LP Gas container.

2. Integral heater-container units specifically designed for the attachment of the heater to the container, or to a supporting standard attached to the container, may be used provided they are designed and installed so as to prevent direct or radiant heat application to the LP-Gas container.

3. Blower and radiant type units shall not be directed toward any LP-Gas container within 20 feet.

4. Heat producing equipment shall be installed with clearance to the combustibles in accordance with the manufacturer's installation instructions.

5. Cylinders shall comply with DOT cylinder specifications and shall be secured in an upright position.

6. Regulators shall be approved for use with LP-Gas. Fittings shall be designed for at least 250 p.s.i.g. service pressure.

7. Hose shall be designed for a working pressure of at least 350 p.s.i.g. (unless limited to 5 p.s.i.g.) and shall be a maximum of 6 feet in length.

8. Portable heaters shall be equipped with an approved automatic device to shut off the flow of gas to the main burner and to the pilot in the event of flame extinguishment or combustion failure. Portable heaters with an input of more than 50,000 Btu/hr shall be equipped with either a pilot that must be proved before the main burner can be turned on or an approved electronic ignition system.

3303.3.2 Use in Occupied Buildings. In addition to the above, for LPG storage/use in buildings undergoing alteration and that are fully or partially occupied, the following shall also apply:

1. Specific approval must be obtained from the fire department prior to bringing LP-Gas containers on-site.

2. The maximum water capacity of individual containers shall be 5-gallon water capacity and the number of containers in the building shall not exceed the number of workers assigned to using the LP-Gas.

3. Containers having a water capacity greater than 2½ pounds (1 quart) shall not be left unattended.

B. Section 3304.1 of the 2019 California Building Code is hereby amended to read in its entirety:

3304.1 Smoking. Smoking is prohibited anywhere inside or on the roof of new buildings under construction or in the project work area of buildings undergoing alteration. A suitable number of 'No Smoking' signs shall be posted to ensure that smoking is controlled.

Smoking shall be prohibited except in approved areas. Signs shall be posted in accordance with Section 310. In approved areas where smoking is permitted, approved ashtrays shall be provided in accordance with Section 310.

CA. Section 3304.94.8 of the 2019 California Fire Code is hereby added to read:

3304.98 Fire walls. When firewalls are required in combustible construction, the wall construction shall be completed (with all openings protected) immediately after the building is sufficiently weather-protected at the location of the wall(s).

D. Section 3304.10 of the 2019 California Fire Code is hereby added to read:

3304.10 Vehicle Parking. All vehicles shall be parked a minimum of 20 feet from new buildings under construction.

Exceptions: 1.

Vehicles that are temporarily parked for loading/unloading or other construction related operations. Such vehicles shall not be left unattended. 2.

Private vehicles may be parked in parking garages of Type I construction if the automatic fire sprinkler system is in service and vertical openings are protected.

E. Section 3304.11 of the 2019 California Fire Code is hereby added to read:

3304.11 Compressed Gas Containers. Gas containers/cylinders shall be protected as follows:

1. Combustible materials shall be kept a minimum of 10 feet from gas containers. 2.

Cylinders shall be protected against physical damage. 3.

Cylinders shall be stored upright and secured to prevent falling. 4.

Cylinders shall not be placed near elevators, unprotected platform edges or other areas where they would drop more than 2 feet. 5.

Cylinders shall not be placed in areas where they may be damaged by falling objects. 6.

When cylinders are not in use, valve protective caps shall be in place. 7.

Ropes, chains or slings shall not be used to suspend gas cylinders, unless the cylinder was manufactured with appropriate lifting attachments.

3304.11.1 Separation. When stored, gas cylinders shall be separated from each other based on their hazard classes.

3304.11.2 Marking. Gas cylinders shall be marked with the name of the contents.

F. Section 3305.2.1 of the California Fire Code is hereby added to read:

3305.2.1 Containers. Metal containers for Class I or II liquids shall be in accordance with DOT requirements or shall be of an approved design. Discharge devices shall not cause an internal pressure on the container. Individual containers shall not be interconnected and shall be kept closed when not in use.

3305.2.2 Secondary Containment. Secondary containment or a means of spill control, drainage control, and diking shall be required for containers and tanks as approved by the fire department and, if applicable, local hazardous materials program agency.

3305.2.3 Marking. Tanks and containers shall be marked with the name of the product and “FLAMMABLE — KEEP FIRE AND FLAME AWAY.” Tanks (i.e., containers in excess of 60 gallons) shall also be labeled “KEEP 50 FEET FROM BUILDINGS.”

3305.2.4 Tank Installation Plans/Permit. Plans for the installation/use of any aboveground storage tank (i.e., container greater than 60 gallons) shall be submitted to the fire department and, if applicable, local hazardous materials program agency for review and permit prior to the proposed tank arriving at the site.

G. Section 3308.1.1 of the 2019 California Fire Code is hereby added to read:

3308.1.1 Fire Protection Plan. The Fire Protection Plan shall include the following:

1. Procedures for reporting emergencies to the Fire department. 2.
- Procedures for emergency notification, evacuation and/or relocation of all persons in the building under construction and on the site. 3.
- Procedures for hot work operations, management of hazardous materials and removal of combustible debris and maintenance of emergency access roads. 4.
- Floor plans identifying the locations of exits, exit stairs, exit routes and portable fire extinguishers. 4.1.
- All new buildings under construction shall have a least one unobstructed exit.
5. Site plans identifying the designated exterior assembly areas for each evacuation route.
6. Site plans identifying required fire apparatus access roadways and on-site fire hydrants.
7. The name and contact phone number of the person(s) responsible for compliance with the Fire Protection Plan.

H. Section 3308.6 of the 2019 California Fire Code is hereby amended to read in its entirety:

3308.6 Hot work operations. Hot work includes any work involving operations capable of initiating fires or explosions, including cutting, welding, brazing, soldering, grinding, thermal spraying, thawing pipe, torch applied roofing, or any other similar activity. The fire prevention program superintendent shall be responsible for supervising the permit system for hot work operations in accordance with Chapter 35.

I. Section 3308.7 of the 2019 California Fire Code is hereby amended to read in its entirety:

3308.7 Impairment of fire protection systems. Fire alarm systems shall be maintained operational at all times during building alterations. Impairments to any fire protection system shall be in accordance with Section 901. When an alteration requires modification to a portion of the fire alarm system, the portion of the system requiring work shall be isolated and the remainder of the system shall be kept in service whenever practical. When it is necessary to shut down an entire fire alarm system a fire watch or other mitigation approved by the fire department shall be implemented by the general contractor until the system is returned to full service.

J. Sections 3308.9 and 3308.10 of the California Fire Code are hereby added to read:

3308.9 Premises Identification. The address numbers of the property or project location shall be plainly visible and legible from the street or road fronting the property at the fire apparatus access point or as otherwise approved.

3308.10 Area Separation Walls. When area separation walls are required, the wall construction shall be completed (with all openings protected) immediately after the building is sufficiently weather-protected at the location of the wall(s).

K. Section 3310.1.1 of the 2019 California Fire Code is hereby added to read:

3310.1.1 Gates. No gate may be installed across a required fire department access road or driveway without prior approval from the local fire agency.

3310.1.2 Fire Apparatus Access Roadway Signs. Where required by the Fire Code Official, fire apparatus access roads shall be designated and marked as a fire lane as set forth in CVC §22500.1. The designation shall be indicated by:

1. A sign posted immediately adjacent to and visible from the designated place, clearly stating in letters not less than one inch in height that the place is a fire lane; or
2. Outlining or painting the place in red and, in contrasting color, marking the place with the words "FIRE LANE," which are clearly visible from a vehicle; or
3. A red curb or red paint on the edge of the roadway upon which is clearly marked the words "FIRE LANE."

~~L.B.~~ Section 3311.1 of the 2019~~96~~ California Fire Code is hereby amended to read in its entirety:

3311.1 Stairways required. Each level above the first story in new multi-story buildings that require two exit stairways shall be provided with at least two usable exit stairways after the floor decking is installed. The stairways shall be continuous and discharge to grade level. Stairways serving more than two floor levels shall be enclosed (with openings adequately protected) after exterior walls/windows are in place. Exit stairs in new and in existing, occupied buildings shall be lighted and maintained clear of debris and construction materials at all times.

Exception: For new multi-story buildings, one of the required exit stairs may be obstructed on not more than two contiguous floor levels for the purposes of stairway construction (i.e., installation of gypsum board, painting, flooring, etc.).

MC. Section 3311.1.1 of the 2019⁹⁶ California Fire Code is hereby added to read:

Section 3311.1.1 Required Means of Egress. All new buildings under construction shall have at least one unobstructed means of egress. All means of egress shall be identified in the prefire plan see Section 3308.2.

N. Section 3311.3 of the 2019 California Fire Code is hereby added to read:

3311.3 Storage. Combustible construction materials shall be stored a minimum of 20 feet from buildings under construction or undergoing remodel. Combustible materials associated with construction, demolition, remodeling or alterations to an occupied structure shall not be stored in exits, enclosures for stairways and ramps, or exit access corridors serving an occupant load of 30 or more.

Exceptions:

1. Where the only occupants are construction workers.
2. Combustible materials that are temporarily accumulated to support work being performed when workers are present.
3. Materials that are staged for installation on a floor level.
4. When approved by the Fire Department, materials may be stored in parking garages of Type I construction if the automatic fire sprinkler system is in service and vertical openings are protected.

O. Section 3312.1 of the 2019 California Fire Code is hereby amended to read in its entirety:

3312.1 When required. An approved water supply for fire protection, either temporary or permanent, shall be completed, and in service prior to combustible construction materials accumulating on site.

P. Section 3313.1 of the 2019 California Fire Code is hereby amended to read in its entirety:

3313.1 Where required. In buildings required to have standpipes the standpipes shall be installed when the progress of construction is not more than 35 feet in height above the lowest level of the fire department access. Standpipes shall be provided with fire department hose connections and outlets at accessible locations adjacent to usable stairs. As construction progresses, such standpipes shall be extended to within one floor of the highest point of construction having secured decking or flooring. Each floor shall be provided with a 2½-inch valve outlet for fire department use. Where construction height requires installation of a Class III standpipe, fire pumps and water main connections shall be provided to serve the standpipe.

Q. Section 3314.1 of the 2019 California Fire Code is hereby amended to read in its entirety:

3314.1 Completion before occupancy. Where automatic fire sprinkler systems are required to be installed in new buildings, the system shall be placed in service as soon possible. For buildings of Type I or II noncombustible construction, activation of the fire sprinkler system may be delayed until combustible finishes, furnishings or equipment are installed, if the building or area is not used for combustible storage or any other purpose.

Immediately upon the completion of sprinkler pipe installation on each floor level, the piping shall be hydrostatically tested and inspected. After inspection approval from the Fire department, each floor level of sprinkler piping shall be connected to the system supply riser and placed into service with all sprinkler heads uncovered. Protective caps may be installed on the active sprinklers during the installation of drywall, texturing and painting, but shall be removed immediately after this work is completed. For system activation notification, an exterior alarm bell shall be installed and connected to the sprinkler water flow device prior to installation of the monitoring system.

It shall be unlawful to occupy any portion of a building or structure until the automatic sprinkler system installation has been tested and approved, except as provided in Section 105.3.4.

R. Section 3314.2 of the 2019 California Fire Code is hereby amended to read in its entirety:

3314.2 Operation of valves. For buildings equipped with fire sprinkler systems that are undergoing alterations, the sprinkler system(s) shall remain in service at all times except when system modifications are necessary. Operation of sprinkler control valves shall be allowed only by properly authorized personnel and shall be accompanied by notification of duly designated parties. Fire sprinkler systems undergoing modifications shall be returned to service at the end of each workday unless otherwise approved by the fire department. The General contractor or his/her designee shall check the sprinkler control valve(s) at the end of each work-day to confirm that the system has been restored to service.

S. Section 3315.1 of the 2019 California Fire Code is hereby amended to read in its entirety:

3315.1 Where required. Structures under construction, alteration or demolition shall be provided with not less than one approved portable fire extinguisher in accordance with Section 906 and sized for not less than ordinary hazard as follows:

1. Portable fire extinguishers shall be provided and shall be mounted on a wall or post at each usable stairway and such that the travel distance to any extinguisher does not exceed 75 feet.

1.1. Mounting height to the top of the extinguisher shall not exceed 5 feet.

1.2. Extinguishers shall not have less than a 2A:10BC rating or as otherwise directed by the fire department.

2. In every storage and construction shed.

3. Additional portable fire extinguishers shall be provided where special hazards exist including, but not limited to, the storage and use of flammable and combustible liquids.

4. The general contractor shall ensure that an adequate number of individuals are trained in the proper use of portable fire extinguishers.

15.44.170 – Chapter 34 — Indoor Storage Arrangement.

A. Section 3404.6 of the 2019 California Fire Code is hereby amended to read in its entirety:

3404.6 Telephone number. Communication equipment shall be maintained at all waste tire facilities and solid waste facilities, if they are staffed by an attendant, to ensure that the site operator can contact local fire authority in the event of fire. The telephone number of the local fire authority and location of the nearest telephone shall be posted conspicuously in attended locations.

B. Section 3405.1 of the 2019 California Fire Code is hereby amended to read in its entirety:

3405.1 Individual piles. Tire storage shall be restricted to individual piles not exceeding 5,000 square feet (464.5 m²) of continuous area. Piles shall not exceed 50,000 cubic feet (1416 m³) in volume or 10 feet (3048 mm) in height. *Pile widths shall not exceed 50 feet.*

C. Section 3407.5 of the 2019 California Fire Code is hereby added to read:

3407.5 Signs. A sign shall be posted at the facility entrance stating the name of the operator, operating hours, and site rules.

3407.6 Attendant. An attendant shall be present when the facility is open for business if the facility receives tires from persons other than the operator of the facility.

3407.7 Access. An access road to the facility must be maintained passable for emergency equipment at all times. Unauthorized access must be strictly controlled.

D. Section 3408.1 of the 2019 California Fire Code is hereby amended to read in its entirety:

3408.1 Water supply. An adequate water supply shall be provided for use by the local fire authority. The water supply shall be capable of delivering at least 1,000 gallons per minute for a duration of at least three hours and at least 2,000 gallons per minute for a duration of at least three hours if the sum of altered plus whole waste tires exceeds 10,000. The water supply shall be arranged such that any part of the storage yard can be reached by using not more than 500 feet (152 m) of hose.

Adequate equipment to aid in the control of fires shall be provided. At a minimum, the following items shall be maintained on site and in working order at all times:

1. One pike pole at least 10 feet in length to separate burning from nonburning tires, and
2. One round point and one square point shovel.

E. Section 3408.2 of the 2019 California Fire Code is hereby amended to read in its entirety:

3408.2 Fire extinguishers. Buildings or structures shall be provided with portable fire extinguishers in accordance with Section 906.

1. Fuel-fired vehicles operating in the storage yard shall be equipped with a minimum 2-A:20-B:C-rated portable fire extinguisher.

2. One portable fire extinguisher with a minimum rating of A:40-B:C shall be carried on each piece of fuel-powered equipment used to handle waste tires.

F. Section 3409.1 of the 2019 California Fire Code is hereby amended to read in its entirety:

3409.1 Pile dimensions. Where tires are stored on-tread, the dimension of the pile in the direction of the wheel hole shall be not more than 50 feet (15 240 mm). Tires stored adjacent to or along one wall shall not extend more than 25 feet (7620 mm) from that wall. Other piles shall be not more than 50 feet (15 240 mm) in width.

1. Where the top of the storage is greater than six feet in height, tires shall be stored in accordance with the following:

(a) Indoor storage areas between 500 square feet and 2,500 square feet shall maintain aisles with access to exits and fire access doors in accordance with the following requirements:

(i) In sprinklered buildings aisles shall be a minimum of 44 inches wide.

(ii) In non-sprinklered buildings aisles shall be a minimum of 96 inches wide.

(iii) The required aisle width shall extend from floor to ceiling.

(b) Indoor storage areas exceeding 2,500 square feet shall maintain aisles with access to exits and fire access doors in accordance with the following requirements:

(i) In non-sprinklered buildings aisles shall be a minimum of 96 inches wide.

(ii) In sprinklered buildings where the waste tire piles are accessible to the public aisles shall be a minimum of 96 inches wide.

(iii) In sprinklered buildings where the waste tire piles are not accessible to the public aisles shall be a minimum of 44 inches wide.

(iv) The required aisle width shall extend from floor to ceiling.

(c) For storage areas greater than 500 square feet the dimensions of the waste tire piles shall not exceed 50 feet in any direction, 30 feet in height, and 75,000 cubic feet in volume.

(d) No facility shall store waste tires in an area greater than 500,000 square feet.

(e) Facilities with an indoor storage area greater than 500 square feet shall be equipped with an automatic fire extinguishing system.

(f) Facilities with an indoor storage area greater than 2,500 square feet shall be equipped with smoke and heat vents.

(g) For purposes of determining the square footage, the aggregate of all tire storage areas within a building which are designated, intended, proposed or actually used for storing tires at a maximum height of more than six feet shall be used, unless such areas are separated from each other by 1-hour fire barriers that have been approved by the local fire code official. Openings in 1-hour fire barriers shall be protected by opening protectives having a 1-hour fire protection rating.

15.44.180 – Chapter 35— Fire Safety Requirements.

A. Section 3504.2.3 of the 2019 California Fire Code is hereby amended to read in its entirety:

3504.2.3 Duties. The sole duty of fire watch personnel shall be to watch for the occurrence of fire during and after hot work operations. Individuals designated to fire watch duty shall have fire-extinguishing equipment readily available and shall be trained in the use of such equipment. Individuals assigned to fire watch duty shall be responsible for extinguishing spot fires and communicating an alarm. Hot work conducted in areas with vertical and horizontal fire exposures that cannot be observed by a single individual shall have additional personnel assigned to fire watches to ensure that all exposed areas are monitored.

15.44.190 - Chapter 49—Requirements for Wildland-Urban Interface Fire Areas.

A. Section 4901.3 and 4901.4 are hereby added to read:

4901.3 Where applicable. These requirements shall apply to all areas within the City of Morgan Hill as set forth and delineated on the map entitled "Wildland-Urban Interface Fire Area" which map and all notations, references, data and other information shown thereon are hereby adopted and made a part of this Chapter. The map properly attested, shall be on file in the Office of the City Clerk.

4901.4 Exemptions. These requirements shall not apply to any land or water area acquired or managed for one or more of the following purposes or uses:

- (1) Habitat for endangered or threatened species, or any species that is a candidate for listing as an endangered or threatened species by the state or federal government.
- (2) Lands kept in a predominantly natural state as habitat for wildlife, plant, or animal communities.
- (3) Open space lands that are environmentally sensitive parklands.
- (4) Other lands having scenic values, as declared by the local agency, or by state or federal law.

BA. The following definition in Section 4902 of the 2016 California Fire Code is hereby amended to read in its entirety:

WILDLAND-URBAN INTERFACE FIRE AREA is a geographical area identified by the state as a "Fire Hazard Severity Zone" in accordance with the Public Resources Code Sections 4201 through 4204 and Government Code Sections 51175 through 51189, or other areas designated by the City to be at a significant risk from wildfires.

The Wildland-Urban Interface Fire Area shall be defined as all areas within the City of Morgan Hill as set forth and delineated on the map entitled "Wildland-Urban Interface Fire Area" which map and all notations, references, data and other information shown thereon are hereby adopted and made a part of this Chapter. The map properly attested, shall be on file in the Office of the City Clerk.

C. Section 4906 of the 2019 California Fire Code is hereby amended to read in its entirety:

4906.1 General. Hazardous vegetation and fuels shall be managed to reduce the severity of potential exterior wildfire exposure to buildings, to reduce the risk of fire spreading to buildings, and provide for safe access for emergency wildland fire equipment and civilian evacuation concurrently, as required by applicable laws and standards.

4906.1.1 Maintenance required. Maintenance is required to ensure conformance with these standards and measures, and to assure continued availability, access, and utilization, of the defensible space during a wildfire.

4906.1.2 Additional measures. No person subject to these regulations shall permit any fire hazard, as defined in this chapter, to exist on premises under their control, or fail to take immediate action to abate a fire hazard when requested to do so by the enforcing agency.

4906.1.3 Exemption. For the purposes of this chapter, vegetation removal or management, undertaken in whole or in part, for fire prevention or suppression purposes shall not be deemed to alter the natural condition of public property.

4906.2 Application. Buildings, roads, driveways, and structures located in the following areas shall maintain the required hazardous vegetation and fuel management:

1. All unincorporated lands designated by the State Board of Forestry and Fire Protection as State Responsibility Areas (SRA) including:

1.1. Moderate Fire Hazard Severity Zones

1.2. High Fire Hazard Severity Zones

1.3. Very-High Fire Hazard Severity Zones

2. Land designated as a Wildland Urban Interface Fire Area by the City of Morgan Hill.

4906.3 Requirements. Hazardous vegetation and fuels around all applicable buildings, roads, driveways, and structures, within these areas shall be maintained in accordance with the following laws and regulations:

1. Public Resources Code, Sections 4290 through 4296.

2. California Code of Regulations, Title 14, Division 1.5, Chapter 7.

3. California Government Code, Sections 51175 – 51189.

4. California Code of Regulations, Title 19, Division 1, Chapter 7, Subchapter 1.

5. Any local ordinance of the City of Morgan Hill.

B. Section 4906.2 of the 2016 California Fire Code is hereby amended to read in its entirety:

4906.2 Application. Buildings and structures located in the following areas shall maintain the required hazardous vegetation and fuel management:

- ~~1. All unincorporated lands designated by the State Board of Forestry and Fire Protection as State Responsibility Areas (SRA) including:

 - ~~1.1. Moderate Fire Hazard Severity Zones~~
 - ~~1.2. High Fire Hazard Severity Zones~~
 - ~~1.3. Very High Fire Hazard Severity Zones~~~~
- ~~2. Land designated as a Very High Fire Hazard Severity Zone or as a Wildland Urban Interface Fire Area by the City of Morgan Hill.~~

DC. Section 4907.4 of the 2019~~6~~ California Fire Code is hereby amended to read in its entirety:

4907.1 General. Defensible space will be maintained around all buildings and structures within the Wildland Urban Interface Fire Areas of Morgan Hill as required in Public Resources Code 4290, California Code of Regulations, Title 14, Division 1.5, Chapter 7, Government Code 51175 – 51189, this Chapter, and any local ordinance. Defensible space shall also be provided around water tank structures, water supply pumps and pump houses.

4907.2 Where required. Persons owning, leasing, controlling, operating or maintaining buildings or structures in the locally adopted Wildland-Urban Interface Fire Area and persons owning, leasing or controlling land adjacent to such buildings or structures, shall at all times:

1. Maintain effective defensible space by a maintaining a noncombustible zone within 5 feet of the structure.

2. Maintain effective defensible space by removing brush, flammable vegetation and combustible growth located within 30 feet of buildings or structures, but not beyond the property line.

2.1 Weeds, grass, vines or other growth that is capable of being ignited and endangering property, shall be cut down and removed. Grass shall not exceed 4 inches in height.

2.2. Remove any tree limbs located within 10 feet of a chimney.

2.3. Maintain any tree, scrub, or other plant overhanging or within 30 feet of any building, road, driveway, or property line, free of dead or dying wood.

2.4 Remove tree limbs located within 6' of ground level or 1/3 of plant height, whichever is less.

2.5. Maintain the roof of a building or structure free of leaves, needles or other vegetative materials.

2.6. Remove flammable vegetation a minimum of 10 feet around liquefied petroleum gas tanks/containers, water tanks, and small outbuildings.

2.7. Remove firewood, vegetative growth, and combustible materials from unenclosed spaces beneath buildings or structures, or on decks or under eaves, canopies or other projections or overhangs.

2.8. The storage of firewood and combustible material within the defensible space shall be located a minimum of 30 feet from structures and separated from the crown of trees by a minimum horizontal distance of 15 feet.

Exception: Firewood and combustible materials not for consumption on the premises shall be stored as approved by the Fire Code Official.

3. Maintain effective defensible space of 100 feet from each side and from the front and rear of the structure, but not beyond the property line, by removing brush, flammable vegetation and combustible growth.

- (a) Weeds, grass, vines or other growth that is capable of being ignited and endangering property, shall be cut down and removed. Grass shall not exceed 6 inches in height.
- (b) Dead and dying woody fuels within this zone shall be removed.
- (c) Loose surface litter within this zone shall be permitted to a depth of 3 inches.
- (d) Dead standing and downed trees within this zone shall be removed.

Exception: Grass and other vegetation located more than 30 feet from buildings or structures and less than 18 inches (457 mm) in height above the ground need not be removed where necessary to stabilize the soil and prevent erosion.

5. Maintain a firebreak by removing brush and clearing away all flammable vegetation or other combustible growth for a distance of not less than 30 feet on each side thereof or to the property line, whichever is nearer.

- (a) Weeds, grass, vines or other growth that is capable of being ignited and endangering property, shall be cut down and removed. Grass shall not exceed 4 inches in height.
- (b) Dead and dying woody fuels within this zone shall be removed.
- (c) Loose surface litter within this zone shall be permitted to a depth of 3 inches.

Exception: Single specimens of trees, ornamental vegetative fuels or cultivated ground cover, such as green grass, ivy, succulents or similar plants used as ground cover, provided they do not form a means of readily transmitting fire.

~~4907.1 General. Defensible space will be maintained around all buildings and structures in State Responsibility Area (SRA) as required in Public Resources Code 4290 and "SRA Fire Safe Regulations" California Code of Regulations, Title 14, Division 1.5, Chapter 7, Subchapter 2, Section 1270.~~

~~Buildings and structures within the Very High Fire Hazard Severity Zones of a Local Responsibility Area (LRA) shall maintain defensible space as outlined in Government Code 51175 -51189 and any local ordinance of the City of Morgan Hill.~~

~~Defensible space shall also be provided around water tank structures, water supply pumps and pump houses.~~

Persons owning, leasing, controlling, operating or maintaining buildings or structures in the locally adopted Wildland Urban Interface Fire Area but that are not within the Very High Fire Hazard Severity Zone and persons owning, leasing or controlling land adjacent to such buildings or structures, shall at all times:

1. ~~Maintain an effective defensible space by removing and clearing away flammable vegetation and combustible growth from areas within 30 feet (9144 mm) of such buildings or structures.~~

~~Exception: Single specimens of trees, ornamental shrubbery or similar plants used as ground covers, provided that they do not form a means of rapidly transmitting fire from the native growth to any structure.~~

2. ~~Maintain additional effective defensible space by removing brush, flammable vegetation and combustible growth located 30 feet to 100 feet (9144 mm to 30480 mm) when required by the fire code official due to steepness of terrain or other conditions that would cause a defensible space of only 30 feet (9144 mm) to be insufficient.~~

~~Exception: Grass and other vegetation located more than 30 feet (9144 mm) from buildings or structures and less than 18 inches (457 mm) in height above the ground need not be removed where necessary to stabilize the soil and prevent erosion.~~

3. ~~Remove portions of trees, which extend within 10 feet (3048 mm) of the outlet of a chimney.~~
4. ~~Maintain trees adjacent to or overhanging a building free of deadwood; and~~
5. ~~Maintain the roof of a structure free of leaves, needles or other dead vegetative growth.~~
6. ~~Remove flammable vegetation a minimum of 10 feet around liquefied petroleum gas tanks/containers.~~
7. ~~Firewood and combustible materials shall not be stores in unenclosed spaces beneath buildings or structures, or on decks or under eaves, canopies or other projections or overhangs. The storage of firewood and combustible material within the defensible space shall be located a minimum of 30 feet (6096 mm) from structures and separated from the crown of trees by a minimum horizontal distance of 15 feet (4572 mm).~~

~~Exception: Firewood and combustible materials not for consumption on the premises shall be stores as approved by the Fire Code Official.~~

8. ~~Clear areas within 10 feet (3048 mm) of fire apparatus access roads and driveways of non-fire resistive vegetation growth.~~

~~Exception: Grass and other vegetation located more than 30 feet (9144 mm) from buildings or structures and less than 18 inches (457 mm) in height above the ground need not be removed where necessary to stabilize the soil and prevent erosion.~~

ED. Section 4908 of the 20196 California Fire Code is hereby added to read:

SECTION 4908 - FIRE PROTECTION PLAN

4908.1 General. New developments and projects proposed within a locally adopted Wildland-Urban Interface Fire Area shall include a plan for the protection of the community from any

unreasonable risks associated with the effects of wildland and urban fires.

4908.2 Content. The plan shall be based upon a site-specific wildfire risk assessment that includes considerations of location, topography, aspect, flammable vegetation, climatic conditions and fire history. The plan shall address water supply, access, building ignition and fire-resistance factors, fire protection systems and equipment, defensible space and vegetation management, evacuation routes, peak load water supply requirements, and minimum road widths, as those items relate to identified fire hazards.

4908.3 Cost. The cost of fire protection plan preparation and review shall be the responsibility of the applicant.

4908.4 Plan Retention. The fire protection plan shall be retained by the fire code official.

~~4908.1 General. When required by the code official, a fire protection plan shall be prepared.~~

~~4908.2 Content. The plan shall be based upon a site-specific wildfire risk assessment that includes considerations of location, topography, aspect, flammable vegetation, climatic conditions and fire history. The plan shall address water supply, access, building ignition and fire-resistance factors, fire protection systems and equipment, defensible space and vegetation management.~~

~~4908.3 Cost. The cost of fire protection plan preparation and review shall be the responsibility of the applicant.~~

~~4908.4 Plan Retention. The fire protection plan shall be retained by the fire code official.~~

FE. Section 4909 of the 20196 California Fire Code is hereby added to read:

SECTION 4909 Access, Egress and Identification.

~~IGNITION SOURCE CONTROL~~ 4909.1 General. Road and street networks, whether public or private, shall provide for safe access for emergency firefighting equipment and civilian evacuation concurrently, and shall provide unobstructed traffic circulation during a wildfire emergency.

4909.2 Where required. Any person who owns, leases, controls, operates, or maintains lands in, upon, or adjoining a locally adopted Wildland-Urban Interface Fire, and persons owning, leasing or controlling land adjacent to buildings or structures within these areas, shall at all times do all of the following:

(a) Maintain all roads, driveways, turnarounds, turnouts, and roadway structures, crossing or bordering their lands at full original design width. In all cases, the minimum clear width and height dimensions described below shall be maintained. Trees, brush, and other vegetative growth, encroaching on or obstructing these dimensions shall be removed.

(b) Clear all flammable vegetation within 10 feet of all roads, driveways, turnarounds, turnouts, and roadway structures.

(i) Weeds, grass, vines, brush, or other growth that is capable of being ignited and endangering property or limiting access/egress during a fire, shall be cut down and removed. Grass generally shall not exceed 6 inches in height.

(ii) Maintain all trees, shrubs, or other plants within this zone free of dead or dying wood.

(iii) Dead and dying woody fuels within this zone shall be removed. Loose surface litter shall be permitted to a depth of 3 inches.

(iv) Dead standing and downed trees within this zone shall be removed.

Exception: Logs or stumps, when embedded in the soil, may be retained when isolated from other vegetation.

(v) Remove lower limbs of trees (prune) to at least 6 feet or the lower 1/3 branches for small trees.

(vi) All trees 3 inches or less in diameter at breast height (dbh) shall be removed with the exception of indigenous, native species. The removal of live trees over 3 inches dbh, should only occur:

1) when needed to remove adjacent dead trees;

2) to achieve tree/shrub vertical requirements; or

3) where deemed a specific liability or fire safety hazard by the authority having jurisdiction.

4909.3 Road Width. All two-way roads, and driveways serving more than 2 single family residential structures, shall have a minimum 20 foot unobstructed and continuous horizontal clearance, and a minimum 15 feet unobstructed and continuous vertical clearance.

4909.4 One-Way Roads. All one-way roads, and driveways serving 2 or fewer residential structures, shall have a minimum 12 foot unobstructed and continuous horizontal clearance, and a minimum 15 feet unobstructed and continuous vertical clearance.

4909.5 Gates. Gate entrances shall be at least 2 feet wider than the traffic lane(s) served by that gate. In all cases, the minimum clear horizontal width shall be 14 feet and the minimum clear vertical height shall be 15 feet.

(a) All gates providing access from a public road shall be located at least 30 feet from the intersecting roadway and shall open to allow a vehicle to stop without obstructing traffic on that road.

(b) Security gates shall not be installed without approval from authority having jurisdiction and where security gates are installed, they shall have an approved means of emergency operation.

(c) The security gates and their emergency operation shall be maintained at all times.

4909.6 Street and Road Signs. The numbers, letters, and symbols, used on street and road signs shall be a minimum 4 inches height and minimum .5 inch stroke, reflectorized, and contrasting with the background color of the sign. On a two-way street, signs shall be visible and legible from either direction of travel.

4909.7 Premises Identification. Address identification shall be plainly legible and visible from the street or road fronting the property. Lettering shall be Arabic numbers or alphabetical letters.

(a) On a two way street, addressing shall be visible and legible from either direction of travel from a distance of 100 feet.

(b) Where access is by means of a private road and the address identification cannot be viewed from the public way, a monument, pole, or other sign or means, shall be used to identify the address.

(c) The numbers, letters, and symbols, used for street address signs shall be a minimum 4 inches height and minimum .5 inch stroke, reflectorized, and contrasting with the background color of the sign.

~~4909.1 Fireworks. Fireworks shall not be used or possessed in the Wildland-Urban Interface Fire Area.~~

15.44.200 - Chapter 50—Hazardous Materials—General Provisions.

A. Section 5001.2.2.2 of the 2019⁹⁶ California Fire Code is hereby amended to read in its entirety:

5001.2.2.2 Health hazards. The material categories listed in this section are classified as health hazards. A material with a primary classification as a health hazard can also pose a physical hazard.

1. Highly toxic and toxic materials.
2. Corrosive materials.
3. Moderately toxic gas.
4. Other health hazards.

B. Section 5001.5.3 is hereby added to read:

5001.5.3 Hazardous materials business plan. Facilities that are required to submit a Hazardous Materials Business Plan (HMBP) as required by Health and Safety Code (HSC), Chapter 6.95, Sections 25500 through 25545, and Title 19, Division 2, Chapter 4, and facilities required to maintain a hazardous materials-related permit in accordance with Section 105.6 of this code, shall electronically submit a HMBP every year on or by the last day of the assigned month and no less frequently than that required by the HSC.

Exception: The following facilities shall electronically submit a HMBP at least once every three years on or by the last day of the assigned month and no less frequently than that required by the HSC.

1. Cell tower sites.
2. Facilities with no other hazardous materials permits other than a permit for carbon dioxide system used in beverage dispensing.
3. Dental offices with no other hazardous materials permits other than a permit for a fixed medical gas system and/or small quantity waste generator permit.

CB. Section 5003.1.3.1 of the 2019⁹⁶ California Fire Code is hereby added to read:

5003.1.3.1 Toxic, highly Toxic, moderately toxic gases and similarly used or handled materials. The storage, use, and handling of toxic, highly toxic and moderately toxic gases in amounts exceeding Table 6004.2 or 6004.3 shall be in accordance with this Chapter and Chapter 60 of the

California Fire Code. Any toxic, highly toxic or moderately toxic material that is used or handled as a gas or vapor shall be in accordance with the requirements for toxic, highly toxic or moderately toxic gases.

DC. Section 5003.1.5 of the 2019⁹⁶ California Fire Code is hereby added to read:

5003.1.5 Other health hazards. The storage, use, and handling of materials classified as other health hazards including carcinogens, irritants and sensitizers in amounts exceeding 810 cubic feet for gases, 55 gallons for liquids and 5,000 pounds for solids shall be in accordance with this Section 5003.

ED. Section 5003.1.6 of the 2019⁹⁶ California Fire Code is hereby added to read:

5003.1.6 Additional Spill Control and Secondary Containment Requirements. In addition to the requirements set forth in Section 5004.2. An approved containment system is required for any quantity of hazardous materials that are liquids or solids at normal temperature, and pressure (NTP) where a spill is determined to be a plausible event and where such an event would endanger people, property or the environment. The approved containment system may be required to include a combination of spill control and secondary containment meeting the design and construction requirements set forth in Section 5004.2.

~~5003.1.6 Spill control and secondary containment requirements. A containment system shall be required for all hazardous materials, which are liquids or solids at normal temperature, and pressure (NTP) where a spill is determined to be a plausible event and where such an event would endanger people, property or the environment. Construction shall be substantial, capable of safely and securely containing a sudden release without discharge. Design criteria shall be performance oriented and constructed of physically and chemically compatible materials to resist degradation and provide structural and functional integrity for a period of time reasonably necessary to ensure detection, mitigation, and repair of the primary system. Regardless of quantities, secondary containment shall also comply with Section 5004.2.~~

FE. Section 5003.2.2.1 of the 2019⁹⁶ California Fire Code is hereby amended to read in its entirety:

5003.2.2.1 Design and construction. Piping, tubing, valves, fittings and related components used for hazardous materials shall be in accordance with the following:

1. Piping, tubing, valves, fittings, and related components shall be designed and fabricated from materials compatible with the material to be contained and shall be of adequate strength and durability to withstand the pressure, structural and seismic stress, and exposure to which they are subject.
2. Piping and tubing shall be identified in accordance with ASME A13.1 and Santa Clara County Fire Chiefs Marking Requirements and Guidelines for Hazardous Materials and Hazardous Waste to indicate the material conveyed.
3. Readily accessible manual valves or automatic remotely activated fail-safe emergency shutoff valves shall be installed on supply piping and tubing at the following locations:
 - 3.1 The point of use.
 - 3.2 The tank, cylinder or bulk use.

4. Manual emergency shutoff valves and controls for remotely activated emergency shutoff valves shall be identified and the location shall be clearly visible accessible and indicated by means of a sign.
5. Backflow prevention or check valves shall be provided when the backflow of hazardous materials could create a hazardous condition or cause the unauthorized discharge of hazardous materials.
6. Where gases or liquids having a hazard ranking of Health hazard Class 3 or 4, Flammability Class 4, or Reactivity Class 4 in accordance with NFPA 704 are carried in pressurized piping above 15 pounds per square inch gauge (psig)(103 Kpa), an approved means of leak detection, emergency shutoff and excess flow control shall be provided. Where the piping originates from within a hazardous material storage room or area, the excess flow control shall be located within the storage room or area. Where the piping originates from a bulk source, the excess flow control shall be located as close to the bulk source as practical.

Exceptions:

1. Piping for inlet connections designed to prevent backflow.
2. Piping for pressure relief devices.
7. Secondary containment or equivalent protection from spills shall be provided for piping for liquid hazardous materials and for highly toxic and toxic corrosive gases above threshold quantities listed in Tables 6004.2 and 6004.3. Secondary containment includes but is not limited to double walled piping.

Exceptions:

1. Secondary containment is not required for toxic corrosive gases if the piping is constructed of inert materials.
2. Piping under sub-atmospheric conditions if the piping is equipped with an alarm and fail-safe-to-close valve activated by a loss of vacuum.
8. Expansion chambers shall be provided between valves whenever the regulated gas may be subjected to thermal expansion. Chambers shall be sized to provide protection for piping and instrumentation and to accommodate the expansion of regulated materials.

GF. Section 5003.2.2.2 of the 2019~~96~~ California Fire Code is hereby amended to read in its entirety:

5003.2.2.2 Additional regulation for supply piping for health hazard materials. Supply piping and tubing for gases and liquids having a health hazard ranking of 3 or 4 shall be in accordance with ASME B31.3 and the following:

1. Piping and tubing utilized for the transmission of toxic, highly toxic, or highly volatile corrosive liquids and gases shall have welded, or brazed connections throughout except for connections within an exhausted enclosure if the material is a gas, or an approved method of drainage or containment is provided for connections if the material is a liquid.
2. Piping and tubing shall not be located within corridors, within any portion of a means of egress required to be enclosed in fire-resistance-rated construction or in concealed spaces in areas not classified as Group H Occupancies.

Exception: Piping and tubing within the space defined by the walls of corridors and the floor or roof above or in concealed space above other occupancies when installed in accordance with the California Building Code as required for Group H, Division 5 Occupancies.

3. All primary piping for toxic, highly toxic and moderately toxic gases shall pass a helium leak test of 1×10^{-9} cubic centimeters/second where practical, or shall pass testing in accordance with an approved, nationally recognized standard. Tests shall be conducted by a qualified "third party" not involved with the construction of the piping and control systems.

HG. Section 5003.3.1 of the 2019~~96~~ California Fire Code is hereby amended to read in its entirety:

5003.3.1 Unauthorized discharges. In the event ~~When~~ hazardous materials are released in quantities reportable under state, federal or local regulations or when there is release or a threatened release that presents a threat to health, property or the environment, the fire code official shall be notified immediately in an approved manner and the following procedures required in accordance with Sections 5003.3.1.1 through 5003.3.1.4.

IH. Section 5003.5.2 of the 2019~~96~~ California Fire Code is hereby added to read:

5003.5.2 Ventilation ducting. ~~D~~Product conveying ducts for venting hazardous materials operations shall be labeled with the hazard class of the material being vented and the direction of flow.

J. Section 5003.5.3 of the 2019~~96~~ California Fire Code is hereby added to read:

5003.5.3 "H" occupancies. In "H" occupancies, all piping and tubing may be required to be identified when there is any possibility of confusion with hazardous materials transport tubing or piping. Flow direction indicators are required.

KJ. Section 5003.9.11 of the 2019~~96~~ California Fire Code is hereby added to read:

5003.9.11 Fire extinguishing systems for workstations dispensing, handling, or using hazardous materials. Combustible and non-combustible workstations, which dispense, handle or use hazardous materials, shall be protected by an approved automatic fire extinguishing system in accordance with Section 2703.10.

Exception: Internal fire protection is not required for Biological Safety Cabinets that carry NSF/ANSI certification where quantities of flammable liquids in use or storage within the cabinet do not exceed 500 ml.

L. Section 5003.4.10.4.3 of the 2019 California Fire Code is hereby amended to read in its entirety:

5003.10.4.3 Highly toxic, toxic, and moderately toxic, gases shall be limited to a container of a maximum water capacity of 1 lb.

MK. Section 5004.2.1 of the 2019~~96~~ California Fire Code is hereby amended to read in its entirety:

5004.2.1 Spill control for hazardous material liquids. Rooms, buildings or areas used for storage of hazardous material liquids shall be provided with spill control to prevent the flow of liquids to

adjoining areas. Floors in indoor locations and similar surfaces in outdoor locations shall be constructed to contain a spill from the largest single vessel by one of the following methods:

1. Liquid-tight sloped or recessed floors in indoor locations or similar areas in outdoor locations.
2. Liquid-tight floors in indoor and outdoor locations or similar areas provided with liquid-tight raised or recessed sills or dikes.
3. Sumps and collection systems, including containment pallets in accordance with Section 5004.2.3.-
4. Other approved engineered systems.

Except for surfacing, the floors, sills, dikes, sumps and collection systems shall be constructed of noncombustible material, and the liquid-tight seal shall be compatible with the material stored. When liquid-tight sills or dikes are provided, they are not required at perimeter openings having an open-grate trench across the opening that connects to an approved collection system.

~~L. Section 5004.2.2 of the 2016 California Fire Code is hereby amended to read in its entirety:~~

~~5004.2.2 Secondary containment for hazardous material liquids and solids. Buildings, rooms or areas used for the storage of hazardous materials liquids or solids shall be provided with secondary containment in accordance with this Section.~~

~~M. Table 5004.2.2 of the 2016 California Building Code is hereby deleted.~~

~~N.~~ Section 5004.2.2.2 of the 20196 California Fire Code is hereby amended to read in its entirety:

5004.2.2.2 Incompatible materials. Incompatible materials shall be separated from each other in independent secondary containment systems.

~~O. Section 5004.2.3 of the 2019 California Fire Code is hereby amended to read in its entirety:~~

5004.2.3 Containment pallets. Combustible containment pallets shall not be used inside buildings to comply with Section 5004.2 where the individual container capacity exceeds 55 gallons (208 L) or an aggregate capacity of multiple containers exceeds 1,000 gallons (3785 L) for liquids or where the individual container capacity exceeds 550 pounds (250 kg) or an aggregate of multiple containers exceeds 10,000 pounds (4540 kg) for solids.

Where used as an alternative to spill control and secondary containment for outdoor storage in accordance, with the exception in Section 5004.2, containment pallets shall comply with all of the following:

1. A liquid-tight sump accessible for visual inspection shall be provided;
2. The sump shall be designed to contain not less than 66 gallons (250L);
3. Exposed surfaces shall be compatible with material stored;
4. Containment pallets shall be protected to prevent collection of rainwater within the sump of the containment pallet.

~~O. Chapter 56 of the 2016 California Fire Code is hereby deleted. **15.44.210 – Chapter 56 – Explosives and Fireworks.**~~

A. Section 5601.1.3 of the 2019 California Fire Code is hereby amended to read in its entirety:

5601.1. 3 Fireworks. The possession, manufacture, storage, sale, handling, and use of fireworks, including those fireworks classified as Safe and Sane by the California State Fire Marshal, are prohibited.

Exception: The use of fireworks for fireworks displays as allowed in Section 5608.

15.44.2210 - Chapter 57—Flammable and Combustible Liquids.

A. Section 5704.2.7.5.8 of the 2019⁹⁶ California Fire Code is hereby amended to read in its entirety:

5704.2.7.5.8 Overfill prevention. An approved means or method in accordance with Section 5704.2.9.7.56 shall be provided to prevent the overfill of all Class I, II and IIIA liquid storage tanks. Storage tanks in refineries, bulk plants or terminals regulated by Sections 5706.4 or 5706.7 shall have overfill protection in accordance with API 2350.

Exception: Outside aboveground tanks with a capacity of 1320 gallons (5000 L) or less need only comply with Section 5704.2.9.7.5.1 (1.1)

An approved means or method in accordance with Section 5704.2.9.7.56 shall be provided to prevent the overfilling of Class IIIB liquid storage tanks connected to fuel-burning equipment inside buildings.

B. Section 5704.2.7.5.9 of the 2019⁹⁶ California Fire Code is hereby added to read:

5704.2.7.5.9 Automatic filling of tanks. Systems that automatically fill flammable or combustible liquid tanks shall be equipped with overfill protection, approved by the fire code official, that sends an alarm signal to a constantly attended location and immediately stops the filling of the tank. The alarm signal and automatic shutoff shall be tested on an annual basis and records of such testing shall be maintained on-site for a period of five (5) years.

15.44.230 – Chapter 58 — Flammable gases and flammable cryogenic fluids.

A. Section 5803.3 of the 2019 California Fire Code is hereby added to read:

5803.3 Mobile fueling of hydrogen vehicles. Mobile fueling of hydrogen vehicles is prohibited unless approved by the fire code official.

B. Section 5809.3.4 of the 2019 California Fire Code is hereby amended to read in its entirety:

5809.3.4 Site plan. For other than emergency roadside service, a site plan shall be developed for each location at which mobile gaseous hydrogen fueling occurs. The site plan shall be in sufficient detail to indicate: all buildings, structures, lot lines, property lines and appurtenances on site and their use and function, and the scale of the site plan.

~~15.44.220—Chapter 60—Highly Toxic and Toxic Materials.~~

A.—Section 6001.3 of the 2016 California Fire Code is hereby added to read:

~~6001.3 Moderately toxic gases with a LC50 equal to or less than 3000 parts per million. Notwithstanding the hazard class definition in Section 3702, moderately toxic gases with an LC50 less than 3000 parts per million shall additionally comply with the requirements for toxic gases in Section 6004 of this Code.~~

B.—The title of Section 6004 of the 2016 California Fire Code to is hereby amended read in its entirety:

~~SECTION 6004 — HIGHLY TOXIC, TOXIC, AND MODERATELY TOXIC COMPRESSED GASES, INCLUDING THOSE USED AS REFRIGERANTS.~~

C.—Section 6004.1.4 of the 2016 California Fire Code is hereby added to read:

~~6001.1.4 Automatic shut-off valve. An automatic shut-off valve, which is of a fail-safe to close design, shall be provided to shut off the supply of highly toxic gases for any of the following:~~

- ~~1.—Activation of a manual fire alarm system.~~
- ~~2.—Activation of the gas detection system.~~
- ~~3.—Failure of emergency power.~~
- ~~4.—Failure of primary containment.~~
- ~~5.—Seismic activity.~~
- ~~6.—Failure of required ventilation.~~
- ~~7.—Manual activation at an approved remote location.~~

D.—Section 6004.1.5 of the 2016 California Fire Code is hereby added to read:

~~6004.1.5 Emergency Control Station. Signals from emergency equipment used for highly toxic gases shall be transmitted to an emergency control station or other approved monitoring station, which is continually staffed by trained personnel.~~

E.—Section 6004.1.6 of the 2016 California Fire Code is hereby added to read:

~~6004.1.6 Maximum threshold quantity. Toxic gases stored or used in quantities exceeding the maximum threshold quantity in a single vessel per control area or outdoor control area shall comply with the additional requirements for highly toxic gases of Section 3704 of this Code.~~

~~Moderately toxic gases stored or used in quantities exceeding the maximum threshold quantity in a single vessel per control area or outdoor control area shall comply with the additional requirements for toxic gases of Section 6004 of this Code.~~

F.—Section 6004.1.7 of the 2016 California Fire Code is hereby added to read:

~~6004.1.7 Reduced flow valve. All containers of materials other than lecture bottles containing Highly Toxic material and having a vapor pressure exceeding 29 psia shall be equipped with a reduced flow valve when available. If a reduced flow valve is not available, the container shall be used with a flow limiting device. All flow limiting devices shall be part of the valve assembly and visible to the eye when possible; otherwise, they shall be installed as close as possible to the cylinder source.~~

G.—Section 6004.1.8 of the 2016 California Fire Code is hereby added to read:

~~6004.1.8 Fire extinguishing systems. Buildings and covered exterior areas for storage and use areas of materials regulated by this Chapter shall be protected by an automatic fire sprinkler system in accordance with NFPA 13. The design of the sprinkler system for any room or area where highly toxic, toxic and moderately toxic gases are stored, handled or used shall be in accordance with Section 5004.5.~~

H.—Section 6004.1.9 of the 2016 California Fire Code is hereby added to read:

~~6004.1.9 Local gas shut off. Manual activation controls shall be provided at locations near the point of use and near the source, as approved by the fire code official. The fire code official may require additional controls at other places, including, but not limited to, the entry to the building, storage or use areas, and emergency control stations.~~

~~Manual activated shut-off valves shall be of a fail-safe-to-close design.~~

I.—Section 6004.1.10 of the 2016 California Fire Code is hereby added to read:

~~6004.1.10 Exhaust ventilation monitoring. For highly toxic gases and toxic gases exceeding threshold quantities, a continuous monitoring system shall be provided to assure that the required exhaust ventilation rate is maintained. The monitoring system shall initiate a local alarm. The alarm shall be both visual and audible and shall be designed to provide warning both inside and outside of the interior storage, use, or handling area.~~

J.—Section 6004.1.11 of the 2016 California Fire Code is hereby added to read:

~~6004.1.11 Emergency response plan. If the preparation of an emergency response plan for the facility is not required by any other law, responsible persons shall prepare, or cause to be prepared, and filed with the fire code official, a written emergency response plan. If the preparation of an emergency response plan is required by other law, a responsible person shall file a copy of the plan with the fire code official.~~

K.—Section 6004.1.12 of the 2016 California Fire Code is hereby added to read:

~~6004.1.12 Cylinder leak testing. Cylinders shall be tested for leaks immediately upon delivery and again immediately prior to departure. Testing shall be approved by the fire code official in accordance with appropriate nationally recognized industry standards and practices, if any. Appropriate remedial action shall be immediately undertaken when leaks are detected.~~

L.—Section 6004.1.13 of the 2016 California Fire Code is hereby added to read:

~~6004.1.13 Inert gas purge system. Gas systems shall be provided with dedicated inert gas purge systems. A dedicated inert gas purge system may be used to purge more than one gas, provided the gases are compatible. Purge gas systems inside buildings shall be located in an approved gas cabinet unless the system operates by vacuum demand.~~

M.—Section 6004.1.14 of the 2016 California Fire Code is hereby added to read:

~~6004.1.14 Seismic shutoff valve. An automatic seismic shut-off valve, which is of a fail-safe to close design, shall be provided to shutoff the supply of highly toxic, toxic and moderately toxic gases with an LC₅₀ less than 3000 parts per million upon a seismic event within 5 seconds of a horizontal sinusoidal oscillation having a peak acceleration of 0.3G (1.47m/sec²) and a period of 0.4 seconds.~~

N.—Section 6004.2 of the 2016 California Fire Code is hereby amended to read in its entirety:

~~6004.2 Indoor storage and use. The indoor storage or use of highly toxic, toxic and moderately toxic compressed gases shall be in accordance with Sections 6004.2.1 through 6004.2.2.10.3. The threshold quantity for highly toxic, toxic and moderately toxic gases for indoor storage and use are set forth in Table 6004.2.~~

O.—Table 6004.2 of the 2016 California Fire Code is hereby added to read:

Threshold Quantities for Highly Toxic, Toxic and Moderately Toxic Gases for Indoor Storage and Use	
Highly Toxic	0
Toxic	10 cubic feet
Moderately Toxic	20 cubic feet

-

P.—Section 6004.2.1 of the 2016 California Fire Code is hereby amended to read in its entirety:

~~6004.2.1 Applicability. The applicability of regulations governing the indoor storage and use of highly toxic, toxic, and moderately toxic compressed gases shall be as set forth in Sections 6004.2.1.1 through 6004.2.1.3.~~

Q.—Section 6004.2.1.1 of the 2016 California Fire Code is hereby amended to read in its entirety:

~~6004.2.1.1 Quantities not exceeding the maximum allowable quantity per control area. The indoor storage or use of highly toxic, toxic and moderately toxic gases in amounts exceeding the maximum allowable quantity per control area set forth in Table 6004.2 shall be in accordance with Sections 5001, 5003, 6001, 6004.1 and 6004.2.~~

R.—Section 6004.2.2 of the 2016 California Fire Code is hereby amended to read in its entirety:

~~6004.2.2 General indoor requirements. The general requirements applicable to the indoor storage and use of highly toxic and toxic compressed gases shall be in accordance with Sections 6004.2.2.1 through 6004.2.2.10.4.~~

~~Moderately toxic gases with an LC₅₀ less than 3000 parts per million shall comply with the requirements for toxic gases in Sections 6004.2.2.1 through 6004.2.2.10.4.~~

~~All other moderately toxic gases exceeding the threshold quantity shall comply with the requirements for toxic gases in Sections 6004.2.2.1 through 6004.2.2.7.~~

S.—Section 6004.2.2.7 of the 2016 California Fire Code is hereby amended to read in its entirety:

~~6004.2.2.7 Treatment systems. The exhaust ventilation from gas cabinets, exhausted enclosures, gas rooms and local exhaust systems required in Section 6004.2.2.4 and 6004.2.2.5 shall be directed to a treatment system. The treatment system shall be utilized to handle the accidental release of gas and to process exhaust ventilation. The treatment system shall be designed in accordance with Sections 6004.2.2.7.1 through 6004.2.2.7.5 and Section 510 of the California Mechanical Code.~~

Exceptions:

1.— ~~Highly toxic, toxic and moderately toxic gases storage. A treatment system is not required for cylinders, containers and tanks in storage when all of the following are provided:~~

1.1.— ~~Valve outlets are equipped with gas-tight outlet plug or caps.~~

1.2.— ~~Hand wheel operated valves have handles secured to prevent movement.~~

1.3.— ~~Approved containment vessels or containment systems are provided in accordance with Section 6004.2.2.3.~~

T.— ~~Section 6004.2.2.10.2 of the 2016 California Fire Code is hereby amended to read in its entirety:~~

~~6004.2.2.10.2 Alarms. The gas detection system shall initiate a local alarm and transmit a signal to a constantly attended control station when a short-term hazard condition is detected. The alarm shall be both visual and audible and shall provide warning both inside and outside the area where the gas is detected. The audible alarm shall be distinct from all other alarms.~~

U.— ~~Section 6004.3 of the 2016 California Fire Code is hereby amended to read in its entirety:~~

~~6004.3 Outdoor storage and use. The outdoor storage or use of highly toxic, toxic and moderately toxic compressed gases shall be in accordance with Sections 6004.3.1 through 6004.3.4. The threshold quantity for highly toxic, toxic and moderately toxic gases for outdoor storage and use are set forth in Table 6004.3.~~

V.— ~~Table 6004.3 of the 2016 California Fire Code is hereby added to read:~~

Threshold Quantities for Highly Toxic, Toxic and Moderately Toxic Gases for Outdoor Storage and Use	
Highly Toxic	0
Toxic	10 cubic feet
Moderately Toxic	20 cubic feet

-

W.— ~~Section 6004.3.1 of the 2016 California Fire Code is hereby amended to read in its entirety:~~

~~6004.3.1 Applicability. The applicability of regulations governing the outdoor storage and use of highly toxic, toxic, and moderately toxic compressed gases shall be as set forth in Sections 6004.3.1.1 through 6004.3.1.3.~~

X.— ~~Section 6004.3.1.1 of the 2016 California Fire Code is hereby amended to read in its entirety:~~

~~6004.3.1.1 Quantities not exceeding the maximum allowable quantity per control area. The outdoor storage or use of highly toxic and toxic gases in amounts exceeding the threshold quantity per control area set forth in Table 6004.3 shall be in accordance with Sections 5001, 5003, 6001, 6004.1 and 6004.3.~~

~~Moderately toxic gases with an LC50 less than 3000 parts per million in amounts exceeding the threshold quantity in Table 6004.3 shall comply with the requirements for toxic gases in Sections 5001, 5003, 6001, 6004.1 and 6004.3.2.1 through 6004.3.2.4.~~

~~Moderately toxic gases in amounts exceeding the threshold quantity in Table 6004.3 shall comply with the requirements for toxic gases in Sections 5001, 5003, 6001, 6004.1 and 6004.3.2.1 through 6004.3.2.4.~~

~~Y. Section 6004.3.3 of the 2016 California Fire Code is hereby amended to read in its entirety:~~

~~6004.3.3 Outdoor storage weather protection for portable tanks and cylinders. Weather protection in accordance with Section 5004.13 shall be provided for portable tanks and cylinders located outdoors and not within gas cabinets or exhausted enclosures.~~

~~The storage area shall be equipped with an approved automatic sprinkler system in accordance with Section 5004.5.~~

15.44.2430 - Chapter 64—Pyrophoric Materials.

A. Section 6405.3.1 of the 2019⁹⁶ California Fire Code is hereby added to read:

6405.3.1 Silane distribution systems automatic shutdown. Silane distribution systems shall automatically shut down at the source upon activation of the gas detection system at levels above the alarm level and/or failure of the ventilation system for the silane distribution system.

15.44.250 – Appendix B

A. Table B105.2 of the 2019 California Fire Code is hereby amended to read in its entirety:

TABLE B105.2

REQUIRED FIRE FLOW FOR BUILDINGS OTHER THAN ONE- AND TWO-FAMILY DWELLINGS, GROUP R-3 AND R-4 BUILDINGS AND TOWNHOUSES

<u>AUTOMATIC SPRINKLER SYSTEM</u> (Design Standard)	<u>MINIMUM FIRE FLOW</u> (gallons per minute)	<u>FLOW DURATION</u> (hours)
<u>No automatic sprinkler system</u>	<u>Value in Table B105.1(2)</u>	<u>Duration in Table B105.1(2)</u>
<u>Section 903.3.1.1 of the California Fire Code</u>	<u>50% of the value in Table B105.1(2)a</u>	<u>Duration in Table B105.1(2) at the reduced flow rate</u>
<u>Section 903.3.1.2 of the California Fire Code</u>	<u>50% of the value in Table B105.1(2)a</u>	<u>Duration in Table B105.1(2) at the reduced flow rate</u>

For SI: 1 gallon per minute = 3.785 L/m.

a. The reduced fire flow shall be not less than 1,000 gallons per minute.

b. The reduced fire flow shall be not less than 1,500 gallons per minute.

15.44.260 - Violation.

A. A violation of the code adopted by this chapter occurs when a person:

1. Fails to comply with this code;
 2. Violates or fails to comply with any order made under this code;
 3. Builds in violation of any detailed statement of specifications or plans submitted and approved thereunder or any certificate or permit issued thereunder and from which no appeal has been taken; or
 4. Fails to comply with such an order as affirmed or modified by the city council or by a court of competent jurisdiction, within the time fixed in this chapter.
- B. Such person may be liable severally and for each and every such violation and noncompliance respectively.
- C. The imposition of one penalty for any violation shall not excuse the violation or permit it to continue and all such persons shall be required to correct or remedy such violations or defects within a reasonable time.
- D. The application of the above penalty shall not be held to prevent the enforced removal of prohibited conditions.

SECTION 9. Sections 15.64.040 of Chapter 15.64 (Wood-Burning Appliances) of Title 15 (Buildings and Construction) of the Morgan Hill Municipal Code is hereby amended to read (additions in underline, deletions in ~~strikeout~~):

15.64.040 - Application.

- A. Only ~~gas fireplaces, E.P.A.~~ pellet-fueled wood heaters, ~~and~~ E.P.A. certified wood-burning appliances ~~or masonry fireplaces,~~ may be installed. ~~in any new construction.~~
- B. This chapter does not prohibit the repair, reconstruction or replacement of an existing wood-burning appliance or wood-burning appliances that are designed primarily for food preparation.

Section 10. References to Prior Code. Unless superseded and expressly repealed, references in City forms, documents and regulations to the chapters and sections of the former Morgan Hill Building Code 2016, shall be construed to apply to the corresponding provisions contained within the Morgan Hill Building Code 2019. Ordinance No. 2221 of the City of Morgan Hill and all other ordinances or parts of ordinances in conflict herewith are hereby superseded and expressly repealed.

Section 11. CEQA. The City Council finds, pursuant to Title 14 of the California Code of Regulations, Section 15061(b)(3), that the adoption of this Ordinance is exempt from the requirements of the California Environmental Quality Act (CEQA) because it can be seen with certainty that there is no potential for causing a significant effect on the environment.

Section 12. Severability. Should any provision of this ordinance be deemed unconstitutional or unenforceable by a court of competent jurisdiction, such provision shall be severed from the ordinance, and such severance shall not affect the remainder of the ordinance.

Section 14. Effective Date; Publication. This Ordinance shall take effect on January 1, 2020.

The City Clerk is hereby directed to publish this Ordinance or a summary thereof pursuant to Government Code Section 36933.

This ordinance was introduced at a meeting of the City Council held on the ____ day of ____, 20__, and adopted at a meeting held on the ____ day of ____, 20__, and said ordinance was duly passed and adopted in accordance with law by the following vote:

AYES: COUNCIL MEMBERS:

NOES: COUNCIL MEMBERS:

ABSTAIN: COUNCIL MEMBERS:

ABSENT: COUNCIL MEMBERS:

ATTEST:

APPROVED:

IRMA TORREZ, City Clerk

RICHARD CONSTANTINE, Mayor

CERTIFICATE OF THE CITY CLERK

I, IRMA TORREZ, CITY CLERK OF THE CITY OF MORGAN HILL, CALIFORNIA, do hereby certify that the foregoing is a true and correct copy of Ordinance No. ____, New Series, adopted by the City Council of the City of Morgan Hill, California at their regular meeting held on the ____ day of ____, 2019.

WITNESS MY HAND AND THE SEAL OF THE CITY OF MORGAN HILL.

DATE: _____

IRMA TORREZ, City Clerk

ORDINANCE NO. _____, NEW SERIES

AN ORDINANCE OF THE CITY OF MORGAN HILL AMENDING CHAPTERS 15.08 (BUILDING CODE), 15.12 (ELECTRICAL CODE), 15.16 (MECHANICAL CODE), 15.20 (PLUMBING CODE), 15.24 (HOUSING CODE), 15.25 (PROPERTY MANAGEMENT), 15.40 (BUILDING SECURITY), 15.44 (FIRE CODE), AND 15.64 (WOOD-BURNING APPLIANCES) TO ADOPT BY REFERENCE THE 2019 CALIFORNIA STATE BUILDING STANDARDS CODES KNOWN AND DESIGNATED AS CALIFORNIA CODE OF REGULATIONS, TITLE 24 AND TO AMEND, DELETE, AND ADD CERTAIN OTHER BUILDING AND CONSTRUCTION STANDARDS AND TO MAKE MINOR CHANGES TO SECTIONS IN CHAPTERS 15.40 (BUILDING SECURITY) AND 15.64 (WOOD-BURNING APPLIANCES) OF TITLE 15 (BUILDING AND CONSTRUCTION) OF THE MORGAN HILL MUNICIPAL CODE

WHEREAS, Health and Safety Code Section 17922 requires that the State adopt building standards and rules and regulations (“State Building Standards Code”) and that such State Building Standards Code impose substantially the same requirements as are contained in the most recent editions of specified uniform industry codes; and

WHEREAS, Health and Safety Code Section 17958 allows the City Council to adopt ordinances or regulations which impose the same requirements as the State Building Standards Code or make changes or modifications to the State Building Standards Code upon express findings that that such modifications or changes are reasonably necessary because of local climatic, geological, or topographical conditions; and

WHEREAS, the Building Standards, along with any changes or modifications made by the City Council, become effective 180 days after publication by the California Building Standards Commissions; and

WHEREAS, the City Council desires to adopt the 2019 State Building Standards Code, including the California Building Code, the California Electrical Code, the California Mechanical Code, the California Plumbing Code, and the California Fire Code, as published by the California Building Standards Commission, along with changes and modifications reasonably necessary because of local climatic, geological, or topographical conditions, based on findings set forth in this ordinance; and

WHEREAS, the City Building Official and the Fire Department have determined that local amendments to the State Building Standards Codes are necessary due to unique conditions that exist in the City of Morgan Hill; and

WHEREAS, amendments related to fire and life-safety contained in the 2019 State Building Standards Code as recommended by the City Building Official and the Fire Department are hereby found to be reasonably necessary due to the following local conditions, along with additional express findings that are already on file with the California Building Standards Commission:

A. Climatic Conditions

Santa Clara County and the City of Morgan Hill are located in a semi-arid Mediterranean type climate which predisposes all fuels to rapid ignition and spread of fire. Hot, dry winds and low humidity are common to all areas within the City of Morgan Hill and Santa Clara County in general. Winter rains promote the growth of grass and brush. This vegetation presents heavy dry fuel loads in the summer months. These conditions are conducive to the ready ignition, propagation, and spread of grass, brush, and structure fires. These conditions, which can cause small brush fires that spread quickly, are a contributing factor to the high fire danger in the area and create the need for an increased level of fire protection. This added protection will supplement normal fire department response and provide immediate protection for life and safety of multiple occupancy occupants during fire occurrences.

B. Topographic Conditions

The topography of Morgan Hill has hillside homes on each side of the City with long response times for safety equipment. The City foothills cause many problems for firefighters, including long response times, inadequate water supply, and unlimited fuel. Fog, heavy rains, mud slides, and earthquakes are other common occurrences which negatively affect the ability of the City's public safety resources to respond to emergency situations. The City is in a Category D seismic activity classification. Many traffic corridors such as Highway 101, Monterey Road, Union Pacific Railroad, related bridges, underpasses, and crossings are subject to obstruction in the event of an earthquake, traffic accident, hazardous material spill, or other disaster.

C. Geographic Conditions

1. Santa Clara County and the City of Morgan Hill are located within the seismically active San Francisco Bay region. The significant earthquakes in the region are generally associated with the crustal movements along well-defined, active fault zones. The nearest known active faults are the San Andreas Fault, approximately 12 miles southwest of Morgan Hill and the Calaveras Fault, approximately one mile northeast. Both faults have produced major earthquakes in the past and have estimated maximum credible Richter magnitudes of 8.3 and 7.3, respectively. The Sargent-Berrocal Fault, a potentially active fault, lies approximately ten miles away and has an estimated maximum credible Richter magnitude of 7.3. The Coyote Creek Fault is located in Morgan Hill and is classified as potentially active as well. In addition, several unnamed faults traverse the western slopes of the upland areas.
2. Regional planning for reoccurrence is recommended by the State Department of Conservation. The October 17, 1989 Santa Cruz earthquake resulted in only one major San Francisco fire in the Marina district but, when combined with the 34 other fires and over 500 responses, the fire department was taxed to its full capabilities.

The Marina fire was difficult to contain because mains supplying water to the district burst during the earthquake. If more fires had been ignited by the earthquake, it would have been difficult for the fire department to contain them. Experts predict a major earthquake in our area. This situation creates the need for both additional fire protection measures and automatic on-site fire protection for building occupants since a multitude of fires may result from breakage of gas lines and electric lines as a result of an earthquake.

3. Traffic and circulation congestion presently existing in the City of Morgan Hill often places fire department response time to fire occurrences at risk. This condition will be exacerbated by any major disaster, including any earthquake where damage to the highway system will occur. This condition makes the need for additional on-site protection for property occupants necessary.
4. The City of Morgan Hill is located in an area subject to a climatic condition of high winds and low humidity. This combination of events creates an environment which is conducive to rapidly spreading fires. Control of such fires requires rapid response. Obstacles generated by a strong wind, such as fallen trees, streetlights, and utility poles, greatly impact the response time to reach an incident scene.
5. The City of Morgan Hill is located in the middle of a seismically active area. The viability of the public water system would be questionable at best after a major seismic event. A severe seismic event has the potential to negatively impact any rescue or fire suppression activities because it is likely to create obstacles similar to those indicated under the high wind section above. With the probability of strong aftershocks, there exists a need to provide increased protection for anyone on upper floors.
6. The City of Morgan Hill is located approximately sixteen miles from the ocean. The City's typical ground water level is between ten and twenty feet. This condition makes the City more prone to subsidence issues than most inland communities; and

WHEREAS, the 2019 Building Standards corrects unnecessary and duplicative provisions of the Municipal Code; and

WHEREAS, the 2018 International Property Maintenance Code corrects unnecessary duplicative provisions of the Municipal Code Housing Code Chapter (Chapter 15.24) and;

WHEREAS, minor changes are also proposed by the Building Official to two sections in the Building Security Chapter (Chapter 15.40) and one section in the Wood-Burning Appliance Chapter (Chapter 15.64) of the Morgan Hill Municipal Code.

THE CITY COUNCIL OF THE CITY OF MORGAN HILL DOES HEREBY ORDAIN AS FOLLOWS:

SECTION 1. Chapter 15.08 (Building Code) of Title 15 (Buildings and Construction) of the Morgan Hill Municipal Code is hereby amended to read (additions in underline, deletions in ~~strikeout~~):

"Chapter 15.08 - BUILDING CODE

Sections:

- 15.08.010 Adoption of the 2019 California Building Code and the 2019 California Residential Code, and other parts of the State Buildings Standards Code.**
- 15.08.020 Short title.**
- 15.08.030 Organization, enforcement, fees, and inspections.**
- 15.08.040 Additions, amendments, and deletions.**
- 15.08.050 Sections 1505.1.4 and R902.1.4 amended – Construction of roof coverings in wildland-urban interface areas.**
- 15.08.060 Building over utility easements.**
- 15.08.070 Section R313.1 and R313.2 amended – Automatic Fire Sprinklers Systems**
- 15.08.080 Section 2308.6.3 and R602.10.4 , amended – Braced wall panel methods (gypsum board and Portland cement plaster).**
- 15.08.090 Section 1907.1 and R506.1 amended - Minimum slab provisions.**
- 15.08.100 Violation—Penalty.**

15.08.010 - Adoption of the 2019 California Building Code, the 2019 California Residential Code and other parts of the State Building Standards Code.

There is hereby adopted by reference that certain code known and designated as the California Code of Regulations, Title 24, Parts 1, 2, 2.5, 3, 4, 5, 6, 7, 8, 10, 11, and 12 as published by the California Building Standards Commission, as further described and including the following:

- 2019 California Administrative Code (California Code of Regulations Title 24, Part 1).
- 2019 California Building Code (California Code of Regulations Title 24, Part 2) based on the 2018 International Building Code; as prepared by the International Code Council, and as amended by the State of California.
- 2019 California Residential Code (California Code of Regulations Title 24, Part 2.5) based on the 2018 International Residential Code; as prepared by the International Code Council, and as amended by the State of California.
- 2019 California Energy Code (California Code of Regulations Title 24, Part 6).
- 2019 California Historical Building Code (California Code of Regulations Title 24, Part 8).
- 2019 California Existing Building Code (California Code of Regulations Title 24, Part 10) based on the 2018 International Existing Building Code; as prepared by the International Code Council, and as amended by the State of California.
- 2019 California Green Building Standards Code (California Code of Regulations Title 24, Part 11).
- 2019 California Referenced Standards Code (California Code of Regulations Title 24, Part 12).

Such code shall include those sections requiring enforcement by the Morgan Hill Building Department, and, as further amended by the City of Morgan Hill, provisions intended to address local climatic, geologic, and topographic conditions as permitted by state law. Adoption of said code shall include the adoption of Appendices B, I, and J, including Division II Scope and Administration, contained in the 2019 California Building Code.

Such code shall be and become the City of Morgan Hill Building Code regulating the erection, construction, alteration, repair, relocation, demolition, occupancy, use, height, area, and maintenance of all buildings and structures and certain equipment therein specifically regulated. The provisions of said code shall provide for the issuance of permits and certificates of occupancy, the collection of fees thereof, and penalties for violation of such code.

At least one copy of the City of Morgan Hill Building Code has been deposited in the office of the city building official and is available for public inspection.

15.08.020 - Short title.

This chapter shall be known as the "building code" and may be cited as such.

15.08.030 - Organization, enforcement, fees, and inspections.

The organization, enforcement, fees, and inspections shall comply with the 2019 California Building Code. The building official shall use the building valuation data from the International Code Council for "cost per square foot."

15.08.040 - Additions, amendments, and deletions.

The following provisions of the California Building Code and California Residential Code shall be added, amended, or deleted as follows:

- A. The following sections in the California Building Code are amended by this chapter: 1505.1.4, 2308.6.3, and 1907.1.
- B. The following section in the California Residential Code is amended by this chapter: R506.1, R602.10.4 and R902.1.4.

15.08.050 - Sections 1505.1.4 and R902.1.4 amended—Construction of roof coverings in wildland-urban interface areas.

- A. Section 1505.1.4 of the 2019 California Building Code is hereby amended to read in its entirety:

1505.1.4 Roofing requirements in a Wildland-Urban Interface Fire Area. Roofing requirements for structures located in a Wildland-Urban Interface Fire Area shall comply with Section 705A. The entire roof covering of every existing structure where more than 50 percent of the total roof area is replaced within any one-year period, the entire roof covering of every new structure, and any roof covering applied in the alteration, repair or replacement of the roof of every existing structure, shall be a fire-retardant roof covering that is at least Class A.

- B. Section R902.1.4 of the 2019 California Residential Code is hereby amended to read in its entirety:

R902.1.4 Roofing requirements in a wildland-urban interface fire area. Roofing requirements for structures located in a Wildland-Urban Interface Fire Area shall comply with Section R337.5. The entire roof covering of every existing structure where more than 50 percent of the total roof area is replaced within any one-year period, the entire roof covering of every new structure, and

any roof covering applied in the alteration, repair or replacement of the roof of every existing structure, shall be a fire-retardant roof covering that is at least Class A.

C. Findings.

1. The council finds and declares that the areas as defined in the open space and conservation element of the general plan are considered a hazardous fire area and that it is, therefore, necessary to establish special minimum fire-resistive requirements in these areas for the protection of life and property. The fire hazard of untreated wood roofs has long been recognized by the National Fire Protection Association. The city's foothills cause many problems for firefighters including long response times, inadequate water supply, and unlimited fuel. The city is in a region which experiences high winds and low humidity during summer months. Winter rains promote the growth of grass and brush. This vegetation presents heavy dry fuel loads in the summer months. These conditions are conducive to the ready ignition, propagation, and spread of grass, brush, and structure fires. Fog, heavy rains, mud slides, and earthquakes are other common occurrences which negatively affect the ability of the city's public safety resources to respond to emergency situations. The topography of Morgan Hill has hillside homes on each side of the city, causing long response time for safety equipment. The city is in a Category D seismic activity classification. Many traffic corridors, such as Highway 101 and Monterey Road, Union Pacific Railroad, and related bridges, underpasses, and crossings are subject to obstruction in the event of an earthquake, traffic accident, hazardous material spill, or other disaster.
2. Any of the above factors could quickly exhaust the fire department's resources and prevent the assistance of mutual aid resources. Therefore, Class A roofing would provide the fire protection needed through this amendment.

15.08.060 - Building over utility easements.

It is unlawful for any person, firm, or corporation to erect, construct, or maintain any structure, building, garage, carport, storage shed, or other similar building over or within the boundary of any utility easement. "Utility easement" as used in this section includes any easement for a gas line, water line, storm drainage line, sewer line or buried or overhead electrical or telephone lines.

15.08.070 – Section R313.1 and R313.2 amended—Automatic Fire Sprinkler Systems.

A. Section R313.1 of the California Residential Code, is hereby amended to read in its entirety: R313.1 Townhouse automatic fire sprinkler systems. An automatic residential fire sprinkler system shall be installed in townhouses.

Exception: An automatic residential fire sprinkler system shall not be required where additions or alterations are made to existing townhouses if the addition does not exceed 1200 square feet or result in a total building area of more than 3600 square feet and an existing automatic residential fire sprinkler system is not installed.

B. Section R313.2 of the California Residential Code is amended to read in its entirety: R313.2 One- and two-family dwellings automatic fire sprinkler systems. An automatic residential fire sprinkler system shall be installed in one- and two-family dwellings.

Exception:

1. An automatic residential fire sprinkler system shall not be required where additions or alterations are made to existing buildings if the addition does not exceed 1200 square feet

or result in a total building area of more than 3600 square feet and an existing automatic residential fire sprinkler system is not installed.

2. Accessory Dwelling Unit, provided that all of the following are met:

- 2.1. The unit meets the definition of an Accessory Dwelling Unit as defined in the Government Code Section 65852.2.
- 2.2. The existing primary residence does not have automatic fire sprinklers.
- 2.3. The accessory detached dwelling unit does not exceed 1,200 square feet in size.
- 2.4. The unit is on the same lot as the primary residence.

C. Findings. The City of Morgan Hill is located in an area subject to a climatic condition of high winds and low humidity. This combination of events creates an environment which is conducive to rapidly spreading fires. Control of such fires requires rapid response. Obstacles generated by a strong wind, such as fallen trees, streetlights, and utility poles, greatly impact the response time to reach an incident scene. This condition makes the requirement for additional on-site protection for property occupants necessary.

15.08.080 - Section 2308.6.3 and R602.10.4 amended—Braced wall panel methods (gypsum board and Portland cement plaster).

A. Section 2308.6.3 of the 2019 California Building Code, which allows the use of gypsum board and Portland cement plaster for wall bracing, is hereby amended to read in its entirety:

2308.6.3 Braced wall panel methods

Construction of braced wall panels shall be by one or a combination of the methods in Table 2308.6.3(1). Braced wall panel length shall be in accordance with Section 2308.6.4 or 2308.6.5. The use of Gypsum Board (GB) or Portland Cement Plaster (PCP) type braced wall panels are not allowed.

B. Section R602.10.4 of the California Residential Code, which allows the use of gypsum board and Portland cement plaster for wall bracing, is hereby amended to read in its entirety:

R602.10.4 Construction methods for braced wall panels.

Intermittent and continuously sheathed braced wall panels shall be constructed in accordance with this section and the methods listed in Table R602.10.4. The use of Gypsum Board (GB) or Portland Cement Plaster (PCP) type braced wall panels are not allowed.

C. Findings. The city is in a Category D seismic activity classification. Gypsum wallboard and exterior Portland cement plaster have performed poorly during California seismic events. Shear values for gypsum wallboard and Portland cement plaster contained in the code are based on monodirectional testing. It is appropriate to eliminate the use of these materials until cyclic loading tests are performed and evaluated.

15.08.090 - Section 1907.1 and R506.1 amended—Minimum slab provisions.

A. Section 1907.1 of the 2019 California Building Code is hereby amended to read in its entirety:

1907.1 General. The thickness of concrete floor slabs supported directly on the ground shall be not less than 3-1/2 inches (89 mm). The slab shall be reinforced with not less than six inches by six inches ten-gauge wire mesh or an approved alternate. A 6-mil (0.006 inch; 0.15 mm)

polyethylene vapor retarder with joints lapped not less than 6 inches (152 mm) shall be placed between the base course or subgrade and the concrete floor slab, or other approved equivalent methods or materials shall be used to retard vapor transmission through the floor slab.

Exception: A vapor retarder is not required:

1. For detached structures accessory to occupancies in Group R-3, such as garages, utility buildings or other unheated facilities.
2. For unheated storage rooms having an area of less than 70 square feet (6.5 m²) and carports attached to occupancies in Group R-3.
3. For buildings of other occupancies where migration of moisture through the slab from below will not be detrimental to the intended occupancy of the building.
4. For driveways, walks, patios and other flatwork that will not be enclosed at a later date.
5. Where approved based on local site conditions.

B. Section R506.1 of the 2019 California Residential Code is hereby amended to read in its entirety:

R506.1 General. Concrete slab-on-ground floors shall be designed and constructed in accordance with the provisions of this section or ACI 332. Floors shall be a minimum 3-1/2

inches (89 mm) thick (for expansive soils, see Section R403.1.8). The slab shall be reinforced with not less than six inches by six inches ten-gauge wire mesh or an approved alternate. The specified compressive strength of concrete shall be as set forth in Section R402.2.

C. Findings. To avoid damage due to soil expansion, shrinkage and seismic activity which causes damage to concrete slab flooring throughout the city, imposing the above requirements eliminates the need for a soils report for some small projects.

15.08.100 - Violation.

A. A violation of the code adopted by this chapter occurs when a person:

1. Fails to comply with this code;
2. Violates or fails to comply with any order made under this code;
3. Builds in violation of any detailed statement of specifications or plans submitted and approved thereunder or any certificate or permit issued thereunder and from which no appeal has been taken; or
4. Fails to comply with such an order as affirmed or modified by the city council or by a court of competent jurisdiction, within the time fixed in this chapter.

B. The imposition of one penalty for any violation shall not excuse the violation or permit it to continue and all such persons shall be required to correct or remedy such violations or defects within a reasonable time.

C. The application of the above penalty shall not be held to prevent the enforced removal of prohibited conditions.

SECTION 2. Chapter 15.12 (Electrical Code) of Title 15 (Buildings and Construction) of the Morgan Hill Municipal Code is hereby amended to read (additions in underline, deletions in ~~strikeout~~):

"Chapter 15.12 - ELECTRICAL CODE

Sections:

- 15.12.010** **Short title.**
- 15.12.020** **Adoption of the 2019 California Electrical Code.**
- 15.12.030** **Scope, organization, enforcement, fees, and inspections.**
- 15.12.040** **Violation.**

15.12.010 - Short title.

This chapter shall be known as the "electrical code" and may be cited as such.

15.12.020 - Adoption of the 2019 California Electrical Code.

There is adopted by reference that certain code known and designated as the California Code of Regulations, Title 24, Part 3, further described and referred to as the 2019 California Electrical Code published by the California Building Standards Commission and based on the National Electric Code, 2017 Edition, prepared by the National Fire Protection Association. Adoption of said code shall include those sections and annexes requiring enforcement by the Morgan Hill Building Department and, as further amended by the City of Morgan Hill, provisions intended to address local climatic, geologic, and/or topographic conditions, as permitted by state law. Adoption of said code shall include adoption of the following annexes of the California Electrical Code: Annex A, Annex B, Annex C, Annex D, Annex E, and Annex F. Such code shall be and become the Morgan Hill Electrical Code, regulating and controlling the design, construction, installation, quality of materials, location, operation, and maintenance of electrical systems, equipment, and appliances. The provisions of said Code shall provide for the issuance of permits and collection of fees thereof and penalties for violation of such code.

At least one copy of the city electrical code has been deposited in the office of the city building official and is available for public inspection.

15.12.030 - Scope, organization, enforcement, fees, and inspections.

The scope, organization, enforcement, fees, and inspections of the 2019 California Electrical Code must comply with those set forth in the 2019 California Building Code and 2017 National Electrical Code.

15.12.040 - Violation.

- A. A violation of the code adopted by this chapter occurs when a person:
 - 1. Fails to comply with this code;
 - 2. Violates or fails to comply with any order made under this code;
 - 3. Builds in violation of any detailed statement of specifications or plan submitted and approved thereunder or any certificate or permit issued thereunder and from which no appeal has been taken; or
 - 4. Fails to comply with such an order as affirmed or modified by the city council or by a court of competent jurisdiction, within the time fixed in this chapter.
- B. Such person shall be liable severally and for each and every violation and noncompliance respectively.

- C. The imposition of one penalty for any violation shall not excuse the violation or permit it to continue and all such persons shall be required to correct or remedy such violations or defects within a reasonable time.
- D. The application of the above penalty shall not be held to prevent the enforced removal of prohibited conditions.

SECTION 3. Chapter 15.14 (Mechanical Code) of Title 15 (Buildings and Construction) of the Morgan Hill Municipal Code is hereby amended to read (additions in underline, deletions in ~~strikeout~~):

"Chapter 15.16 - MECHANICAL CODE

Sections:

- 15.16.010 Short title.**
- 15.16.020 Adoption of the 2019 California Mechanical Code.**
- 15.16.030 Scope, organization, enforcement, fees, and inspections.**
- 15.16.040 Violation—Penalty.**

15.16.010 - Short title.

This chapter shall be known as the "mechanical code" and may be cited as such.

15.16.020 - Adoption of the 2019 California Mechanical Code.

There is hereby adopted by reference that certain code known and designated as the California Code of Regulations, Title 24, Part 4, further described and referred to as the 2019 California Mechanical Code published by the California Building Standards Commission and based on the Uniform Mechanical Code; 2018 Edition, prepared by the International Association of Plumbing and Mechanical Officials. The adoption of said Code shall include those sections requiring enforcement by the Morgan Hill Building Department. Such code shall be and become the Morgan Hill Mechanical Code, regulating heating, ventilating, comfort cooling, refrigeration systems, and other miscellaneous heating appliances, prescribing conditions under which such work may be performed within the city, and providing for the issuance of permits and the collection of fees therefore and penalties for violation of such code.

At least one copy of the city mechanical code has been deposited in office of the city building official and is available for public inspection.

15.16.030 - Scope, organization, enforcement, fees, and inspections.

The scope, organization, enforcement, fees, and inspections of the California Mechanical Code must comply with those set forth in the 2019 California Building Code.

15.16.040 - Violation.

- A. A violation of the code adopted by this chapter occurs when a person:
 - 1. Fails to comply with this code;
 - 2. Violates or fails to comply with any order made under this code;

3. Builds in violation of any detailed statement of specifications or plans submitted and approved thereunder or any certificate or permit issued thereunder and from which no appeal has been taken; or
 4. Fails to comply with such an order as affirmed or modified by the city council or by a court of competent jurisdiction, within the time fixed in this chapter.
- B. Such person shall be liable severally and for each and every such violation and noncompliance respectively.
- C. The imposition of one penalty for any violation shall not excuse the violation or permit it to continue and all such persons shall be required to correct or remedy such violations or defects within a reasonable time.
- D. The application of the above penalty shall not be held to prevent the enforced removal of prohibited conditions.

SECTION 4. Chapter 15.20 (Plumbing Code) of Title 15 (Buildings and Construction) of the Morgan Hill Municipal Code is hereby amended to read (additions in underline, deletions in ~~strikeout~~):

"Chapter 15.20 - PLUMBING CODE

Sections:

15.20.010	Short title.
15.20.020	Adoption of the 2019 California Plumbing Code.
15.20.030	Scope, organization, fees, and inspections.
15.20.040	Amendments and deletions.
15.20.050	Section 604.3 amended--Copper tube.
15.20.060	Sections 609.3 amended-- Under concrete slab.
15.20.070	Violation-Penalty.

15.20.010 - Short title.

This chapter shall be known as the "plumbing code" and may be cited as such.

15.20.020 - Adoption of the 2019 California Plumbing Code.

There is hereby adopted by reference that certain code known and designated as the California Code of Regulations, Title 24, Part 5, further described and referred to as the 2019 California Plumbing Code published by the California Building Standards Commission and based on the Uniform Plumbing Code, 2018 Edition, prepared by the International Association of Plumbing and Mechanical Officials. The adoption of said code shall include those sections requiring enforcement by the local building department as mandated by the State and as further amended by the City of Morgan Hill with provisions intended to address local climatic, geologic, and topographic conditions, as permitted by state law. Such code shall be and become the Morgan Hill Plumbing Code, regulating plumbing and drainage systems, house sewers, private sewage disposal, drainage systems, and prescribing conditions under which such work may be carried on within the city and providing for the issuance of permits and the collection of fees therefore.

At least one copy of the city plumbing code has been deposited in the office of the city building official and is available for public inspection.

15.20.030 - Scope, organization, fees, and inspections.

The scope, organization, enforcement, fees, and inspections of the 2019 California Plumbing Code must comply with those set forth in the 2019 California Building Code.

15.20.040 - Amendments and deletions.

The following provisions of the 2019 California Plumbing Code shall be amended or deleted:

- A. The following sections of the California Plumbing Code are amended by this chapter: 604.3, 609.3, 710.1 and 1002.1 - 1002.3.

15.20.050 - Section 604.3 amended—Copper tube.

- A. Section 604.3 of the 2019 California Plumbing Code is hereby amended to read in its entirety:

604.3 Copper or Copper Alloy Tube. Copper or copper alloy tube for potable water piping shall have a weight of not less than type "L."

- B. Finding. Due to water hardness in the city, type "L" copper shall be required.

15.20.060 - Sections 609.3 amended—Under concrete slab.

- A. Section 609.3 of the 2019 California Plumbing Code is hereby amended to read in its entirety:

609.3 Under Concrete Slab. Water piping shall not be installed directly in or under a concrete floor slab within a building without prior approval of the Building Official.

- B. Findings.

1. Most of the surface soils in Morgan Hill are relatively young and unconsolidated sedimentary materials formed from a wide variety of parent materials. The varying chemical composition, degree of weathering, and the relatively acid environment have created soils of varying types, which are peculiarly corrosive in nature.
2. Much of the surface soil in Morgan Hill is characterized by peculiarly high expansivity (i.e., shrink-swell behavior) and low bearing strength. There are two types of expansive soils in the area:
 - a. The organic silty clays which are the recent bay muds; and
 - b. The plastic silty clays which weather from the shale found in the hills surrounding Santa Clara Valley.
3. The local climate is characterized by markedly delineated rainy and dry seasons, which tend to maximize the volume changes occurring within the soil.
4. Areas of the city have hard water, which may be corrosive to ferrous pipe.
5. The groundwater table is unusually high in many places.
6. Morgan Hill is a seismically active region.

15.20.070 - Violation.

- A. A violation of the code adopted by this chapter occurs when a person:

1. Fails to comply with this code;

2. Violates or fails to comply with any order made under this code;
 3. Builds in violation of any detailed statement of specifications or plans submitted and approved thereunder or any certificate or permit issued thereunder and from which no appeal has been taken; or
 4. Fails to comply with such an order as affirmed or modified by the city council or by a court of competent jurisdiction, within the time fixed in this chapter.
- B. Such person shall be liable severally and for each and every such violation and noncompliance respectively.
- C. The imposition of one penalty for any violation shall not excuse the violation or permit it to continue and all such persons shall be required to correct or remedy such violations or defects within a reasonable time.
- D. The application of the above penalty shall not be held to prevent the enforced removal of prohibited conditions.

SECTION 5. Chapter 15.24 (Housing Code) of Title 15 (Buildings and Construction) of the Morgan Hill Municipal Code is hereby deleted in its entirety:

SECTION 6. Chapter 15.25 (Property Management) of Title 15 (Buildings and Construction) of the Morgan Hill Municipal Code is hereby amended to read (additions in underline, deletions in ~~strikeout~~):

"Chapter 15.25 - PROPERTY MAINTENANCE

Sections:

15.25.010

Short title.

15.25.020

Adoption of the International Property Maintenance Code.

- 15.25.030 Scope, organization, enforcement, fees and inspections.**
- 15.25.040 Amendments and deletions.**
- 15.25.050 Section 101.1 amended – Title.**
- 15.25.060 Section 102.3 amended – Application of other codes.**
- 15.25.070 Section 103.5 amended - Fees.**
- 15.25.080 Section 112.4 amended - Failure to comply.**
- 15.25.090 Section 302.4 amended – Weeds.**
- 15.25.100 Section 303.2 amended – Enclosures.**
- 15.25.110 Section 304.14 amended – Insect screens.**
- 15.25.120 Section 602.3 amended – Heat supply.**
- 15.25.130 Section 602.4 amended – Occupiable workspaces.**
- 15.25.140 Violation.**

15.25.010 - Short title.

This chapter shall be known as the "Property Maintenance Code" and may be cited as such.

15.25.020 - Adoption of the International Property Maintenance Code.

Pursuant to Sections 50022.1 through 50022.4, inclusive, of the Government Code of the state of California, the text of that certain publication copyrighted and published by the ICC entitled

"2018 International Property Maintenance Code" is adopted as the rules, regulations, and standards within this city as to all matters therein contained except as otherwise provided in this chapter. Adoption of said code shall include adoption of Appendix A. One copy of the International Property Maintenance Code will at all times be kept on file in the office of the city building official and is available for public inspection.

15.25.030 - Scope, organization, enforcement, fees and inspections.

The scope, organization, enforcement, fees and inspections of the 2018 International Property Maintenance Code must comply with those set forth in the 2019 California Building Code (see Chapter 15.08 of this Title).

15.25.040 – Amendments and deletions.

The following sections of the 2018 International Property Maintenance Code shall be amended or deleted: 101.1, 102.3, 103.5, 112.4, 302.4, 303.2, 304.14 602.3, and 602.4.

15.25.050 – Section 101.1 amended – Title.

A. Section 101.1 of the International Property Maintenance Code is hereby amended to read in its entirety:

101.1 Title. These regulations shall be known as the International Property Maintenance Code of the City of Morgan Hill, hereinafter referred to as “this code.”

15.25.060 – Section 102.3 amended – Application of other codes.

A. Section 102.3 of the International Property Maintenance Code is hereby amended to read in its entirety:

102.3 Application of other codes. Repairs, additions or alterations to a structure, or changes of occupancy, shall be done in accordance with the procedures and provisions of the California Building Code, California Existing Building Code, California Energy Code, California Fire Code, California Plumbing Code, California Mechanical Code, California Residential Code, and California Electrical Code. Nothing in this code shall be construed to cancel, modify or set aside any provision of the Zoning Code.

15.25.070 – Section 103.5 amended - Fees.

A. Section 103.5 of the International Property Maintenance Code is hereby amended to read in its entirety:

103.5 Fees. The fees for activities and services performed by the department in carrying out its responsibilities under this code shall be the fully burdened hourly rate.

15.25.080 – Section 112.4 amended - Failure to comply.

A. Section 112.4 of the International Property Maintenance Code is hereby amended to read in its entirety:

112.4 Failure to comply. Any person who shall continue any work after having been served with a stop work order, except such work as that person is directed to perform to remove a violation or unsafe condition, shall be liable to a fine of not less than \$100 dollars.

15.25.090 – Section 302.4 amended – Weeds.

A. Section 302.4 of the International Property Maintenance Code is hereby amended to read in its entirety:

302.4 Weeds. Premises and exterior property shall be maintained free from weeds or plant growth in excess of 10 inches. Noxious weeds shall be prohibited. Weeds shall be defined as all grasses, annual plants and vegetation, other than trees or shrubs provided; however, this term shall not include cultivated flowers and gardens. Upon failure of the owner or agent having charge of a property to cut and destroy weeds after service of a notice of violation, they shall be subject to prosecution in accordance with Section 106.3 and as prescribed by the authority having jurisdiction. Upon failure to comply with the notice of violation, any duly authorized employee of the jurisdiction or contractor hired by the jurisdiction shall be authorized to enter upon the property in violation and cut and destroy the weeds growing thereon, and the costs of such removal shall be paid by the owner or agent responsible for the property.

15.25.100 – Section 303.2 amended – Enclosures.

A. Section 303.2 of the International Property Maintenance Code is hereby amended to read in its entirety:

303.2 Enclosures. Private swimming pools, hot tubs and spas, containing water more than 24 inches (610 mm) in depth shall be completely surrounded by a fence or barrier not less than 60 inches (1219 mm) in height above the finished ground level measured on the side of the barrier away from the pool. Gates and doors in such barriers shall be self-closing and self-latching. Where the self-latching device is less than 60 inches (1372 mm) above the bottom of the gate, the release mechanism shall be located on the pool side of the gate. Self-closing and self-latching gates shall be maintained such that the gate will positively close and latch when released from an open position of 6 inches (152 mm) from the gatepost. An existing pool enclosure shall not be removed, replaced or changed in a manner that reduces its effectiveness as a safety barrier.

Exception: Spas or hot tubs with a safety cover that complies with ASTM F1346 shall be exempt from the provisions of this section.

15.25.110 – Section 304.14 amended – Insect screens.

A. Section 304.14 of the International Property Maintenance Code is hereby amended to read in its entirety:

304.14 Insect screens. Every door, window and other outside opening required for ventilation of habitable rooms, food preparation areas, food service areas or any areas where products to be included or utilized in food for human consumption are processed, manufactured, packaged or stored shall be supplied with approved tightly fitting screens of minimum 16 mesh per inch (16 mesh per 25 mm), and every screen door used for insect control shall have a self-closing device in good working condition.

Exception: Screens shall not be required where other approved means, such as air curtains or insect repellent fans, are employed.

15.25.120- Section 602.3 amended – Heat supply.

A. Section 602.3 of the International Property Maintenance Code is hereby amended to read in its entirety:

602.3 Heat supply. Every owner and operator of any building who rents, leases or lets one or more dwelling units or sleeping units on terms, either expressed or implied, to furnish heat to the occupants thereof shall supply heat to maintain a minimum temperature of 68°F (20°C) in all habitable rooms, bathrooms and toilet rooms.

15.25.130 – Section 602.4 amended – Occupiable workspaces.

A. Section 602.4 of the International Property Maintenance Code is hereby amended to read in its entirety:

602.4 Occupiable workspaces. Indoor occupiable workspaces shall be supplied with heat to maintain a minimum temperature of 65°F (18°C) during the period the spaces are occupied.

Exceptions:

1. Processing, storage and operation areas that require cooling or special temperature conditions.
2. Areas in which persons are primarily engaged in vigorous physical activities.

15.25.0140 - Violation.

A. A violation of the code adopted by this chapter occurs when a person:

1. Fails to comply with this code;
2. Violates or fails to comply with any order made under this code;
3. Builds in violation of any detailed statement of specifications or plans submitted and approved thereunder or any certificate or permit issued thereunder and from which no appeal has been taken; or
4. Fails to comply with such an order as affirmed or modified by the city council or by a court of competent jurisdiction, within the time fixed in this chapter.

B. Such person may be liable severally and for each and every such violation and noncompliance respectively.

C. The imposition of one penalty for any violation shall not excuse the violation or permit it to continue and all such persons shall be required to correct or remedy such violations or defects within a reasonable time.

D. The application of the above penalty shall not be held to prevent the enforced removal of prohibited conditions.

SECTION 7. Sections 15.40.310 and 15.40.400 of Chapter 15.40 (Building Security) of Title 15 (Buildings and Construction) of the Morgan Hill Municipal Code are hereby amended to read (additions in underline, deletions in ~~strikeout~~):

15.40.310 - Open parking lots.

Open parking lots and access thereto, for the use of the general public, shall be provided with a maintained average of two foot-candles and a minimum of five tenths (.5) foot-candles maintained lighting on the parking surface from dusk until the beginning of business every operating day.

15.40.400 - Open parking lots.

Open parking lots and carports shall be provided with a maintained average of two foot-candles and a minimum of five tenths (.5) foot-candles of light on the parking surface during the hours of darkness. Lighting devices shall be protected by vandalism-resistant covers.

SECTION 8. Chapter 15.44 (Fire Code) of Title 15 (Buildings and Construction) of the Morgan Hill Municipal Code is hereby amended to read (additions in underline, deletions in ~~strikeout~~):

"Chapter 15.44 FIRE CODE

Sections:

15.44.010	Adoption of the 2019 California Fire and 2018 International Fire Codes.
15.44.015	Adoption of appendix chapters
15.44.020	Short title; International Fire Code and California Fire Code Defined.
15.44.030	Establishment and duties of the bureau of fire prevention.
15.44.040	Modification of provisions by chief.
15.44.050	Establishment of limits of districts.
15.44.060	Additions, amendments, and deletions.
15.44.070	Scope and general requirements.
15.44.080	Modification relating to violations.
15.44.090	Inspections.
15.44.100	Chapter 2 - Definitions.
15.44.110	Chapter 3 - General Precautions Against Fire.
15.44.120	Chapter 5 – Fire Service Features.
15.44.130	Chapter 6 – Electrical Equipment, Wiring and Hazards.
15.44.140	Chapter 9 – Fire Protection Systems.
15.44.150	Chapter 22 – Combustible Dust-Producing Operations.
15.44.160	Chapter 33 - Fire Safety During Construction and Demolition.
15.44.170	Chapter 34 – Indoor Storage Arrangements .
15.44.180	Chapter 35 – Fire Safety Requirements.
15.44.190	Chapter 49 – Requirements for Wildland-Urban Interface Fire Areas.
15.44.200	Chapter 50 - Hazardous Materials - General Provisions.
15.44.210	Chapter 56 – Explosives and Fireworks.
15.44.220	Chapter 57 – Flammable and Combustible Liquids.
15.44.230	Chapter 58 – Flammable Gases and Flammable Cryogenic Fluids.
15.44.240	Chapter 64 – Pyrophoric Materials.
15.44.250	Appendix B.
15.44.260	Violation.

15.44.010 - Adoption of the 2019 California and 2018 International Fire Codes.

There is hereby adopted by reference that certain code known and designated as the California Code of Regulations, Title 24, Part 9, further described and referred to as the 2019 California Fire Code published by the California Building Standards Commission and based on the International Fire Code;, 2018 Edition, prepared by the International Code Council, including Appendix Chapters B, C, and K, save and except such portions as are hereinafter deleted, modified, or amended by this chapter. Such code shall be and become the Morgan Hill Fire Code, regulating and governing the safeguarding of life and property from fire and explosion hazards arising from the storage, handling, and use of hazardous substances, materials, and devices, and from conditions hazardous to life or property in the occupancy of buildings and premises in the City of Morgan Hill.

One (1) copy of the code shall be kept on file at all times in the office of the city building official and the administrative offices of the Morgan Hill Fire Department for use and examination by the public.

15.44.015 - Adoption of appendix chapters.

The following Appendix Chapters from the 2019 California Fire Code are hereby adopted:

Appendix B: Fire Flow Requirements for Buildings.

Appendix C: Fire Hydrant Locations and Distribution.

Appendix K: Temporary Haunted Houses, Ghost Walks and Similar Amusement Uses.

15.44.020 - Short Title; International Fire Code and California Fire Code Defined.

This chapter shall be known as the "Fire Code" and may be cited as such. Whenever the phrase "International Fire Code" appears in this code or any ordinance of the city, such phrase shall be deemed and construed to refer to and apply to the International Fire Code, 2018 Edition, as adopted and amended by this chapter. Whenever the phrase "California Fire Code" appears in this code or any ordinance of the city, such phrase shall be deemed and construed to refer to and apply to the 2019 California Fire Code, as adopted and amended by this chapter. Sections amended or modified in this chapter shall refer to the sections of the California Fire Code unless otherwise specified.

15.44.030 - Establishment and duties of bureau of fire prevention.

The California Fire Code and International Fire Code shall be enforced by the bureau of fire prevention in the Morgan Hill Fire Department, which shall be operated under the supervision of the chief of the fire department.

15.44.040 - Modification of provisions by chief.

- A. The Chief of the Morgan Hill Fire Department shall have power to modify any of the provisions of the fire code upon application in writing by the owner or lessee, or their duly authorized agent, when there are practical difficulties in the way of carrying out the strict letter of the codes, provided that the spirit of the codes shall be observed, public safety secured, and substantial justice done.
- B. The particulars of such modification, when granted or allowed, and the decision of the chief shall be entered in the records of the fire department and a signed copy shall be furnished to the applicant for modification.

15.44.050 - Establishment of limits of districts.

- A. Storage of stationary tanks of flammable cryogenic fluids are to be prohibited. The limits referred to in Section 5806.2 of the 2019 California Fire Code, in which the storage of flammable cryogenic fluids in stationary containers is prohibited, are hereby established as to all locations of the City of Morgan Hill which are residential and congested commercial areas as determined by the fire code official.
- B. Storage of Class I and II liquids in outside aboveground tanks is prohibited. The limits referred to in Section 5704.2.9.6.1 of the 2019 California Fire Code, in which the storage of flammable or combustible liquids in aboveground tanks is prohibited, are hereby established as to all locations of the City of Morgan Hill that are residential or congested commercial areas as determined by the fire code official.
- C. Storage of Class I and II liquids in aboveground tanks is prohibited. The limits referred to in Section 5706.2.4.4 of the 2019 California Fire Code, in which the storage of flammable or combustible liquids in aboveground tanks is prohibited, are hereby established as to all locations of the City of Morgan Hill that are residential or other locations as determined by the fire code official.

- D. Storage of liquefied petroleum gases ("LPG") is prohibited. The limits referred to in Section 6104.2 of the 2019 California Fire Code, in which storage of liquefied petroleum gas is restricted, are hereby established as to all locations of the City of Morgan Hill that are residential or congested commercial areas as determined by the fire code official.

Exceptions: LPG may be used for industrial operations or when natural gas is not available or would not provide a viable substitute for LPG. Portable containers for temporary heating and/or cooking uses may be permitted if stored and handled in accordance with this code. Facilities in commercial areas for refueling portable or mobile LPG containers may be approved by the fire code official on a case by case basis.

15.44.060 - Additions, amendments, and deletions.

- A. In accordance with California Health and Safety Code Section 17958.7, certain modifications to the California Fire Code as set forth in this Chapter are reasonably necessary because of local climatic, geologic, or topographical conditions.

B. Climatic Conditions

Santa Clara County and the City of Morgan Hill are located in a semi-arid Mediterranean type climate which predisposes all fuels to rapid ignition and spread of fire. Hot, dry winds, and low humidity, are common to all areas within the City of Morgan Hill and Santa Clara County in general. Winter rains promote the growth of grass and brush. This vegetation presents heavy dry fuel loads in the summer months. These conditions are conducive to the ready ignition, propagation and spread of grass, brush and structure fires. These conditions, which can cause small brush fires which spread quickly, are a contributing factor to the high fire danger in the area, and create the need for an increased level of fire protection. This added protection will supplement normal fire department response available and provide immediate protection for life and safety of multiple occupancy occupants during fire occurrences.

C. Topographic Conditions

The topography of Morgan Hill has hillside homes on each side of the city with long response times for safety equipment. The city foothills cause many problems for firefighters, including long response times, inadequate water supply and unlimited fuel. Fog, heavy rains, mud slides and earthquakes are other common occurrences which negatively affect the ability of the city's public safety resources to respond to emergency situations. The City is in a Category D seismic activity classification. Many traffic corridors such as Highway 101 and Monterey Road, Southern Pacific Railroad, related bridges, underpasses and crossings are subject to obstruction in the event of an earthquake, traffic accident, hazardous material spill or other disaster.

D. Geographic Conditions

1. Santa Clara County and the City of Morgan Hill are located within the seismically active San Francisco Bay region. The significant earthquakes in the region are generally associated with the crustal movements along well-defined, active fault zones. The nearest known active faults are the San Andreas Fault, approximately 12 miles southwest of Morgan Hill, and the Calaveras Fault, approximately 1 mile northeast. Both faults have produced major earthquakes in the past, and have estimated maximum credible Richter magnitudes of 8.3 and 7.3, respectively. The Sargent-Berrocal Fault, a potentially active fault, lies approximately 10 miles away and has an estimated

- maximum credible Richter magnitude of 7.3. The Coyote Creek Fault is located in Morgan Hill and is classified as potentially active as well. In addition, several unnamed faults traverse the western slopes of the upland areas.
2. Regional planning for reoccurrence is recommended by the State of California, Department of Conservation. The October 17, 1989, Santa Cruz earthquake resulted in only one major San Francisco fire in the Marina district, but when combined with the 34 other fires and over 500 responses, the department was taxed to its full capabilities. The Marina fire was difficult to contain because mains supplying water to the district burst during the earthquake. If more fires had been ignited by the earthquake, it would have been difficult for the fire department to contain them. Experts predict a major earthquake in our area within the next 50 years. This situation creates the need for both additional fire protection measures and automatic on-site fire protection for building occupants since a multitude of fires may result from breakage of gas lines and electric lines as a result of an earthquake.
 3. Traffic and circulation congestion presently existing in the City of Morgan Hill often places fire department response time to fire occurrences at risk. This condition will be exacerbated by any major disaster, including any earthquake where damage to the highway system will occur. This condition makes the need for additional on-site protection for property occupants necessary.
 4. The City of Morgan Hill is located in an area subject to a climatic condition of high winds and low humidity. This combination of events creates an environment which is conducive to rapidly spreading fires. Control of such fires requires rapid response. Obstacles generated by a strong wind, such as fallen trees, streetlights and utility poles greatly impact the response time to reach an incident scene.
 5. The City of Morgan Hill is located in the middle of a seismically active area. The viability of the public water system would be questionable at best after a major seismic event. A severe seismic event has the potential to negatively impact any rescue or fire suppression activities because it is likely to create obstacles similar to those indicated under the high wind section above. With the probability of strong aftershocks, there exists a need to provide increased protection for anyone on upper floors.
 6. The City of Morgan Hill is located approximately sixteen miles from the ocean. The City's typical ground water level is between ten and twenty feet. This condition makes the City more prone to subsidence issues than most inland communities.

15.44.070– Scope and general requirements.

A. Section 101.1 of the 2019 California Fire Code is hereby amended to read in its entirety:

[A] 101.1 Title. These regulations shall be known as the *Fire Code* of Morgan Hill, hereinafter referred to as "this code."

15.44.080 - Modifications relating to permits.

A. Section 105.6.53 of the 2019 California Fire Code is hereby added to read:

105.6.53 Lithium batteries. An operational permit is required to store or handle lithium batteries or cells in quantities exceeding 1,000 pounds.

15.44.090 - Inspections.

A. Section 107.5 of the 2019 California Fire Code is hereby added to read:

107.5 Final Inspection. No final inspection as to all or any portion of a development shall be deemed completed until the installation of the required fire protection facilities and access ways have been completed and approved. No final certificate of occupancy may be granted until the fire department issues notice of final clearance of such fire protection facilities and access ways to the building department.

15.44.100- Chapter 2—Definitions.

A. The following definitions in Section 202 of the 2019 California Fire Code is hereby added to read:

3D PRINTER. A machine used in the additive manufacturing process for fabricating objects through the deposition of a material using a print head, nozzle, or another printer technology.

ADDITIVE MANUFACTURING. A process of joining materials to make objects from 3D model data, usually layer upon layer, sometimes referred to as 3D printing. The Code recognizes two types of additive manufacturing:

1. Industrial additive manufacturing. 3D printing operations that typically utilize combustible powders or metals, an inert gas supply, a combustible dust collection system, or that create a hazardous (classified) location area or zone outside of the equipment.
2. Non-industrial additive manufacturing. 3D printing operations that do create a hazardous (classified) location area outside of the equipment, and do not utilize an inert gas supply or a combustible dust collection system.

CORROSIVE LIQUID. Corrosive liquid is

- 1) any liquid which, when in contact with living tissue, will cause destruction or irreversible alteration of such tissue by chemical action; or
- 2) any liquid having a pH of 2 or less or 12.5 or more; or
- 3) any liquid classified as corrosive by the U.S. Department of Transportation; or
- 4) any material exhibiting the characteristics of corrosivity in accordance with Title 22, California Code of Regulations §66261.22.

DUST COLLECTION SYSTEM. A combination of equipment designed to contain, capture and collect airborne combustible dusts.

MODERATELY TOXIC GAS. A chemical or substance that has a median lethal concentration (LC50) in air more than 2000 parts per million but not more than 5000 parts per million by volume of gas or vapor, when administered by continuous inhalation for an hour, or less if death occurs within one hour, to albino rats weighing between 200 and 300 grams each.

OTHER HEALTH HAZARD MATERIAL. A hazardous material which affects target organs of the body, including but not limited to, those materials which produce liver damage, kidney damage, damage to the nervous system, act on the blood to decrease hemoglobin function, deprive the body tissue of oxygen or affect reproductive capabilities, including mutations (chromosomal damage), sensitizers or teratogens (effect on fetuses).

SECONDARY CONTAINMENT. Secondary containment is that level of containment that is external to and separate from primary containment and is capable of safely and securely containing the material, without discharge, for a period of time reasonably necessary to ensure detection and remedy of the primary containment failure.

SPILL CONTROL. That level of containment that is external to and separate from the primary containment and is capable of safely and securely containing the contents of the largest container and prevents the materials from spreading to other parts of the room.

WORKSTATION. A defined space or an independent principal piece of equipment using hazardous materials with a hazard rating of 3 or higher as ranked by or 4 in accordance with NFPA 704 here a specific function, laboratory procedure or research activity occurs. Approved or listed hazardous materials storage cabinets, flammable liquid storage cabinets or gas cabinets serving a workstation are included as part of the workstation. A workstation is allowed to contain ventilation equipment, fire protection devices, detection devices, electrical devices and other processing and scientific equipment.

15.44.110 - Chapter 3—General Precautions Against Fire.

A. Section 315.8 of the 2019 California Fire Code is hereby added to read:

SECTION 315.8 LITHIUM BATTERY STORAGE AND HANDLING

315.8 Lithium Battery Storage and Handling. The storage and handling of lithium ion and lithium metal batteries or cells in quantities exceeding 1,000 pounds (4086 kg) shall comply with Section 315.8.1 through 315.8.10, and Chapter 32 where applicable.

315.8.1 Permits. Permits shall be required as set forth in Section 105.6.

315.8.2 Maximum quantity in a fire area. The aggregate amount of lithium batteries stored and handled in a single fire area shall not exceed 9,000 pounds (4086 kg).

315.8.3 Construction requirements. Fire areas shall be separated from each other by fire barriers having not less than 2-hour fire resistance rating constructed in accordance with Section 707 of the Building Code and horizontal assemblies constructed in accordance with Section 711 of the Building Code.

315.8.4 Number of fire areas. The maximum number of fire areas within a building shall be four.

315.8.5 Group H, Division 2 occupancy. Storage and handling of more than 9,000 pounds of lithium batteries per fire area shall be in an approved Group H, Division 2 occupancy

constructed in accordance with the Building Code and provided throughout with approved automatic smoke detection and radiant-energy detection systems.

315.8.6 Automatic sprinkler system. Buildings containing fire areas used for lithium battery storage or handling shall be equipped throughout with an approved automatic sprinkler system in accordance with Section 903.3.1.1. The design of the sprinkler system within each fire area shall not be less than that required for Extra Hazard Group 2 with a minimum design area of 2,500 square feet. Where the storage arrangement is required by other provisions of this code to be provided with a higher level of sprinkler system protection, the higher level of sprinkler system protection shall be provided.

315.8.7 Automatic smoke detection system. An approved automatic smoke detection system that activates an approved occupant notification system shall be provided throughout each fire area in accordance with Section 907.

315.8.8 Radiant energy detection. An approved radiant-energy detection system that activates an approved occupant notification system shall be installed throughout each fire area in accordance with Section 907.

315.8.9 Collection containers. Containers used to collect or store lithium batteries shall be noncombustible and shall not have an individual capacity exceeding 30 gallons (113.6 L), or be approved for transportation in accordance with the Department of Transportation (DOT).

315.8.10 Storage configuration. Lithium batteries shall be considered a high-hazard commodity in accordance with Chapter 32 and where applicable, lithium battery storage shall comply with Chapter 32 in addition to Section 315.8.

B. Section 321 of the 2019 California Fire Code is hereby added to read:

SECTION 321 ADDITIVE MANUFACTURING

321.1 General. Additive manufacturing equipment and operations shall comply with Section 321.

321.1.1 Scope. Additive manufacturing shall comply with one of the following:

1. Non-industrial additive manufacturing shall comply with Section 321.2.
2. Industrial additive manufacturing shall comply with Section 321.3.

321.1.2 Installation, operation and maintenance. 3D printers and associated additive manufacturing equipment shall be installed, operated and maintained in accordance with this Code, the listing and the manufacturer's instructions.

321.1.3 Production materials. Only the production materials listed for use with the equipment and included in the manufacturer's instructions shall be used.

321.2 Non-industrial additive manufacturing. Non-industrial additive manufacturing equipment and operations shall comply with Section 321.2.1 through 321.2.4. Additive manufacturing equipment and operations that do not comply with Section 321.2 shall comply with Section 320.3.

321.2.1 Listing. 3D printers used in non-industrial additive manufacturing shall be listed and labeled in accordance with UL 60950-1, UL 62368-1 or UL 2011. The listing shall also verify:

1. The 3D printers are self-contained and utilize maximum 30 liter pre-packaged production materials.
2. The operation of the 3D printers shall not create a hazardous (classified) electrical area or outside of the unit.
3. If any hazardous (classified) electrical area or zone exists inside of the unit's outer enclosure, the area shall be protected by intrinsically safe electrical construction or other acceptable protection methods.
4. The 3D printers shall not utilize inert gas or an external combustible dust collection.

321.2.2 Occupancies. Non-industrial additive manufacturing shall be permitted in all occupancy groups.

321.3 Industrial additive manufacturing. Industrial additive manufacturing equipment and operations shall comply with Section 321.3.1 through 321.3.13.

321.3.1 Permits required. Permits shall be obtained from the fire code official in accordance with Section 105.6 prior to engaging in industrial additive manufacturing operations.

321.3.2 Listing. 3D printers used in industrial additive manufacturing shall be listed and labeled in accordance with UL 2011 or approved for the application based on a field evaluation conducted by an approved agency.

321.3.3 Combustible dusts and metals. Industrial additive manufacturing operations that store, use or produce combustible dust, combustible particulate solids or combustible metals shall comply with Chapter 22 and this section.

321.3.4 Powder evaluation. Printing powders used in industrial additive manufacturing operations shall be tested for combustibility in accordance with NFPA 484 or NFPA 652 as applicable. A copy of test reports shall be provided to the fire code official upon request.

321.3.5 Combustible (non-metallic) dusts. Industrial additive manufacturing that uses operations that store, use or produce combustible (non-metallic) dusts shall comply with NFPA 654.

321.3.6 Combustible metals. Industrial additive manufacturing operations that store or use combustible metals shall also comply with NFPA 484.

321.3.7 Ancillary equipment. Ancillary equipment provided for recycling, sieving, vacuuming or handling combustible powders shall be designed and approved for such use.

321.3.8 Hazardous materials. Industrial additive manufacturing operations that store or use hazardous materials exceeding the maximum allowable quantity limits shall comply with Chapter 50.

321.3.9 Inert Gas. Additive manufacturing processes that utilize inert gases shall comply with Chapter 53. Ventilation or gas detection shall be provided in accordance with Section 5307.

321.3.10 Technical assistance. Where required by the fire code official, a report evaluating the acceptability of technologies, processes, products, facilities, materials and uses associated with the operation shall be provided in accordance with 104.7.2 and approved.

321.3.11 Performance based design alternative. Where approved by the fire code official, buildings and facilities where industrial additive manufacturing is performed shall be permitted to comply with the performance-based design options in Section 5001.3 as an alternative to compliance with the other requirements set forth in this Section.

321.3.12 Occupancies. Industrial additive manufacturing shall only be conducted in the occupancy groups associated with manufacturing operations. The occupancy may be required by the fire code official to comply with Chapter 50 maximum allowable quantity tables. Where approved, the requirements in Sections 321.2.5 and 321.3.6 shall be permitted to provide the technical basis for determining compliance with Table 5003.1.1(1), footnote q.

321.3.13 Safety Certification. The equipment, process, training procedures and occupancy associated with industrial additive manufacturing may be required by the fire code official to receive a safety certification from Underwriter's Laboratory or equivalent.

15.44.120 - Chapter 5—Fire Service Features.

A. Section 503.1 of the 2019 California Fire Code is hereby amended to read in its entirety:

503.1 Where required. Fire apparatus access roads shall be provided and maintained in accordance with Sections 503.1.1 through 503.1.3 and as per Fire Department access road Standards.

B. Section 503.2.1 of the 2019 California Fire Code is hereby amended to read in its entirety:

503.2.1 Dimensions. Fire apparatus access roads shall have an unobstructed width of not less than 20 feet (6096 mm), except for approved security gates in accordance with Section 503.6, and an unobstructed vertical clearance of 13 feet 6 inches (4115 mm).

Exception: When there are not more than two Group R, Division 3, or Group U occupancies, the access road width may be modified by the fire code official.

C. Section 503.2.2 of the 2019 California Fire Code is hereby amended to read in its entirety:

503.2.2 Authority. The fire code official shall have the authority to require or permit modifications to the required access widths and/or vertical clearance where they are inadequate for fire or rescue operations or where necessary to meet the public safety objectives of the jurisdiction.

D. Section 504.5 of the 2019 California Fire Code is hereby added to read:

504.5 Access control devices. When access control devices including bars, grates, gates, electric or magnetic locks or similar devices, which would inhibit rapid fire department emergency access to within and throughout the building, are installed, such devices shall be approved by the fire code official. All electrically powered access control devices shall be provided with an approved means for deactivation or unlocking from a single location or otherwise approved by the fire department. Access control devices shall also comply with Chapter 10 entitled Egress in the California Fire Code.

E. Section 507.5.1 of the 2019 California Fire Code is hereby amended to read in its entirety:

507.5.1 Where required. Where a portion of the facility or building hereafter constructed or moved into or within the jurisdiction is more than 400 feet (122 m) from a hydrant on a fire apparatus access road, as measured by an approved route around the exterior of the facility or building, on-site fire hydrants and mains shall be provided where required by the fire code official.

F. Section 507.5.2 of the 2019 California Fire Code is hereby amended to read in its entirety:

507.5.2 Inspection, testing and maintenance. Fire hydrant systems shall be maintained in an operative condition at all times and shall be repaired where defective. Additions, repairs, alterations and servicing shall comply with approved standards. Records of tests and required maintenance shall be maintained.

G. Section 508.1.2 of the California Fire Code is hereby amended to read in its entirety:

508.1.2 Separation. The fire command center shall be separated from the remainder of the building by not less than a 2-hour fire barrier constructed in accordance with Section 707 of the California Building Code or horizontal assembly constructed in accordance with Section 711 of the California Building Code, or both.

15.44.130 - Chapter 6—Electrical Equipment, Wiring, and Hazards.

A. Section 603.4.2.1.1 of the 2019 California Fire Code is hereby amended to read in its entirety:

603.4.2.1.1 Prohibited locations. The storage or use of portable outdoor gas-fired heating appliances is prohibited in any of the following locations:

1. Inside of any occupancy where connected to the fuel gas container.
2. Inside of tents, canopies and membrane structures.
3. On exterior balconies. and rooftops.

B. Section 604.12 of the 2019 California Fire Code is hereby added to read:

605.13 Immersion heaters. All electrical immersion heaters used in dip tanks, sinks, vats and similar operations shall be provided with approved over-temperature controls and low liquid level electrical disconnects. Manual reset of required protection devices shall be provided.

15.44.140 - Chapter 9—Fire Protection Systems.

A. Section 901.6.3 of the 2019 California Fire Code is hereby amended to read in its entirety:

901.6.3 Records. Records of all system inspections, tests and maintenance required by the referenced standard shall be maintained on the premises for a minimum of five years. Inspections and tests performed on fire alarm systems shall be documented on NFPA 72 forms.

B. Section 903.2 of the 2019 California Fire Code is hereby amended to read in its entirety:

903.2 Where required. Approved automatic sprinkler systems in new and existing buildings and structures shall be provided in the locations described in this Section or in Sections 903.2.1 through 903.2.19 of the California Fire Code, whichever is the more restrictive. For the purposes of this section, firewalls and fire barriers used to separate building areas shall be constructed in accordance with the California Building Code and shall be without openings or penetrations.

1. An automatic sprinkler system shall be provided throughout all new buildings and structures greater than 1,200 square feet of building area.

Exceptions:

- a. Group S-2 or U occupancies used exclusively for vehicle parking or solar arrays and meeting all of the following conditions:
 - i. Noncombustible construction;
 - ii. Maximum building areas not to exceed 5,000 square feet;
 - iii. Structure is open on three (3) or more sides; and
 - iv. Minimum of 10 feet separation from existing buildings unless area is separated by fire walls.
- b. Accessory Dwelling Unit, provided that all of the following are met:
 - i. The unit meets the definition of an Accessory Dwelling Unit as defined in the Government Code Section 65852.2.
 - ii. The existing primary residence does not have automatic fire sprinklers.
 - iii. The accessory detached dwelling unit does not exceed 1,200 square feet in size.
 - iv. The unit is on the same lot as the primary residence.
2. An automatic sprinkler system shall be provided throughout existing Group A, B, E, F, I, L, M, R, S and U buildings and structures, when additions are made that increase the building area by more than 1,200 square feet or where the resulting area exceeds 3,600 square feet.
3. An automatic sprinkler system shall be provided throughout all new basements regardless of size and throughout existing basements that are expanded by more than 50%.
4. Any change in the character of occupancy or in use of any building which, in the opinion of the fire code official or building official, would place the building into a more hazardous division of the same occupancy group or into a different group of occupancies and constitutes a greater degree of life safety ¹ or increased fire risk ², shall require the installation of an approved fire automatic fire sprinkler system.

¹ Life Safety—Increased occupant load, public assembly areas, public meeting areas, churches, indoor amusement attractions, buildings with complex exiting systems due to increased occupant loads, large schools/daycare facilities, large residential care facilities with non-ambulatory.

² Fire Risks—High-piled combustible storage, woodworking operations, hazardous operations using hazardous materials, increased fuel loads (storage of moderate to highly combustible materials), increased sources of ignition (welding, automotive repair with use of flammable liquids and open flames).

C. Section 909.20.1 of the California Fire Code is hereby amended to read in its entirety:

909.20.1 Schedule. A routine maintenance and operational testing program shall be initiated immediately after the smoke control system has passed the acceptance tests. A written schedule for routine maintenance and operational testing shall be established and both shall occur at least annually.

15.44.150 - Chapter 22—Combustible Dust-Producing Operations.

A. Section 2203 of the 2019 California Fire Code is hereby amended to read in its entirety:

2203 DUST EXPLOSION PREVENTION

2203.1 Critical Depth Layer. The maximum dust layer on all surfaces, including but not limited to walls, ceilings, beams, equipment, furniture, pipes and ducts, shall not exceed the Critical Depth Layer specified in Table 2203.1. The critical depth layer depth is permitted to be adjusted for explosion hazard further evaluated in accordance with one of the following:

1. Section 6.1.1.3 of NFPA 654.
2. Section 4.2.2 of NFPA 664 for wood flour.

Accumulated combustible dust shall be collected by one of the methods listed in 2203.5.

Table 2203.1 Critical Depth Layer

Type of Dust	Critical Depth Layer (Inches)
Wood Flour	1/8
All Other Dusts	1/32

For SI: 1 inch = 25.4 mm

2203.2 Dust Producing and Dust Handling Equipment. Dust producing equipment and dust handling equipment, including but not limited to vacuums, dust collection systems, dryers, mixers, blenders, separators, conveyors, storage containers, silos or other similar devices shall be listed and shall be maintained in accordance with the manufacturer's recommended standards.

2203.2.1 Signages and Markings. Signages and markings shall be provided in accordance with Section 2203.2.1.1 through 2203.2.1.3.

2203.2.1.1 Deflagration Vent Discharge Area Markings. Where dust collection systems and other equipment, systems, or systems components are provided with deflagration vents, the area within the deflagration vent's discharge area shall be marked in an approved manner.

2203.2.1.2 Caution Signs. Signs shall be posted near the dust containing equipment with deflagration vents that reads as follows:

CAUTION: THIS EQUIPMENT CAN CONTAIN EXPLOSIVE DUST.

KEEP OUTSIDE THE MARKED AREA WHILE EQUIPMENT IS OPERATING.

2203.2.1.3 Warning Signs. Where dust collection systems and other equipment, systems, or systems components are provided with deflagration vents, vent closures shall be clearly marked as follows:

WARNING: EXPLOSION RELIEF DEVICE. STAY CLEAR.

2203.3 Dust Collection and Conveying Systems. Dust collection and conveying systems shall be in accordance with Sections 2203.3.1 through 2203.3.3.

2203.3.1 Dust Collection Systems. Dust collection systems shall be designed to collect dust emissions from dust-producing equipment at the point of generation. Dust collection systems shall be in accordance with Section 511 of the California Mechanical Code.

Exception: Closed systems using listed equipment and designed in accordance with manufacturer's recommendations and specifications, where cleanouts are provided in accordance with Section 2203.3.3.

Heating, ventilation, and air conditioning (HVAC) systems shall not be used as the means to collect dust from localized sources.

2203.3.1.1 Location. Dust collectors shall be located outside of buildings.

Exceptions:

1. Dust collectors inside of buildings complying with Section 511 of the California Mechanical Code.
2. Wet-type dust collectors when specifically listed for the type of dust conveyed shall be permitted inside of buildings where in accordance with the manufacturer's instructions and specifications.
3. Dust collectors designed to specific NFPA standards listed in Table 2204.1 for the specific type of dust conveyed.

2203.3.1.2 Minimum Conveying Velocities. The minimum velocities within ducts used as part of the dust collection system shall be in accordance with Table 2203.3.1.2.

Table 2203.3.1.2

Minimum Conveying Velocities

Type of Product	Feet Per Minute
Fine light dust, such as cotton, lint, and wood flour (100 mesh and under)	2000 (10 m/s)
Dry dust such as fine rubber molding powder	2500 (13 m/s)
Average dust such as sawdust, grinding dust, coal dust	3500 (18 m/s)
Heavy dust such as metal turnings, including aluminum and magnesium powder	4000 (20 m/s)

2203.3.2 Plastic Ducts and Conveying Systems. Plastic, fiberglass and other nonconductive ducts, duck liners or pipes shall not be used as a part of duct and conveying systems. Ductwork utilizing combustible lines shall be permitted only in high impact areas and where approved. Flexible hose shall be permitted if designed and installed in accordance with the following requirements:

1. Manufactured of static dissipative construction. 2.
- Used only for connections and isolation purposes. 3.
- Limited to 18 inches (457 mm) in length. 4.
- Properly grounded.

2203.3 Cleanouts. Openings shall be provided in enclosed equipment and conveyors to allow access to all parts of the equipment and conveyors to permit inspection, cleaning, maintenance and the effective use of portable extinguishers or hose streams. Cleanouts for ducts uses as part of the dust collection system shall be in accordance with California Mechanical Code.

2293.4 Sources of Ignition. Sources of ignition shall be controlled in accordance with Sections 2203.4.1 through 2203.4.9.5.

2203.4.1 Classified Electrical. Classified electrical shall be in accordance with NFPA 70. Electric motors and electrical components of the equipment shall not be installed in the dust laden air stream unless listed for Class II, Division 1 locations.

2203.4.2 Static Electricity. Bonding and grounding is required to minimize accumulation of static electric charge in the following locations:

1. Dust producing equipment. 2.
- Dust collection system. 3.
- Pneumatic dust conveying systems conveying combustible dust from one location to another,

combustible dust conveyors, piping and conductive components. Conveying systems include transport modes such as railcars, hopper cars, boxcars, tank cars and trucks into which or from which commodities or products are pneumatically conveyed.

4. Conveying systems using metallic piping.

2203.4.3 Hot Works. Hot work and similar spark-producing operations shall not be conducted in or adjacent to combustible dust producing areas unless precautions have been taken to provide safety. Hot work shall be permitted only in safe, designated areas in accordance with Chapter 35. Hot work is prohibited on equipment that is operating.

2203.4.3.1 Signs. Conspicuous signs with the following warning shall be posted in the vicinity of combustible dust producing areas or in the vicinity of combustible dust use:

NO WELDING. THE USE OF WELDING OR CUTTING EQUIPMENT IN OR NEAR THIS AREA IS DANGEROUS BECAUSE OF FIRE AND EXPLOSION HAZARDS. WELDING AND CUTTING SHALL BE DONE ONLY UNDER THE SUPERVISION OF THE PERSON IN CHARGE.

2203.4.4 Hot Surfaces and Hot Equipment. In areas where a dust explosion hazard or dust flash fire hazard exists, the temperature of external surfaces, shall be maintained below 80 percent (in degrees Celsius) of the lower of the dust surface ignition temperature or the dust-cloud ignition temperature for worst-case dusts. External surfaces shall include but not limited to:

1. Compressors.
2. Steam, water or process piping.
3. Ducts.
4. Conveyors.
5. Process equipment.

Where steam pipes or hot surfaces occur in dust producing or dust handling areas, accumulation of dust on the surfaces shall be minimized by an approved method.

Exception: Drying apparatus listed for the intended use and installed in accordance with the manufacturer's instructions.

2203.4.5 Powered Industrial Trucks. Powered industrial trucks used in electrically classified areas shall be listed for such use.

2203.4.6 Smoking Prohibited. Smoking shall be prohibited in or adjacent to dust producing or dust handling areas.

"No Smoking" signs complying with Section 310 shall be conspicuously posted in such areas. Smoking shall be permitted only in designated areas.

2203.4.7 Spark-Producing Devices. Spark-producing devices shall not be located within 20 feet (6096 mm) of areas requiring classified electrical unless separated by a permanent partition.

2203.4.8 Self-heating materials. Materials in silos and other large storage piles of particulates prone to self-heating shall be in accordance with Section 8.5.11 of NFPA 652.

2203.4.9 Open Flames and Fuel Fired Equipment. Open flames and fuel fired equipment shall be in accordance with Section 2203.4.9.1 through 2203.4.9.5.

2203.4.9.1 Release of Airborne Combustible dust. Production, maintenance or repair activities that have the potential to release or force combustible dust to become airborne shall not be conducted within 35 feet (11 m) of an open flame or pilot flame.

2203.4.9.2 Space Heaters. Fuel-fired space heaters drawing local ambient air shall not be located within electrically classified areas. Space heating appliances in dust producing or dust handling areas shall be located where not subject to accumulation of deposits of combustible dust.

2203.4.9.3 Equipment Listing. Fuel-fired process equipment shall be listed for its intended use and shall be operated and maintained in accordance with the manufacturer's instructions.

2203.4.9.4 Inspection and Preventative Maintenance. Inspection and maintenance of fuel-fired process equipment shall include verification that significant combustible dust accumulations do not exist within or around the equipment.

2203.4.9.5 Sources of Combustion Air. In Class II electrically classified locations, heating units shall be provided with a source of combustion air ducted directly from the building exterior or from an unclassified location.

2203.5 Housekeeping. Accumulation of combustible dust on surfaces inside buildings shall be maintained below the critical depth layer in Section 2203.1. Pressurized air or similar methods shall not be used to remove dust from surfaces. Accumulated combustible dust shall be collected by one of the following methods:

1. Portable vacuum cleaners listed for use in Class II, Group G, Division 1 atmospheres as defined in NFPA 70. 2.
- Dust collection systems. 3.
- Other approved means that will not place combustible dust into suspension in air.

2203.6 Standard Operational Procedures. Dust producing equipment and all associated equipment including dust collection equipment shall be maintained in accordance with the

manufacturer's instructions and specifications and applicable codes. The inspection, testing and maintenance program shall include the following, as applicable:

1. Fire and explosion protection and prevention equipment, as applicable, in accordance with the applicable NFPA standards. 2.
- Dust control equipment. 3.
- Control of potential ignition sources. 4.
- Electrical, process and mechanical equipment, including applicable process interlocks.
5. Lubrication of bearings for dust collection, dust handling and dust producing equipment.
6. Additional maintenance in accordance with the manufacturer's instructions and specifications for dust collection, dust handling and dust producing equipment.
7. Records shall be kept of maintenance and repairs performed. The standard operating procedures shall be submitted to the fire code official for review and approval. The written standard operating procedures shall be signed by the person responsible for facility operations.

2203.7 Emergency Response Plan. A written emergency response plan shall be developed for preventing, preparing for and responding to work-related emergencies including but not limited to fire and explosion. The following information shall be developed into the plan:

1. Identification of dust hazards. 2.
- Identification and location of all utilities to affected areas. 3.
- Site plans or floor plans locating utility shut-off controls including water, gas and power.
4. Identify the potential for explosion. 5.
- Identify the location of fire extinguishing equipment compatible with the hazards present.
6. Any additional information required by the fire code official.

2203.8 Training. The plans and procedures required in Sections 2203.5, 2203.6 and 2203.7 shall be approved by the fire code official. The plans and procedures shall be reviewed annually and updated as required by process changes. Initial and annual refresher training shall be provided to employees who are involved in operating, maintaining and supervising facilities that handle combustible dust. Initial and annual refresher training shall include:

1. Workplace hazards.
2. General orientation, plant diagrams and plant safety rules.
3. Process description or flowchart.
4. Equipment operation, safe startup and shutdown, and response to hazard conditions or an incident.
5. The location and use of all related fire and explosion protection and prevention systems.
6. Equipment maintenance requirements and practices, including visual inspections of conveyors and ducts. 7.
- Housekeeping requirements, including the maintenance of the critical depth layer in Section

2203.1.

8.

Emergency response plans as required in Section 2203.7.

The employer shall maintain records of initial and annual training and for review.

B. Section 2204 of the 2019 California Fire Code is hereby amended to read in its entirety:

2204 DUST EXPLOSION SCREENING TESTS

2204.1 Combustibility and Explosivity Tests. Where combustibility or explosivity screening tests are required to analyze the combustible dust as part of compliance with Section 414.1.3 of the California Building Code and Section 104.7 of this Code, it shall be in accordance with Section 5.4 of NFPA 652.

2204.2 Samples. Representative samples for the screening test shall be obtained in accordance with Section 5.5 of NFPA 652.

C. Section 2205 of the California Fire Code is hereby added to read:

2205 STANDARDS

2205.1 Specific Hazards Standards. The fire code official is authorized to enforce additional industry or material specific provisions of the codes and standards listed in Table 2205.1 as applicable to prevent and control dust explosions.

Table 2205.1 Explosion Protection Standards

Standard	Subject
NFPA 61	Standard for the Prevention of Fires and Dust Explosions in Agricultural and Food Processing Facilities
NFPA 69	Standard on Explosion Prevention Systems
NFPA 70	National Electrical Code
NFPA 77	Recommended Practice on Static Electricity
NFPA 85	Boiler and Combustion System Hazards Code
NFPA 120	Standard for Fire Prevention and Control in Coal Mines
NFPA 484	Standard for Combustible Metals
NFPA 652	Standard on the Fundamentals of Combustible Dust
NFPA 654	Standard for Prevention of Fire and Dust Explosions from the Manufacturing, Processing and Handling of Combustible Particulate Solids
NFPA 655	Standard for the Prevention of Sulfur Fires and Explosions
NFPA 664	Standard for the Prevention of Fires and Explosions in Wood Processing and Woodworking Facilities

2205.1.1 Dust Hazard Analysis. If a dust hazard analysis (DHA) is required by the fire code official to new or existing facilities and operations, it shall be in accordance with NFPA 652. The DHA for existing facilities shall be in accordance with Section 7.1.2 of NFPA 652.

15.44.160 - Chapter 33—Fire Safety During Construction and Demolition.

A. Section 3303.3 of the 2019 California Building Code is hereby amended to read in its entirety:

3303.3 LP-gas heaters. Fuel supplies for liquefied-petroleum gas-fired heaters shall comply with Chapter 61 and the International Fuel Gas Code.

3303.3.1 Use in Buildings. Propane containers may be used in buildings under construction or undergoing major renovation as a fuel source for temporary heating for curing concrete, drying plaster and similar applications in accordance with the following:

1. Heating elements (other than integral heater-container units) shall be located at least 6 feet from any LP Gas container.
2. Integral heater-container units specifically designed for the attachment of the heater to the container, or to a supporting standard attached to the container, may be used provided they are designed and installed so as to prevent direct or radiant heat application to the LP-Gas container.
3. Blower and radiant type units shall not be directed toward any LP-Gas container within 20 feet.
4. Heat producing equipment shall be installed with clearance to the combustibles in accordance with the manufacturer's installation instructions.
5. Cylinders shall comply with DOT cylinder specifications and shall be secured in an upright position.
6. Regulators shall be approved for use with LP-Gas. Fittings shall be designed for at least 250 p.s.i.g. service pressure.
7. Hose shall be designed for a working pressure of at least 350 p.s.i.g. (unless limited to 5 p.s.i.g.) and shall be a maximum of 6 feet in length.
8. Portable heaters shall be equipped with an approved automatic device to shut off the flow of gas to the main burner and to the pilot in the event of flame extinguishment or combustion failure. Portable heaters with an input of more than 50,000 Btu/hr shall be equipped with either a pilot that must be proved before the main burner can be turned on or an approved electronic ignition system.

3303.3.2 Use in Occupied Buildings. In addition to the above, for LPG storage/use in buildings undergoing alteration and that are fully or partially occupied, the following shall also apply:

1. Specific approval must be obtained from the fire department prior to bringing LP-Gas containers on-site.
2. The maximum water capacity of individual containers shall be 5-gallon water capacity and the number of containers in the building shall not exceed the number of workers assigned to using the LP-Gas.
3. Containers having a water capacity greater than 2½ pounds (1 quart) shall not be left unattended.

B. Section 3304.1 of the 2019 California Building Code is hereby amended to read in its entirety:

3304.1 Smoking. Smoking is prohibited anywhere inside or on the roof of new buildings under construction or in the project work area of buildings undergoing alteration. A suitable number of 'No Smoking' signs shall be posted to ensure that smoking is controlled.

Smoking shall be prohibited except in approved areas. Signs shall be posted in accordance with Section 310. In approved areas where smoking is permitted, approved ashtrays shall be provided in accordance with Section 310.

C. Section 3304.9 of the 2019 California Fire Code is hereby added to read:

3304.9 Fire walls. When firewalls are required in combustible construction, the wall construction shall be completed (with all openings protected) immediately after the building is sufficiently weather-protected at the location of the wall(s).

D. Section 3304.10 of the 2019 California Fire Code is hereby added to read:

3304.10 Vehicle Parking. All vehicles shall be parked a minimum of 20 feet from new buildings under construction.

Exceptions:

1. Vehicles that are temporarily parked for loading/unloading or other construction related operations. Such vehicles shall not be left unattended.
- 2.

Private vehicles may be parked in parking garages of Type I construction if the automatic fire sprinkler system is in service and vertical openings are protected.

E. Section 3304.11 of the 2019 California Fire Code is hereby added to read:

3304.11 Compressed Gas Containers. Gas containers/cylinders shall be protected as follows:

1. Combustible materials shall be kept a minimum of 10 feet from gas containers. 2.
- Cylinders shall be protected against physical damage. 3.
- Cylinders shall be stored upright and secured to prevent falling. 4.
- Cylinders shall not be placed near elevators, unprotected platform edges or other areas where they would drop more than 2 feet. 5.
- Cylinders shall not be placed in areas where they may be damaged by falling objects. 6.
- When cylinders are not in use, valve protective caps shall be in place. 7.
- Ropes, chains or slings shall not be used to suspend gas cylinders, unless the cylinder was manufactured with appropriate lifting attachments.

3304.11.1 Separation. When stored, gas cylinders shall be separated from each other based on their hazard classes.

3304.11.2 Marking. Gas cylinders shall be marked with the name of the contents.

F. Section 3305.2.1 of the California Fire Code is hereby added to read:

3305.2.1 Containers. Metal containers for Class I or II liquids shall be in accordance with DOT requirements or shall be of an approved design. Discharge devices shall not cause an internal pressure on the container. Individual containers shall not be interconnected and shall be kept closed when not in use.

3305.2.2 Secondary Containment. Secondary containment or a means of spill control, drainage control, and diking shall be required for containers and tanks as approved by the fire department and, if applicable, local hazardous materials program agency.

3305.2.3 Marking. Tanks and containers shall be marked with the name of the product and “FLAMMABLE — KEEP FIRE AND FLAME AWAY.” Tanks (i.e., containers in excess of 60 gallons) shall also be labeled “KEEP 50 FEET FROM BUILDINGS.”

3305.2.4 Tank Installation Plans/Permit. Plans for the installation/use of any aboveground storage tank (i.e., container greater than 60 gallons) shall be submitted to the fire department and, if applicable, local hazardous materials program agency for review and permit prior to the proposed tank arriving at the site.

G. Section 3308.1.1 of the 2019 California Fire Code is hereby added to read:

3308.1.1 Fire Protection Plan. The Fire Protection Plan shall include the following:

1. Procedures for reporting emergencies to the Fire department. 2.
- Procedures for emergency notification, evacuation and/or relocation of all persons in the building under construction and on the site. 3.
- Procedures for hot work operations, management of hazardous materials and removal of combustible debris and maintenance of emergency access roads. 4.

Floor plans identifying the locations of exits, exit stairs, exit routes and portable fire extinguishers. 4.1.

All new buildings under construction shall have a least one unobstructed exit.

5. Site plans identifying the designated exterior assembly areas for each evacuation route.

6. Site plans identifying required fire apparatus access roadways and on-site fire hydrants.

7. The name and contact phone number of the person(s) responsible for compliance with the Fire Protection Plan.

H. Section 3308.6 of the 2019 California Fire Code is hereby amended to read in its entirety:

3308.6 Hot work operations. Hot work includes any work involving operations capable of initiating fires or explosions, including cutting, welding, brazing, soldering, grinding, thermal spraying, thawing pipe, torch applied roofing, or any other similar activity. The fire prevention program superintendent shall be responsible for supervising the permit system for hot work operations in accordance with Chapter 35.

I. Section 3308.7 of the 2019 California Fire Code is hereby amended to read in its entirety:

3308.7 Impairment of fire protection systems. Fire alarm systems shall be maintained operational at all times during building alterations. Impairments to any fire protection system shall be in accordance with Section 901. When an alteration requires modification to a portion of the fire alarm system, the portion of the system requiring work shall be isolated and the remainder of the system shall be kept in service whenever practical. When it is necessary to shut down an entire fire alarm system a fire watch or other mitigation approved by the fire department shall be implemented by the general contractor until the system is returned to full service.

J. Sections 3308.9 and 3308.10 of the California Fire Code are hereby added to read:

3308.9 Premises Identification. The address numbers of the property or project location shall be plainly visible and legible from the street or road fronting the property at the fire apparatus access point or as otherwise approved.

3308.10 Area Separation Walls. When area separation walls are required, the wall construction shall be completed (with all openings protected) immediately after the building is sufficiently weather-protected at the location of the wall(s).

K. Section 3310.1.1 of the 2019 California Fire Code is hereby added to read:

3310.1.1 Gates. No gate may be installed across a required fire department access road or driveway without prior approval from the local fire agency.

3310.1.2 Fire Apparatus Access Roadway Signs. Where required by the Fire Code Official, fire apparatus access roads shall be designated and marked as a fire lane as set forth in CVC §22500.1. The designation shall be indicated by:

1. A sign posted immediately adjacent to and visible from the designated place, clearly stating in letters not less than one inch in height that the place is a fire lane; or
2. Outlining or painting the place in red and, in contrasting color, marking the place with the words "FIRE LANE," which are clearly visible from a vehicle; or
3. A red curb or red paint on the edge of the roadway upon which is clearly marked the words "FIRE LANE."

L. Section 3311.1 of the 2019 California Fire Code is hereby amended to read in its entirety:

3311.1 Stairways required. Each level above the first story in new multi-story buildings that require two exit stairways shall be provided with at least two usable exit stairways after the floor decking is installed. The stairways shall be continuous and discharge to grade level. Stairways serving more than two floor levels shall be enclosed (with openings adequately protected) after exterior walls/windows are in place. Exit stairs in new and in existing, occupied buildings shall be lighted and maintained clear of debris and construction materials at all times.

Exception: For new multi-story buildings, one of the required exit stairs may be obstructed on not more than two contiguous floor levels for the purposes of stairway construction (i.e., installation of gypsum board, painting, flooring, etc.).

M. Section 3311.1.1 of the 2019 California Fire Code is hereby added to read:

Section 3311.1.1 Required Means of Egress. All new buildings under construction shall have at least one unobstructed means of egress. All means of egress shall be identified in the prefire plan see Section 3308.2.

N. Section 3311.3 of the 2019 California Fire Code is hereby added to read:

3311.3 Storage. Combustible construction materials shall be stored a minimum of 20 feet from buildings under construction or undergoing remodel. Combustible materials associated with construction, demolition, remodeling or alterations to an occupied structure shall not be stored in exits, enclosures for stairways and ramps, or exit access corridors serving an occupant load of 30 or more.

Exceptions:

1. Where the only occupants are construction workers.
2. Combustible materials that are temporarily accumulated to support work being performed when workers are present.
3. Materials that are staged for installation on a floor level.
4. When approved by the Fire Department, materials may be stored in parking garages of Type I construction if the automatic fire sprinkler system is in service and vertical openings are protected.

O. Section 3312.1 of the 2019 California Fire Code is hereby amended to read in its entirety:

3312.1 When required. An approved water supply for fire protection, either temporary or permanent, shall be completed, and in service prior to combustible construction materials accumulating on site.

P. Section 3313.1 of the 2019 California Fire Code is hereby amended to read in its entirety:

3313.1 Where required. In buildings required to have standpipes the standpipes shall be installed when the progress of construction is not more than 35 feet in height above the lowest level of the fire department access. Standpipes shall be provided with fire department hose connections and outlets at accessible locations adjacent to usable stairs. As construction progresses, such standpipes shall be extended to within one floor of the highest point of construction having secured decking or flooring. Each floor shall be provided with a 2½-inch valve outlet for fire department use. Where construction height requires installation of a Class III standpipe, fire pumps and water main connections shall be provided to serve the standpipe.

Q. Section 3314.1 of the 2019 California Fire Code is hereby amended to read in its entirety:

3314.1 Completion before occupancy. Where automatic fire sprinkler systems are required to be installed in new buildings, the system shall be placed in service as soon possible. For buildings of Type I or II noncombustible construction, activation of the fire sprinkler system may be delayed until combustible finishes, furnishings or equipment are installed, if the building or area is not used for combustible storage or any other purpose.

Immediately upon the completion of sprinkler pipe installation on each floor level, the piping shall be hydrostatically tested and inspected. After inspection approval from the Fire department, each floor level of sprinkler piping shall be connected to the system supply riser and placed into service with all sprinkler heads uncovered. Protective caps may be installed on the active sprinklers during the installation of drywall, texturing and painting, but shall be removed immediately after this work is completed. For system activation notification, an exterior alarm bell shall be installed and connected to the sprinkler water flow device prior to installation of the monitoring system.

It shall be unlawful to occupy any portion of a building or structure until the automatic sprinkler system installation has been tested and approved, except as provided in Section 105.3.4.

R. Section 3314.2 of the 2019 California Fire Code is hereby amended to read in its entirety:

3314.2 Operation of valves. For buildings equipped with fire sprinkler systems that are undergoing alterations, the sprinkler system(s) shall remain in service at all times except when system modifications are necessary. Operation of sprinkler control valves shall be allowed only by properly authorized personnel and shall be accompanied by notification of duly designated parties. Fire sprinkler systems undergoing modifications shall be returned to service at the end of each workday unless otherwise approved by the fire department. The General contractor or his/her designee shall check the sprinkler control valve(s) at the end of each workday to confirm that the system has been restored to service.

S. Section 3315.1 of the 2019 California Fire Code is hereby amended to read in its entirety:

3315.1 Where required. Structures under construction, alteration or demolition shall be provided with not less than one approved portable fire extinguisher in accordance with Section 906 and sized for not less than ordinary hazard as follows:

1. Portable fire extinguishers shall be provided and shall be mounted on a wall or post at each usable stairway and such that the travel distance to any extinguisher does not exceed 75 feet.
 - 1.1. Mounting height to the top of the extinguisher shall not exceed 5 feet.
 - 1.2. Extinguishers shall not have less than a 2A:10BC rating or as otherwise directed by the fire department.
2. In every storage and construction shed.
3. Additional portable fire extinguishers shall be provided where special hazards exist including, but not limited to, the storage and use of flammable and combustible liquids.
4. The general contractor shall ensure that an adequate number of individuals are trained in the proper use of portable fire extinguishers.

15.44.170 – Chapter 34 — Indoor Storage Arrangement.

A. Section 3404.6 of the 2019 California Fire Code is hereby amended to read in its entirety:

3404.6 Telephone number. Communication equipment shall be maintained at all waste tire facilities and solid waste facilities, if they are staffed by an attendant, to ensure that the site operator can contact local fire authority in the event of fire. The telephone number of the local fire authority and location of the nearest telephone shall be posted conspicuously in attended locations.

B. Section 3405.1 of the 2019 California Fire Code is hereby amended to read in its entirety:

3405.1 Individual piles. Tire storage shall be restricted to individual piles not exceeding 5,000 square feet (464.5 m²) of continuous area. Piles shall not exceed 50,000 cubic feet (1416 m³) in volume or 10 feet (3048 mm) in height. *Pile widths shall not exceed 50 feet.*

C. Section 3407.5 of the 2019 California Fire Code is hereby added to read:

3407.5 Signs. A sign shall be posted at the facility entrance stating the name of the operator, operating hours, and site rules.

3407.6 Attendant. An attendant shall be present when the facility is open for business if the facility receives tires from persons other than the operator of the facility.

3407.7 Access. An access road to the facility must be maintained passable for emergency equipment at all times. Unauthorized access must be strictly controlled.

D. Section 3408.1 of the 2019 California Fire Code is hereby amended to read in its entirety:

3408.1 Water supply. An adequate water supply shall be provided for use by the local fire authority. The water supply shall be capable of delivering at least 1,000 gallons per minute for a duration of at least three hours and at least 2,000 gallons per minute for a duration of at least three hours if the sum of altered plus whole waste tires exceeds 10,000. The water supply shall be arranged such that any part of the storage yard can be reached by using not more than 500 feet (152 m) of hose.

Adequate equipment to aid in the control of fires shall be provided. At a minimum, the following items shall be maintained on site and in working order at all times:

1. One pike pole at least 10 feet in length to separate burning from nonburning tires, and
2. One round point and one square point shovel.

E. Section 3408.2 of the 2019 California Fire Code is hereby amended to read in its entirety:

3408.2 Fire extinguishers. Buildings or structures shall be provided with portable fire extinguishers in accordance with Section 906.

1. Fuel-fired vehicles operating in the storage yard shall be equipped with a minimum 2-A:20-B:C-rated portable fire extinguisher.
2. One portable fire extinguisher with a minimum rating of A:40-B:C shall be carried on each piece of fuel-powered equipment used to handle waste tires.

F. Section 3409.1 of the 2019 California Fire Code is hereby amended to read in its entirety:

3409.1 Pile dimensions. Where tires are stored on-tread, the dimension of the pile in the direction of the wheel hole shall be not more than 50 feet (15 240 mm). Tires stored adjacent to or along one wall shall not extend more than 25 feet (7620 mm) from that wall. Other piles shall be not more than 50 feet (15 240 mm) in width.

1. Where the top of the storage is greater than six feet in height, tires shall be stored in accordance with the following:

(a) Indoor storage areas between 500 square feet and 2,500 square feet shall maintain aisles with access to exits and fire access doors in accordance with the following requirements:

- (i) In sprinklered buildings aisles shall be a minimum of 44 inches wide.
- (ii) In non-sprinklered buildings aisles shall be a minimum of 96 inches wide.
- (iii) The required aisle width shall extend from floor to ceiling.

(b) Indoor storage areas exceeding 2,500 square feet shall maintain aisles with access to exits and fire access doors in accordance with the following requirements:

- (i) In non-sprinklered buildings aisles shall be a minimum of 96 inches wide.
- (ii) In sprinklered buildings where the waste tire piles are accessible to the public aisles shall be a minimum of 96 inches wide.
- (iii) In sprinklered buildings where the waste tire piles are not accessible to the public aisles shall be a minimum of 44 inches wide.
- (iv) The required aisle width shall extend from floor to ceiling.
- (c) For storage areas greater than 500 square feet the dimensions of the waste tire piles shall not exceed 50 feet in any direction, 30 feet in height, and 75,000 cubic feet in volume.
- (d) No facility shall store waste tires in an area greater than 500,000 square feet.
- (e) Facilities with an indoor storage area greater than 500 square feet shall be equipped with an automatic fire extinguishing system.
- (f) Facilities with an indoor storage area greater than 2,500 square feet shall be equipped with smoke and heat vents.
- (g) For purposes of determining the square footage, the aggregate of all tire storage areas within a building which are designated, intended, proposed or actually used for storing tires at a maximum height of more than six feet shall be used, unless such areas are separated from each other by 1-hour fire barriers that have been approved by the local fire code official. Openings in 1-hour fire barriers shall be protected by opening protectives having a 1-hour fire protection rating.

15.44.180 – Chapter 35— Fire Safety Requirements.

A. Section 3504.2.3 of the 2019 California Fire Code is hereby amended to read in its entirety:

3504.2.3 Duties. The sole duty of fire watch personnel shall be to watch for the occurrence of fire during and after hot work operations. Individuals designated to fire watch duty shall have fire-extinguishing equipment readily available and shall be trained in the use of such equipment. Individuals assigned to fire watch duty shall be responsible for extinguishing spot fires and communicating an alarm. Hot work conducted in areas with vertical and horizontal fire exposures that cannot be observed by a single individual shall have additional personnel assigned to fire watches to ensure that all exposed areas are monitored.

15.44.190 - Chapter 49—Requirements for Wildland-Urban Interface Fire Areas.

A. Section 4901.3 and 4901.4 are hereby added to read:

4901.3 Where applicable. These requirements shall apply to all areas within the City of Morgan Hill as set forth and delineated on the map entitled "Wildland-Urban Interface Fire Area" which map and all notations, references, data and other information shown thereon are hereby adopted and made a part of this Chapter. The map properly attested, shall be on file in the Office of the City Clerk.

4901.4 Exemptions. These requirements shall not apply to any land or water area acquired or managed for one or more of the following purposes or uses:

- (1) Habitat for endangered or threatened species, or any species that is a candidate for listing as an endangered or threatened species by the state or federal government.
- (2) Lands kept in a predominantly natural state as habitat for wildlife, plant, or animal communities.
- (3) Open space lands that are environmentally sensitive parklands.
- (4) Other lands having scenic values, as declared by the local agency, or by state or federal law.

B. The following definition in Section 4902 of the 2016 California Fire Code is hereby amended to read in its entirety:

WILDLAND-URBAN INTERFACE FIRE AREA is a geographical area identified by the state as a "Fire Hazard Severity Zone" in accordance with the Public Resources Code Sections 4201 through 4204 and Government Code Sections 51175 through 51189, or other areas designated by the City to be at a significant risk from wildfires.

The Wildland-Urban Interface Fire Area shall be defined as all areas within the City of Morgan Hill as set forth and delineated on the map entitled "Wildland-Urban Interface Fire Area" which map and all notations, references, data and other information shown thereon are hereby adopted and made a part of this Chapter. The map properly attested, shall be on file in the Office of the City Clerk.

C. Section 4906 of the 2019 California Fire Code is hereby amended to read in its entirety:

4906.1 General. Hazardous vegetation and fuels shall be managed to reduce the severity of potential exterior wildfire exposure to buildings, to reduce the risk of fire spreading to buildings, and provide for safe access for emergency wildland fire equipment and civilian evacuation concurrently, as required by applicable laws and standards.

4906.1.1 Maintenance required. Maintenance is required to ensure conformance with these standards and measures, and to assure continued availability, access, and utilization, of the defensible space during a wildfire.

4906.1.2 Additional measures. No person subject to these regulations shall permit any fire hazard, as defined in this chapter, to exist on premises under their control, or fail to take immediate action to abate a fire hazard when requested to do so by the enforcing agency.

4906.1.3 Exemption. For the purposes of this chapter, vegetation removal or management, undertaken in whole or in part, for fire prevention or suppression purposes shall not be deemed to alter the natural condition of public property.

4906.2 Application. Buildings, roads, driveways, and structures located in the following areas shall maintain the required hazardous vegetation and fuel management:

1. All unincorporated lands designated by the State Board of Forestry and Fire Protection as State Responsibility Areas (SRA) including:

- 1.1. Moderate Fire Hazard Severity Zones
- 1.2. High Fire Hazard Severity Zones
- 1.3. Very-High Fire Hazard Severity Zones

2. Land designated as a Wildland Urban Interface Fire Area by the City of Morgan Hill.

4906.3 Requirements. Hazardous vegetation and fuels around all applicable buildings, roads, driveways, and structures, within these areas shall be maintained in accordance with the following laws and regulations:

1. Public Resources Code, Sections 4290 through 4296.
2. California Code of Regulations, Title 14, Division 1.5, Chapter 7.
3. California Government Code, Sections 51175 – 51189.
4. California Code of Regulations, Title 19, Division 1, Chapter 7, Subchapter 1.
5. Any local ordinance of the City of Morgan Hill.

D. Section 4907 of the 2019 California Fire Code is hereby amended to read in its entirety:

4907.1 General. Defensible space will be maintained around all buildings and structures within the Wildland Urban Interface Fire Areas of Morgan Hill as required in Public Resources Code 4290, California Code of Regulations, Title 14, Division 1.5, Chapter 7, Government Code 51175 – 51189, this Chapter, and any local ordinance. Defensible space shall also be provided around water tank structures, water supply pumps and pump houses.

4907.2 Where required. Persons owning, leasing, controlling, operating or maintaining buildings or structures in the locally adopted Wildland-Urban Interface Fire Area and persons owning, leasing or controlling land adjacent to such buildings or structures, shall at all times:

1. Maintain effective defensible space by maintaining a noncombustible zone within 5 feet of the structure.
2. Maintain effective defensible space by removing brush, flammable vegetation and combustible growth located within 30 feet of buildings or structures, but not beyond the property line.
 - 2.1 Weeds, grass, vines or other growth that is capable of being ignited and endangering property, shall be cut down and removed. Grass shall not exceed 4 inches in height.
 - 2.2. Remove any tree limbs located within 10 feet of a chimney,
 - 2.3. Maintain any tree, scrub, or other plant overhanging or within 30 feet of any building, road, driveway, or property line, free of dead or dying wood,
 - 2.4 Remove tree limbs located within 6' of ground level or 1/3 of plant height, whichever is less,
 - 2.5. Maintain the roof of a building or structure free of leaves, needles or other vegetative materials,

2.6. Remove flammable vegetation a minimum of 10 feet around liquefied petroleum gas tanks/containers, water tanks, and small outbuildings,

2.7. Remove firewood, vegetative growth, and combustible materials from unenclosed spaces beneath buildings or structures, or on decks or under eaves, canopies or other projections or overhangs.

2.8. The storage of firewood and combustible material within the defensible space shall be located a minimum of 30 feet from structures and separated from the crown of trees by a minimum horizontal distance of 15 feet.

Exception: Firewood and combustible materials not for consumption on the premises shall be stored as approved by the Fire Code Official.

3. Maintain effective defensible space of 100 feet from each side and from the front and rear of the structure, but not beyond the property line, by removing brush, flammable vegetation and combustible growth.

- (a) Weeds, grass, vines or other growth that is capable of being ignited and endangering property, shall be cut down and removed. Grass shall not exceed 6 inches in height.
- (b) Dead and dying woody fuels within this zone shall be removed.
- (c) Loose surface litter within this zone shall be permitted to a depth of 3 inches.
- (d) Dead standing and downed trees within this zone shall be removed.

Exception: Grass and other vegetation located more than 30 feet from buildings or structures and less than 18 inches (457 mm) in height above the ground need not be removed where necessary to stabilize the soil and prevent erosion.

5. Maintain a firebreak by removing brush and clearing away all flammable vegetation or other combustible growth for a distance of not less than 30 feet on each side thereof or to the property line, whichever is nearer.

- (a) Weeds, grass, vines or other growth that is capable of being ignited and endangering property, shall be cut down and removed. Grass shall not exceed 4 inches in height.
- (b) Dead and dying woody fuels within this zone shall be removed.
- (c) Loose surface litter within this zone shall be permitted to a depth of 3 inches.

Exception: Single specimens of trees, ornamental vegetative fuels or cultivated ground cover, such as green grass, ivy, succulents or similar plants used as ground cover, provided they do not form a means of readily transmitting fire.

E. Section 4908 of the 2019 California Fire Code is hereby added to read:

SECTION 4908 - FIRE PROTECTION PLAN

4908.1 General. New developments and projects proposed within a locally adopted Wildland-Urban Interface Fire Area shall include a plan for the protection of the community from any unreasonable risks associated with the effects of wildland and urban fires.

4908.2 Content. The plan shall be based upon a site-specific wildfire risk assessment that includes considerations of location, topography, aspect, flammable vegetation, climatic conditions and fire history. The plan shall address water supply, access, building ignition and fire-resistance factors, fire protection systems and equipment, defensible space and vegetation management, evacuation routes, peak load water supply requirements, and minimum road widths, as those items relate to identified fire hazards.

4908.3 Cost. The cost of fire protection plan preparation and review shall be the responsibility of the applicant.

4908.4 Plan Retention. The fire protection plan shall be retained by the fire code official.

F. Section 4909 of the 2019 California Fire Code is hereby added to read:

SECTION 4909 Access, Egress and Identification.

4909.1 General. Road and street networks, whether public or private, shall provide for safe access for emergency firefighting equipment and civilian evacuation concurrently, and shall provide unobstructed traffic circulation during a wildfire emergency.

4909.2 Where required. Any person who owns, leases, controls, operates, or maintains lands in, upon, or adjoining a locally adopted Wildland-Urban Interface Fire, and persons owning, leasing or controlling land adjacent to buildings or structures within these areas, shall at all times do all of the following:

(a) Maintain all roads, driveways, turnarounds, turnouts, and roadway structures, crossing or bordering their lands at full original design width. In all cases, the minimum clear width and height dimensions described below shall be maintained. Trees, brush, and other vegetative growth, encroaching on or obstructing these dimensions shall be removed.

(b) Clear all flammable vegetation within 10 feet of all roads, driveways, turnarounds, turnouts, and roadway structures.

(i) Weeds, grass, vines, brush, or other growth that is capable of being ignited and endangering property or limiting access/egress during a fire, shall be cut down and removed. Grass generally shall not exceed 6 inches in height.

(ii) Maintain all trees, shrubs, or other plants within this zone free of dead or dying wood.

(iii) Dead and dying woody fuels within this zone shall be removed. Loose surface litter shall be permitted to a depth of 3 inches.

(iv) Dead standing and downed trees within this zone shall be removed.

Exception: Logs or stumps, when embedded in the soil, may be retained when isolated from other vegetation.

(v) Remove lower limbs of trees (prune) to at least 6 feet or the lower 1/3 branches for small trees.

(vi) All trees 3 inches or less in diameter at breast height (dbh) shall be removed with the exception of indigenous, native species. The removal of live trees over 3 inches dbh, should only occur:

- 1) when needed to remove adjacent dead trees;
- 2) to achieve tree/shrub vertical requirements; or
- 3) where deemed a specific liability or fire safety hazard by the authority having jurisdiction.

4909.3 Road Width. All two-way roads, and driveways serving more than 2 single family residential structures, shall have a minimum 20 foot unobstructed and continuous horizontal clearance, and a minimum 15 feet unobstructed and continuous vertical clearance.

4909.4 One-Way Roads. All one-way roads, and driveways serving 2 or fewer residential structures, shall have a minimum 12 foot unobstructed and continuous horizontal clearance, and a minimum 15 feet unobstructed and continuous vertical clearance.

4909.5 Gates. Gate entrances shall be at least 2 feet wider than the traffic lane(s) served by that gate. In all cases, the minimum clear horizontal width shall be 14 feet and the minimum clear vertical height shall be 15 feet.

(a) All gates providing access from a public road shall be located at least 30 feet from the intersecting roadway and shall open to allow a vehicle to stop without obstructing traffic on that road.

(b) Security gates shall not be installed without approval from authority having jurisdiction and where security gates are installed, they shall have an approved means of emergency operation.

(c) The security gates and their emergency operation shall be maintained at all times.

4909.6 Street and Road Signs. The numbers, letters, and symbols, used on street and road signs shall be a minimum 4 inches height and minimum .5 inch stroke, reflectorized, and contrasting with the background color of the sign. On a two-way street, signs shall be visible and legible from either direction of travel.

4909.7 Premises Identification. Address identification shall be plainly legible and visible from the street or road fronting the property. Lettering shall be Arabic numbers or alphabetical letters.

(a) On a two way street, addressing shall be visible and legible from either direction of travel from a distance of 100 feet.

(b) Where access is by means of a private road and the address identification cannot be viewed from the public way, a monument, pole, or other sign or means, shall be used to identify the address.

(c) The numbers, letters, and symbols, used for street address signs shall be a minimum 4 inches height and minimum .5 inch stroke, reflectorized, and contrasting with the background color of the sign.

15.44.200 - Chapter 50—Hazardous Materials—General Provisions.

A. Section 5001.2.2.2 of the 2019 California Fire Code is hereby amended to read in its entirety:

5001.2.2.2 Health hazards. The material categories listed in this section are classified as health hazards. A material with a primary classification as a health hazard can also pose a physical hazard.

1. Highly toxic and toxic materials.
2. Corrosive materials.

3. Moderately toxic gas.
4. Other health hazards.

B. Section 5001.5.3 is hereby added to read:

5001.5.3 Hazardous materials business plan. Facilities that are required to submit a Hazardous Materials Business Plan (HMBP) as required by Health and Safety Code (HSC), Chapter 6.95, Sections 25500 through 25545, and Title 19, Division 2, Chapter 4, and facilities required to maintain a hazardous materials-related permit in accordance with Section 105.6 of this code, shall electronically submit a HMBP every year on or by the last day of the assigned month and no less frequently than that required by the HSC.

Exception: The following facilities shall electronically submit a HMBP at least once every three years on or by the last day of the assigned month and no less frequently than that required by the HSC.

1. Cell tower sites.
2. Facilities with no other hazardous materials permits other than a permit for carbon dioxide system used in beverage dispensing.
3. Dental offices with no other hazardous materials permits other than a permit for a fixed medical gas system and/or small quantity waste generator permit.

C. Section 5003.1.3.1 of the 2019 California Fire Code is hereby added to read:

5003.1.3.1 Toxic, highly Toxic, moderately toxic gases and similarly used or handled materials. The storage, use, and handling of toxic, highly toxic and moderately toxic gases in amounts exceeding Table 6004.2 or 6004.3 shall be in accordance with this Chapter and Chapter 60 of the California Fire Code. Any toxic, highly toxic or moderately toxic material that is used or handled as a gas or vapor shall be in accordance with the requirements for toxic, highly toxic or moderately toxic gases.

D. Section 5003.1.5 of the 2019 California Fire Code is hereby added to read:

5003.1.5 Other health hazards. The storage, use, and handling of materials classified as other health hazards including carcinogens, irritants and sensitizers in amounts exceeding 810 cubic feet for gases, 55 gallons for liquids and 5,000 pounds for solids shall be in accordance with this Section 5003.

E. Section 5003.1.6 of the 2019 California Fire Code is hereby added to read:

5003.1.6 Additional Spill Control and Secondary Containment Requirements. In addition to the requirements set forth in Section 5004.2. An approved containment system is required for any quantity of hazardous materials that are liquids or solids at normal temperature, and pressure (NTP) where a spill is determined to be a plausible event and where such an event would endanger people, property or the environment. The approved containment system may be required to include a

combination of spill control and secondary containment meeting the design and construction requirements set forth in Section 5004.2.

F. Section 5003.2.2.1 of the 2019 California Fire Code is hereby amended to read in its entirety:

5003.2.2.1 Design and construction. Piping, tubing, valves, fittings and related components used for hazardous materials shall be in accordance with the following:

1. Piping, tubing, valves, fittings, and related components shall be designed and fabricated from materials compatible with the material to be contained and shall be of adequate strength and durability to withstand the pressure, structural and seismic stress, and exposure to which they are subject.
2. Piping and tubing shall be identified in accordance with ASME A13.1 and Santa Clara County Fire Chiefs Marking Requirements and Guidelines for Hazardous Materials and Hazardous Waste to indicate the material conveyed.
3. Readily accessible manual valves or automatic remotely activated fail-safe emergency shutoff valves shall be installed on supply piping and tubing at the following locations:
 - 3.1 The point of use.
 - 3.2 The tank, cylinder or bulk use.
4. Manual emergency shutoff valves and controls for remotely activated emergency shutoff valves shall be identified and the location shall be clearly visible accessible and indicated by means of a sign.
5. Backflow prevention or check valves shall be provided when the backflow of hazardous materials could create a hazardous condition or cause the unauthorized discharge of hazardous materials.
6. Where gases or liquids having a hazard ranking of Health hazard Class 3 or 4, Flammability Class 4, or Reactivity Class 4 in accordance with NFPA 704 are carried in pressurized piping above 15 pounds per square inch gauge (psig)(103 Kpa), an approved means of leak detection, emergency shutoff and excess flow control shall be provided. Where the piping originates from within a hazardous material storage room or area, the excess flow control shall be located within the storage room or area. Where the piping originates from a bulk source, the excess flow control shall be located as close to the bulk source as practical.

Exceptions:

1. Piping for inlet connections designed to prevent backflow.
 2. Piping for pressure relief devices.
7. Secondary containment or equivalent protection from spills shall be provided for piping for liquid hazardous materials and for highly toxic and toxic corrosive gases above threshold quantities listed in Tables 6004.2 and 6004.3. Secondary containment includes but is not limited to double walled piping.

Exceptions:

1. Secondary containment is not required for toxic corrosive gases if the piping is constructed of inert materials.
2. Piping under sub-atmospheric conditions if the piping is equipped with an alarm and fail-safe-to-close valve activated by a loss of vacuum.
8. Expansion chambers shall be provided between valves whenever the regulated gas may be subjected to thermal expansion. Chambers shall be sized to provide protection for piping and instrumentation and to accommodate the expansion of regulated materials.

G. Section 5003.2.2.2 of the 2019 California Fire Code is hereby amended to read in its entirety:

5003.2.2.2 Additional regulation for supply piping for health hazard materials. Supply piping and tubing for gases and liquids having a health hazard ranking of 3 or 4 shall be in accordance with ASME B31.3 and the following:

1. Piping and tubing utilized for the transmission of toxic, highly toxic, or highly volatile corrosive liquids and gases shall have welded, or brazed connections throughout except for connections within an exhausted enclosure if the material is a gas, or an approved method of drainage or containment is provided for connections if the material is a liquid.
2. Piping and tubing shall not be located within corridors, within any portion of a means of egress required to be enclosed in fire-resistance-rated construction or in concealed spaces in areas not classified as Group H Occupancies.

Exception: Piping and tubing within the space defined by the walls of corridors and the floor or roof above or in concealed space above other occupancies when installed in accordance with the California Building Code as required for Group H, Division 5 Occupancies.

3. All primary piping for toxic, highly toxic and moderately toxic gases shall pass a helium leak test of 1×10^{-9} cubic centimeters/second where practical, or shall pass testing in accordance with an approved, nationally recognized standard. Tests shall be conducted by a qualified "third party" not involved with the construction of the piping and control systems.

H. Section 5003.3.1 of the 2019 California Fire Code is hereby amended to read in its entirety:

5003.3.1 Unauthorized discharges. In the event hazardous materials are released in quantities reportable under state, federal or local regulations or when there is release or a threatened release that presents a threat to health, property or the environment, the fire code official shall be notified immediately in an approved manner and the following procedures required in accordance with Sections 5003.3.1.1 through 5003.3.1.4.

I. Section 5003.5.2 of the 2019 California Fire Code is hereby added to read:

5003.5.2 Ventilation ducting. Ducts venting hazardous materials operations shall be labeled with the hazard class of the material being vented and the direction of flow.

J. Section 5003.5.3 of the 2019 California Fire Code is hereby added to read:

5003.5.3 "H" occupancies. In "H" occupancies, all piping and tubing may be required to be identified when there is any possibility of confusion with hazardous materials transport tubing or piping. Flow direction indicators are required.

K. Section 5003.9.11 of the 2019 California Fire Code is hereby added to read:

5003.9.11 Fire extinguishing systems for workstations dispensing, handling, or using hazardous materials. Combustible and non-combustible workstations, which dispense, handle or use hazardous materials, shall be protected by an approved automatic fire extinguishing system in accordance with Section 2703.10.

Exception: Internal fire protection is not required for Biological Safety Cabinets that carry NSF/ANSI certification where quantities of flammable liquids in use or storage within the cabinet do not exceed 500 ml.

L. Section 5003.4.10.4.3 of the 2019 California Fire Code is hereby amended to read in its entirety:

5003.10.4.3 Highly toxic, toxic, and moderately toxic, gases shall be limited to a container of a maximum water capacity of 1 lb.

M. Section 5004.2.1 of the 2019 California Fire Code is hereby amended to read in its entirety:

5004.2.1 Spill control for hazardous material liquids. Rooms, buildings or areas used for storage of hazardous material liquids shall be provided with spill control to prevent the flow of liquids to adjoining areas. Floors in indoor locations and similar surfaces in outdoor locations shall be constructed to contain a spill from the largest single vessel by one of the following methods:

1. Liquid-tight sloped or recessed floors in indoor locations or similar areas in outdoor locations.
2. Liquid-tight floors in indoor and outdoor locations or similar areas provided with liquid-tight raised or recessed sills or dikes.
3. Sumps and collection systems, including containment pallets in accordance with Section 5004.2.3.
4. Other approved engineered systems.

Except for surfacing, the floors, sills, dikes, sumps and collection systems shall be constructed of noncombustible material, and the liquid-tight seal shall be compatible with the material stored. When liquid-tight sills or dikes are provided, they are not required at perimeter openings having an open-grate trench across the opening that connects to an approved collection system.

N. Section 5004.2.2.2 of the 2019 California Fire Code is hereby amended to read in its entirety:

5004.2.2.2 Incompatible materials. Incompatible materials shall be separated from each other in independent secondary containment systems.

O. Section 5004.2.3 of the 2019 California Fire Code is hereby amended to read in its entirety:

5004.2.3 Containment pallets. Combustible containment pallets shall not be used inside buildings to comply with Section 5004.2 where the individual container capacity exceeds 55 gallons (208 L) or an aggregate capacity of multiple containers exceeds 1,000 gallons (3785 L) for liquids or where the individual container capacity exceeds 550 pounds (250 kg) or an aggregate of multiple containers exceeds 10,000 pounds (4540 kg) for solids.

Where used as an alternative to spill control and secondary containment for outdoor storage in accordance, with the exception in Section 5004.2, containment pallets shall comply with all of the

following:

1. A liquid-tight sump accessible for visual inspection shall be provided;
2. The sump shall be designed to contain not less than 66 gallons (250L);
3. Exposed surfaces shall be compatible with material stored;
4. Containment pallets shall be protected to prevent collection of rainwater within the sump of the containment pallet.

15.44.210 – Chapter 56 — Explosives and Fireworks.

A. Section 5601.1.3 of the 2019 California Fire Code is hereby amended to read in its entirety:

5601.1. 3 Fireworks. The possession, manufacture, storage, sale, handling, and use of fireworks, including those fireworks classified as Safe and Sane by the California State Fire Marshal, are prohibited.

Exception: The use of fireworks for fireworks displays as allowed in Section 5608.

15.44.220 - Chapter 57—Flammable and Combustible Liquids.

A. Section 5704.2.7.5.8 of the 2019 California Fire Code is hereby amended to read in its entirety:

5704.2.7.5.8 Overfill prevention. An approved means or method in accordance with Section 5704.2.9.7.5 shall be provided to prevent the overfill of all Class I, II and IIIA liquid storage tanks. Storage tanks in refineries, bulk plants or terminals regulated by Sections 5706.4 or 5706.7 shall have overfill protection in accordance with API 2350.

Exception: Outside aboveground tanks with a capacity of 1320 gallons (5000 L) or less need only comply with Section 5704.2.9.7.5.1 (1.1)

An approved means or method in accordance with Section 5704.2.9.7.5 shall be provided to prevent the overfilling of Class IIIB liquid storage tanks connected to fuel-burning equipment inside buildings.

B. Section 5704.2.7.5.9 of the 2019 California Fire Code is hereby added to read:

5704.2.7.5.9 Automatic filling of tanks. Systems that automatically fill flammable or combustible liquid tanks shall be equipped with overfill protection, approved by the fire code official, that sends an alarm signal to a constantly attended location and immediately stops the filling of the tank. The alarm signal and automatic shutoff shall be tested on an annual basis and records of such testing shall be maintained on-site for a period of five (5) years.

15.44.230 – Chapter 58 — Flammable gases and flammable cryogenic fluids.

A. Section 5803.3 of the 2019 California Fire Code is hereby added to read:

5803.3 Mobile fueling of hydrogen vehicles. Mobile fueling of hydrogen vehicles is prohibited unless approved by the *fire code official*.

B. Section 5809.3.4 of the 2019 California Fire Code is hereby amended to read in its entirety:

5809.3.4 Site plan. For other than emergency roadside service, a site plan shall be developed for each location at which mobile gaseous hydrogen fueling occurs. The site plan shall be in sufficient detail to indicate: all buildings, structures, lot lines, property lines and appurtenances on site and their use and function, and the scale of the site plan.

15.44.240 - Chapter 64—Pyrophoric Materials.

A. Section 6405.3.1 of the 2019 California Fire Code is hereby added to read:

6405.3.1 Silane distribution systems automatic shutdown. Silane distribution systems shall automatically shut down at the source upon activation of the gas detection system at levels above the alarm level and/or failure of the ventilation system for the silane distribution system.

15.44.250 – Appendix B

A. Table B105.2 of the 2019 California Fire Code is hereby amended to read in its entirety:

TABLE B105.2

REQUIRED FIRE FLOW FOR BUILDINGS OTHER THAN ONE- AND

TWO-FAMILY DWELLINGS, GROUP R-3 AND R-4 BUILDINGS AND TOWNHOUSES

AUTOMATIC SPRINKLER SYSTEM (Design Standard)	MINIMUM FIRE FLOW (gallons per minute)	FLOW DURATION (hours)
No automatic sprinkler system	Value in Table B105.1(2)	Duration in Table B105.1(2)
Section 903.3.1.1 of the California Fire Code	50% of the value in Table B105.1(2)a	Duration in Table B105.1(2) at the reduced flow rate
Section 903.3.1.2 of the California Fire Code	50% of the value in Table B105.1(2)a	Duration in Table B105.1(2) at the reduced flow rate

For SI: 1 gallon per minute = 3.785 L/m.

- The reduced fire flow shall be not less than 1,000 gallons per minute.
- The reduced fire flow shall be not less than 1,500 gallons per minute.

15.44.260 - Violation.

A. A violation of the code adopted by this chapter occurs when a person:

- Fails to comply with this code;
- Violates or fails to comply with any order made under this code;

3. Builds in violation of any detailed statement of specifications or plans submitted and approved thereunder or any certificate or permit issued thereunder and from which no appeal has been taken; or
 4. Fails to comply with such an order as affirmed or modified by the city council or by a court of competent jurisdiction, within the time fixed in this chapter.
- B. Such person may be liable severally and for each and every such violation and noncompliance respectively.
- C. The imposition of one penalty for any violation shall not excuse the violation or permit it to continue and all such persons shall be required to correct or remedy such violations or defects within a reasonable time.
- D. The application of the above penalty shall not be held to prevent the enforced removal of prohibited conditions.

SECTION 9. Sections 15.64.040 of Chapter 15.64 (Wood-Burning Appliances) of Title 15 (Buildings and Construction) of the Morgan Hill Municipal Code is hereby amended to read (additions in underline, deletions in ~~strikeout~~):

15.64.040 - Application.

- A. Only E.P.A. pellet-fueled wood heaters and E.P.A. certified wood-burning appliances may be installed.
- B. This chapter does not prohibit the repair, reconstruction or replacement of an existing wood-burning appliance or wood-burning appliances that are designed primarily for food preparation.

Section 10. References to Prior Code. Unless superseded and expressly repealed, references in City forms, documents and regulations to the chapters and sections of the former Morgan Hill Building Code 2016, shall be construed to apply to the corresponding provisions contained within the Morgan Hill Building Code 2019. Ordinance No. 2221 of the City of Morgan Hill and all other ordinances or parts of ordinances in conflict herewith are hereby superseded and expressly repealed.

Section 11. CEQA. The City Council finds, pursuant to Title 14 of the California Code of Regulations, Section 15061(b)(3), that the adoption of this Ordinance is exempt from the requirements of the California Environmental Quality Act (CEQA) because it can be seen with certainty that there is no potential for causing a significant effect on the environment.

Section 12. Severability. Should any provision of this ordinance be deemed unconstitutional or unenforceable by a court of competent jurisdiction, such provision shall be severed from the ordinance, and such severance shall not affect the remainder of the ordinance.

Section 14. Effective Date; Publication. This Ordinance shall take effect on January 1, 2020. The City Clerk is hereby directed to publish this Ordinance or a summary thereof pursuant to Government Code Section 36933.

This ordinance was introduced at a meeting of the City Council held on the ____ day of ____, 20__, and adopted at a meeting held on the ____ day of ____, 20__, and said ordinance was duly passed and adopted in accordance with law by the following vote:

AYES: COUNCIL MEMBERS:

NOES: COUNCIL MEMBERS:

ABSTAIN: COUNCIL MEMBERS:

ABSENT: COUNCIL MEMBERS:

ATTEST:

APPROVED:

IRMA TORREZ, City Clerk

RICHARD CONSTANTINE, Mayor

CERTIFICATE OF THE CITY CLERK

I, IRMA TORREZ, CITY CLERK OF THE CITY OF MORGAN HILL, CALIFORNIA, do hereby certify that the foregoing is a true and correct copy of Ordinance No. ____, New Series, adopted by the City Council of the City of Morgan Hill, California at their regular meeting held on the ____ day of ____, 2019.

WITNESS MY HAND AND THE SEAL OF THE CITY OF MORGAN HILL.

DATE: _____

IRMA TORREZ, City Clerk



CITY COUNCIL STAFF REPORT

MEETING DATE: October 23, 2019

PREPARED BY: Chris Ghione, Public Services Director
APPROVED BY: City Manager

RECEIVE REPORT REGARDING MORGAN HILL AND GILROY SUSTAINABLE WATER MANAGEMENT PLANNING

RECOMMENDATION(S)

1. Receive the technical memorandum on sustainable water management planning; and
2. Provide policy direction.

COUNCIL PRIORITIES, GOALS & STRATEGIES

Ongoing Priorities

Enhancing Public Safety
Protecting the Environment
Maintaining Fiscal Responsibility
Advancing Regional Initiatives

GUIDING DOCUMENTS

Water System Master Plan

REPORT NARRATIVE:

Background

The City of Morgan Hill supplies water to approximately 12,900 residential, commercial, and industrial customers. The City manages the distribution system relying solely on ground water extracted from the Llagas Subbasin groundwater aquifer and the Coyote Valley Subbasin (northern area of the City). While the City is responsible for providing clean and safe drinking water to its residents, it is Valley Water that is responsible for maintaining the ground water aquifers and the overall water supply for the County. Valley Water actively brings imported water that travels through the Sacramento-San Joaquin Delta and San Luis Reservoir into South County specifically for groundwater recharge.

Valley Water is currently in the process of updating several planning documents and has continually requested input from the City of Morgan Hill and the other water retailers for its planning efforts. The most impactful of these plans are the updates to the Water Supply Master Plan and the Countywide Recycled Water Master Plan. These plans call for numerous projects that could positively or negatively impact the City's water supply from both a sustainability and financial perspective.

The water supply for the City of Morgan Hill is linked with the City of Gilroy through the

sharing of the Llagas Subbasin groundwater aquifer and the generation of recycled water from wastewater at the South County Regional Wastewater Facility (SCRWA), which is jointly owned by the cities. The City of Gilroy operates its water utility similarly to Morgan Hill and has similar interests in the operations and planning of Valley Water. After considering the timing of planning and the alignment of interest, the cities have partnered to consult with Akel Engineering to develop a technical memo (Memorandum) on sustainable water management planning (Attachment 1) specifically for the two cities.

Water Supply Planning

The purpose of the Memorandum is to support both staff and elected officials in identifying which projects are the most beneficial to the cities and to provide a framework upon which decision makers can adopt policies that support a sustainable water future. It is important to note that while both cities are located in South County, the Memorandum considers the needs of the cities specifically in their role to provide water to the urban customers. While the cities make up much of the population in the South County, they account for less than 40% of the water extracted from the Llagas Subbasin.

The Memorandum identified 18 projects for analysis. The ranking of projects within the Memorandum utilizes a variety of criteria and ultimately assigns each project a ranking based on its benefits to the water supply for the cities. This analysis provides the cities with additional data to inform their comments on Valley Water's current plans and on their future planning work. The top 4 projects include:

1. Agricultural and Other Users Offset: This alternative scored the highest based on the criteria. This is largely due to the potential significant reduction in groundwater pumping that could be achieved and the negligible need for any new infrastructure. This project would initiate a program to provide a policy and regulatory framework to reduce agricultural pumping within the South County specifically during droughts or imported water supply curtailments. The project would conceptually provide agricultural water users with incentives to reduce groundwater pumping in order to preserve groundwater levels.
2. (Tie) Butterfield Channel Recharge: This project would construct pipelines that would extend the Madrone Pipeline, which currently ends at 101, to allow Valley Water to bring imported water or Anderson water into the Butterfield Channel for groundwater recharge. It is anticipated to have an annual yield of 2,000 Acre Feet per Year (AFY) in the Llagas Subbasin. While this project does rely on the availability of imported water or Anderson water, it scores well in terms of location of benefit and overall increases to the Llagas Subbasin. Its lower cost as compared to other projects also supports its high scoring.
2. (Tie) South Bay Water Recycling (SBWR) Indirect Potable Reuse (IPR) to Butterfield Channel: This project would alter alternatives currently outlined in Valley Water's Recycled Water Master Plan and would deliver IPR water to the Butterfield Channel from the SBWR Plant in San Jose. It is anticipated to have an

annual yield of 3,000 Acre Feet per Year (AFY) in the Llagas Subbasin. This project scores well in terms of location of benefit and overall increases to the Llagas Basin. It also scores highly due to it increasing resiliency as it does not rely on the availability of imported water.

4. South County Water Treatment Plant (with Increased Deliveries). This project would construct a surface water treatment plant in the South County area to receive raw water from the Santa Clara Conduit. This project scores well with the provision that a substantial increase in yield is possible (up to approximately 11,000 AFY). Should deliveries be supported at this higher level, there is significant potential to rest groundwater wells within the cities.

It should also be noted that many long-discussed potential projects have not scored as highly in this analysis. These include the Morgan Hill scalping plant and the pumping of recycled water from SCRWA to Morgan Hill for non-potable reuse.

Policy Implications

It is believed that this analysis can help support the ongoing policy decisions for the decisionmakers in both cities. To conduct the analysis, some basic assumptions were used to support the work. These assumptions include:

- If imported water were unavailable for an extended period, groundwater aquifers would suffer dramatically.
- The water supplies for both cities are isolated single-source systems with no potential interties or other infrastructure to improve resiliency.
- The Llagas Subbasin does not have formal allocation limits, and no corresponding water supply agreements exist between the cities and Valley Water, thus the status of the supplies is difficult to determine.
- The respective municipal water systems have benefitted from the managed recharge programs implemented by Valley Water.
- The amount and reliability of imported water supplies is likely to diminish in the future due to climate change, biological restrictions that limit pumping in the Delta, and physical disruptions, e.g., levee failures, to the Delta infrastructure.

City staff are recommending that Morgan Hill and Gilroy continue to explore and expand their joint groundwater planning, policies, and objectives. Staff are recommending that the cities begin to work together to take an increasingly active approach in ensuring water supplies in partnership with Valley Water. Some specific actions include:

1. Explore joint role in regional water supply planning.
2. Define a minimum level of service for water supply.
3. Define risk levels for water supply.
4. Identify reasonable recycled water investments benefitting both Morgan Hill and Gilroy.
5. Develop water supply agreements with Valley Water.

It is important to recognize that this more active approach is different than the past approach. Staff at the City of Morgan Hill believe that the City can continue to construct the needed infrastructure to support the increased demand on the water system that will be required by growth if appropriate development impact fees are collected. However, as previously noted, the cities are completely reliant on Valley Water for the ground water recharge that is required to maintain water levels within the groundwater aquifers. Historically, Valley Water has been an excellent partner in ensuring this recharge has occurred, but there are significant changes ahead. Factors that are necessitating this change in approach include:

1. Climate change is real and future droughts may be longer and more severe.
2. State and Federal policies may likely lead to reductions in the amount of imported water that is available in the future.
3. Recent housing legislation intended to increase housing production may increase water demand significantly locally, regionally and across the State resulting in an increase in water demand.
4. Valley Water is responsible for the water supply of the metropolitan areas in Northern Santa Clara County. The elected representation for South County is limited to one of seven board members.
5. The City of Morgan Hill is extremely vulnerable, being at the “top of the hill” for both of the aquifers it draws water from, and therefore is much more vulnerable during severe drought events.

The proposed more active approach may require additional work with Valley Water in a formal setting. The two cities and Valley Water established a Joint Water Resources Committee in 2017 in order to facilitate policy discussions and the sharing of information among the three jurisdictions. Recently, Valley Water has expressed an interest in expanding its role in the governance of wastewater resources in South County – particularly as it relates to the development of additional recycled water infrastructure. Staff agrees that it is important that Valley Water representatives have a formal role in these decisions and recommends that the Council direct staff to explore developing a new agreement, committee, and/or organization in cooperation with Valley Water that will roughly equate to the agreements and institutions that Valley Water has with the cities in Northern Santa Clara County.

Should the City Council agree with the actions outlined in the Memorandum, staff intend to partner with the City of Gilroy and utilize opportunities to work with Valley Water on moving these actions forward. In conjunction with this work, City staff will continue to evaluate and update the City Council on future actions that may be appropriate for the City - especially as it relates to new growth and water supply.

COMMUNITY ENGAGEMENT: Inform

This report serves to provide an update on City water supply planning work. Staff of both cities intend to share this report at a future meeting of the South County Joint Water Resources Committee which includes elected officials from Morgan Hill, Gilroy, and Valley Water. This report was provided to the community over ten days in advance

of the Council meeting in alignment with the City practice of providing extended time for review of large planning documents.

ALTERNATIVE ACTIONS:

No formal action is required on this item, but the City Council may choose to provide additional direction and feedback to City staff.

PRIOR CITY COUNCIL AND COMMISSION ACTIONS:

The Council has previously received numerous reports and taken numerous actions on water supply related activities. This includes adoption of the 2017 Water System Master Plan and the 2015 Urban Water Management Plan.

FISCAL AND RESOURCE IMPACT:

There is no fiscal impact associated with receiving this report.

CEQA (California Environmental Quality Act):

Not a Project.

This report is informational in nature and is an administrative program that will not result in a change to the physical environment, this action is not a project under the California Environmental Quality Act. Individual projects all undergo various levels of environmental analysis and review to meet CEQA requirements.

LINKS/ATTACHMENTS:

1. Sustainable Water Management Planning Memo
2. Correspondence



**CITY OF GILROY
AND
CITY OF MORGAN HILL**

SUSTAINABLE WATER MANAGEMENT PLANNING

FINAL

September 2019

A K E L
ENGINEERING GROUP, INC.



September 26, 2019

City of Gilroy
7351 Rosanna Street
Gilroy, CA 95020

City of Morgan Hill,
17575 Peak Avenue,
Morgan Hill, California 95037

Attention: Mr. Girum Awoke, P.E.
Director of Public Works, City of
Gilroy

Mr. Chris Ghione
Public Services Director, City of Morgan Hill

Subject: Technical Memorandum – Sustainable Water Management Planning

Dear Girum and Chris:

We are pleased to submit this letter report documenting the water supply alternatives analysis and project ranking for the Llagas and Coyote Valley Groundwater Subbasins. This analysis documents on-going and potential projects impacting the water supplies in the local groundwater aquifers, and provides a qualitative analysis and ranking system in an effort to prioritize the impact of each project and the benefits to the Cities of Gilroy and Morgan Hill.

We are extending our thanks to you and your staff, SCRWA staff, and other staff, whose courtesy and cooperation were valuable components in completing this study and producing this report.

Sincerely,

AKEL ENGINEERING GROUP, INC.

Tony Akel, P.E.
Principal

Enclosure: Report

Cc: Mr. Saeid Vaziry, PE, Environmental Programs Manager, South County Regional
Wastewater Authority



Acknowledgements

City of Gilroy

Girum Awoke, Director of Public Works

Gary Heap, City Engineer

City of Morgan Hill

Chris Ghione, Public Services Director

Anthony Eulo, Program Administrator

Dan Repp, Deputy Director of Utility Services

South County Regional Wastewater Authority

Saeid Vaziry, Environmental Programs Manager

Sustainable Water Management Planning

TABLE OF CONTENTS

PAGE NO.

Contents

1.0	BACKGROUND.....	1
2.0	DEFINITIONS.....	2
3.0	GROUNDWATER BASINS	2
3.1	Llagas and Coyote Valley Groundwater Basins.....	2
3.2	Existing and Projected Water Supply Balance.....	3
4.0	EXISTING VALLEY WATER BASIN RECHARGE PROGRAM	4
5.0	CITY OF GILROY AND MORGAN HILL CURRENT POLICY OBJECTIVES	4
6.0	POTENTIAL WATER MANAGEMENT PROJECTS	5
6.1	Currently Considered Projects	5
6.2	New Projects Added for Consideration	6
7.0	PROJECT EVALUATION AND RANKING	7
7.1	Criteria.....	7
7.2	Project Evaluation and Ranking	8
8.0	SUMMARY	9
9.0	RECOMMENDATIONS	10

FIGURES

Figure 1	Regional Location Map
Figure 2	Groundwater Subbasins
Figure 3	Creeks and Water Bodies
Figure 4	Groundwater Wells
Figure 5	Gilroy – Morgan Hill Recycled Water Alternatives
Figure 6	Santa Clara Conduit

TABLES

Table 1	Existing and Projected Supply vs Demand Comparison (Coyote Valley Subarea)
Table 2	Existing and Projected Supply vs Demand Comparison (Llagas Subbasin)
Table 3	Evaluation Criteria – Categories and Scores
Table 4	Project Ranking

APPENDIX

Llagas Groundwater Subbasin 2035 Water Budget

Sustainable Water Management Planning

1.0 BACKGROUND

The cities of Gilroy (G) and Morgan Hill (MH) are located approximately 25 miles south of San Jose along the State Route 101 corridor (**Figure 1**). The cities are located in the southern portion of County of Santa Clara, within the Santa Clara Valley. Both areas are located within the Llagas Subbasin groundwater aquifer, with the northern-most portion of Morgan Hill located in the Coyote Valley Subbasin groundwater aquifer (**Figure 2**). The cities completed a 2015 Urban Water Management Plan, which provides a groundwater balance for the respective aquifers, and which documents objectives to meet the groundwater supply and demand needs for a 20-year planning horizon.

As part of continued management efforts to provide a sustainable groundwater resource, Valley Water (VW) is in the process of updating the Water Supply Master Plan and County-Wide Recycled Water Master Plan for their service area. Other relevant studies and reports include:

1. Zone of Benefit Study (VW) – In Progress
2. South County Recycled Water Master Plan (G/MH/VW) – 2015
3. Morgan Hill Urban Water Management Plan (UWMP) - 2015
4. Gilroy Urban Water Management Plan - 2015
5. Morgan Hill Water System Master Plan - 2017

Several projects have been recommended in each report that impact the Llagas and Coyote Valley Subbasins. This report evaluates the impact of these projects, while suggesting enhancements or alternate projects, that may be beneficial to the cities and the groundwater basin. Accordingly, the cities have retained the services of Akel Engineering Group to perform a qualitative analysis of the water supply projects, their benefits to the Cities of Gilroy and Morgan Hill, and to provide a ranking of the projects as a useful tool for guiding water supply discussions.

This memorandum includes the following sections:

- Groundwater Basins
- Existing VW Basin Recharge Program
- City of Gilroy and City of Morgan Hill Policy Objectives
- Potential Water Management Projects
- Project Evaluation and Ranking
- Summary
- Recommendations

2.0 DEFINITIONS

Since some of the terms used in this memorandum are not commonplace, it is important to understand the following basic definitions:

Sustainable

Water supplies are available in sufficient volume to maintain a positive annual water budget in the Llagas and Coyote subbasins where water supplies include: imported water, surface water storage, recycled water, and precipitation capture.

Resiliency

Water emanates from a source that is in some ways different than existing sources and less interruptible due to climate change, imported water restrictions, or physical failures in the imported water delivery system.

Non-Potable Reuse (NPR) Water

Common “purple pipe” recycled water resulting from additional treatment processes as a wastewater treatment plant that is typically used solely for irrigation and some industrial processes.

Potable Reuse (PR) Water

Wastewater that has been subject to advanced treatment processes at a wastewater treatment plant that render the water safe for human consumption. Uses for potable reuse can be either indirect or direct.

- **Indirect Potable Reuse (IPR)** – There are 2 types of IPR, and both require an environmental buffer. These items are as follows:
 - Groundwater Recharge – requires 6 months retention time before reaching nearest well
 - Surface Water Augmentation – requires time in a reservoir before entering a treatment plant
- **Direct Potable Reuse (DPR)** – 2 types
 - Raw Water Augmentation (send directly to a drinking water treatment plant)
 - Direct Connection to a public water system

3.0 GROUNDWATER BASINS

This section provides a description of the groundwater basin characteristics and documents the water supply balance for the Llagas Subbasin and Coyote Valley Subarea in accordance with the cities' respective 2015 UWMPs.

3.1 Llagas and Coyote Valley Groundwater Basins

The City of Morgan Hill is located above the boundary between two groundwater basins: The Coyote Valley Subarea of the Santa Clara groundwater subbasin in the north and the Llagas groundwater subbasin in the south, with Cochrane Road generally serving as the boundary line. The City of Gilroy is located entirely within the Llagas Subbasin. Neither the Coyote Valley Subarea nor the Llagas Subbasin are adjudicated groundwater basins and overdraft has not been a historical problem.

The VW prepared a Groundwater Management Plan (GMP) in November 2016. This 2016 GMP provides a comprehensive overview of the Santa Clara Valley Groundwater Basin and recommends various management strategies for the basin. The plan specifies two Basin Management Objectives, which summarize the overall management objectives for the VW and are summarized as follows:

- Groundwater supplies are managed to optimize water supply reliability and minimize land subsidence
- Groundwater is protected from contamination

The VW GMP and the Cities 2015 UWMPs include detailed discussions on the groundwater basins and on the collaborative efforts currently underway to manage the groundwater supplies. This includes management of the upstream watersheds, which are a significant source of natural groundwater recharge. The watersheds are shown on [Figure 3](#).

The supply reliability is considered for the near-term needs (2020) and the long-term needs (2020-2040). There are two aspects of supply reliability to be considered. The first relates to immediate service needs and is primarily a function of the availability and adequacy of the supply facilities. This aspect is considered for emergency reliability. The second aspect is climate-related, and involves the availability of water during mild or severe drought periods.

3.2 Existing and Projected Water Supply Balance

As part of the 2015 Urban Water Management Plans (2015 UWMP), each City prepared a supply versus demand comparison that evaluated the Llagas Subbasin and Coyote Valley Subarea. [Figure 4](#) documents the location of each City's groundwater wells with respect to the groundwater aquifers. The groundwater wells indicate which groundwater aquifers impact the City's overall production. A discussion of the groundwater supply balance for each aquifer is included in the following, and an infographic explaining the water supply balance concept is included in the [Appendix](#):

- **Coyote Valley Subarea.** [Table 1](#) documents the water supply balance for the Coyote Valley Subarea. In accordance with the City of Morgan Hill's 2015 UWMP, the Coyote Valley Subarea was projected to have an 1,168 acre-feet per year (AFY) deficiency in 2020, with the deficiency expanding to 1,982 AFY by the year 2040.
- **Llagas Subbasin.** [Table 2](#) documents the water supply balance for the Llagas Subbasin, and in accordance with the Gilroy 2015 UWMP. The Llagas Subbasin is currently projected to have a surplus of 900 AFY in 2020, and a 1,400 AFY deficiency by 2035. However, accounting for recycled water from the South County Regional Wastewater Authority (SCRWA), the 2020 surplus increases to 3,700 AFY and the deficiency is offset and becomes a 2,300 AFY surplus by 2035.

Recycled water was addressed as part of a joint effort between VW, the City of Morgan Hill, the City of Gilroy, and the South County Regional Wastewater Authority. Alternatives for

servicing the City of Gilroy and the City of Morgan Hill with recycled water are shown on [Figure 5](#).

4.0 EXISTING VALLEY WATER BASIN RECHARGE PROGRAM

VW imports Central Valley Project water from San Luis Reservoir via the Pacheco Tunnel, the Pacheco Conduit, and the Santa Clara Conduit. The Santa Clara Conduit traverses the east side of the City of Gilroy and the City of Morgan Hill, with connections supplying raw water for recharge purposes in the City of Morgan Hill. The Santa Clara Conduit is shown on [Figure 6](#).

Valley Water manages several groundwater recharge projects that receive deliveries from the Santa Clara Conduit, and discussed as follows:

- **San Pedro Ponds:** These ponds are located in the City of Morgan Hill and recharge the Llagas Subbasin. However, due to septic tanks in the area, the full capacity of this recharge basin is not utilized.
- **Main Avenue Ponds:** These ponds are on the east side of the City of Morgan Hill and recharge the Llagas Subbasin.
- **Madrone Channel:** This channel is used for stormwater runoff management in the wet season, and receives raw recharge water via the Madrone Pipeline during the summer months. While the northern end of the Channel recharges the Coyote Valley Subarea when stormwater is present, the Channel primarily recharges the Llagas Subbasin.
- **Llagas In-Stream Recharge:** This managed recharge occurs using natural runoff in Llagas Creek to recharge the Llagas Subbasin.

These projects are part of the managed groundwater recharge program administrated by VW. The 2016 Groundwater Management Plan for VW indicates that there is a recharge capacity of 19,000 AFY.

5.0 CITY OF GILROY AND MORGAN HILL CURRENT POLICY OBJECTIVES

The cities of Morgan Hill and Gilroy currently acknowledge that:

- If imported water were unavailable for an extended period, groundwater aquifers would suffer dramatically.
- Their water supplies are isolated single source systems, with no potential interties (connections to other systems) or other infrastructure to improve resiliency.
- The Llagas Subbasin does not have formal allocation limits, and no corresponding water supply agreements exist between the cities and VW, thus the status of the supplies is difficult to determine.

- The respective municipal water systems have benefitted from the managed recharge programs implemented by VW.
- The amount and reliability of imported water supplies is likely to diminish in the future due to climate change, biological restrictions that limit pumping in the Delta, and physical disruptions, (e.g., levee failures), to the Delta infrastructure.

6.0 POTENTIAL WATER MANAGEMENT PROJECTS

This section documents projects that are currently being considered by VW, as well as other projects that have been added based on feedback during planning workshops held jointly with City of Gilroy and City of Morgan Hill staff.

6.1 Currently Considered Projects

VW is currently in the process of updating their Water Supply Master Plan, and which includes projects intended to balance and promote sustainability of the Llagas and Coyote Valley aquifers. The projects include the following:

Groundwater Recharge Projects

- **GW-1 Butterfield Channel Recharge.** This project is anticipated to have an annual yield of 2,000 AFY in the Llagas Subbasin, and would extend the Madrone Pipeline to the Butterfield Channel.
- **GW-2 Anderson Dam Reconstruction.** This project includes retrofits to Anderson Dam, and raising the spillway. This project is anticipated to increase annual yields to Coyote Creek by 10,000 AFY, and benefits the Coyote Valley Subarea. Valley Water recently completed a project that enables Anderson water to now flow into the Madrone Channel and recharge the Llagas aquifer as well.
- **GW-3 San Pedro Ponds.** This project would extend sewer services to nearby homes currently relying on septic tanks in order to allow the full capacity of the San Pedro Ponds to be utilized. This project has an anticipated yield of approximately 1,000 AFY.
- **GW-4 Uvas Pipeline.** This project would install a pipeline from Uvas Reservoir to Llagas Creek. This project has an anticipated yield of approximately 1,000 AFY.
- **GW-5 Church Avenue Pipeline.** This project would install a new pipeline off of the Santa Clara Conduit and to the Church Ponds. This project has an anticipated yield of approximately 1,000 AFY.
- **GW-6 Uvas Reservoir Expansion.** This project would expand the Uvas Reservoir holding capacity. This project has an anticipated yield of approximately 1,000 AFY.

Other Water Supply Projects

- **OS-1 South County Water Treatment Plant.** This project would construction a surface water treatment plant in the South County area, and receive raw water from the Santa Clara Conduit. This project has an anticipated yield of approximately 2,000 AFY (OS-1a).

As an alternative (OS-1b), a secondary scenario was included to increase the yield of the South County Water Treatment Plant to 11,000 AFY. This was done in an effort to substantiate the Water Treatment Plant option, should supplies be available.

In addition to the projects list above, Valley Water is currently working on a County-Wide Recycled Water Master Plan. This master plan evaluated four scenarios to deliver recycled water to the South County area, and discussed as follows:

Recycled Water Projects

- **RW-1 South Bay Water Recycling (SBWR).** This project is considered as Alternatives 1 and 2 in the Recycled Water Master Plan, and would deliver enhanced non-potable reuse (NPR) water to Morgan Hill for the purposes of reuse.
- **RW-2 Scalping Plant.** This project is considered as Alternatives 3 and 4 in the Recycled Water Master Plan, and would construct a recycled water scalping plant in Morgan Hill, and treat and deliver advance purified water to the Church Ponds for indirect potable reuse (IPR) groundwater recharge.

6.2 New Projects Added for Consideration

Finally, other projects were consider that altered, or expanded on, the currently considered projects. Some additional projects were considered by the Cities of Morgan Hill and Gilroy that are not yet included in the VW planning documents. These alternatives are as follows:

Groundwater Recharge Projects

- **GW-7 Stormwater Capture.** This project would increase stormwater retention basin capture in an effort to enhance groundwater recharge during rainfall events.

Recycled Water Projects

- **RW-3 Scalping Plant for NPR.** This project would treat wastewater for delivery as NPR to a recycled water system in the City of Morgan Hill.
- **RW-4 SCRWA Pump Station to Morgan Hill.** This project would construct a pump station at the SCRWA treatment plant and pump recycled water to Morgan Hill for NPR.
- **RW-5 SCRWA IPR Upgrade and Pump Station to Morgan Hill.** This project would upgrade the SCRWA treatment plant to Advanced Water Treatment. A pump station would be

constructed at the SCRWA treatment plant and pump recycled water to Morgan Hill for IPR in the Butterfield Channel.

- **RW-6 Scalping Plant to IPR.** This project alters Alternatives 3 and 4 in the Recycled Water Master Plan, and would construct a recycled water scalping plant in Morgan Hill, and treat and deliver advance purified water to the Butterfield Channel for indirect potable reuse (IPR) groundwater recharge.
- **RW-7 SBWR IPR to Butterfield Channel.** This project would alter Alternatives 1 and 2 in the Recycled Water Master Plan, and would deliver IPR water to the Butterfield Channel from the South Bay Water Recycling Plant.

Other Water Supply Projects

- **OS-2 Buy and Wheel Water.** This alternative would involve purchasing water from other potential agencies and municipalities, and “wheeling” the water to the cities of Morgan Hill and Gilroy via a transfer agreement.
- **OS-3 Agricultural and Other Users Offset.** This project would initiate a program to provide a policy and regulatory framework to reduce agricultural pumping within the South County specifically during droughts or imported water supply curtailments.

7.0 PROJECT EVALUATION AND RANKING

This section discusses the criteria used in the evaluation, and the results of the evaluation.

7.1 Criteria

Water supply projects should be evaluated and selected within a water supply policy framework. These policies should address items such as risk, resiliency, sustainability, cost, and source of water supplies. The following are a series of ranking criteria used in this report to evaluate water supply projects. There were seven individual criteria evaluated for each project, and the project was ranked from 0, meaning no benefit, to a 5, which would have a great benefit ([Table 3](#)). Additionally, the seven criteria receive an independent weighting, which provided the importance of each criteria to the cities. The criteria and their weight are discussed as follows:

- **Criteria 1 - Increase in Yield to the Llagas Subbasin.** The increase in yield is defined as additional water to the basin, and does not account for inter-basin transfers. This criteria received an overall weight of 20%.
- **Criteria 2 - Increase in Yield to the Coyote Valley Subarea.** The increase in yield is defined as additional water to the basin, and does not account for inter-basin transfers. This criteria received an overall weight of 5%.

- **Criteria 3 - Cost per Acre Foot.** This is qualitative analysis of the cost per acre foot of each project based on reported values from VW, and scaled appropriately for projects with cost not yet established. This criteria received an overall weight of 15%.
- **Criteria 4 - Location of Benefit.** This is defined based on the geographical location of the benefit for the project. For example, areas of recharge in the northern most portion of the Llagas Subbasin have the highest benefit to the cities. This criteria received an overall weight of 20%.
- **Criteria 5 - Cost within Cities.** This is a qualitative analysis of the foreseeable cost within the cities related to the project. This can be related to road work, expected operations and maintenance, easement acquisition, new pipeline networks, and other costs related to the project. This criteria received an overall weight of 20%.
- **Criteria 6 - Implementation and Regulatory.** This criteria provides a basis for the feasibility of construction, the likelihood of the project, and whether the current regulatory framework supports the project. This criteria received an overall weight of 5%.
- **Criteria 7 - Resiliency.** This criteria evaluates the susceptibility of a project to the impacts of climate change, as well as the potential for an interruptible Delta supply. Delta supply interruptions could be related to earthquakes, biological concerns, or other factors that may result in a limited water supply availability. This criteria received an overall weight of 15%.

7.2 Project Evaluation and Ranking

Based on the criteria listed above, each project was evaluated by City of Gilroy and City of Morgan Hill staff and scored based on the benefits to the cities and their respective groundwater aquifers. The evaluation was an iterative effort that involved multiple joint workshops with City of Gilroy and City of Morgan Hill staff. Each workshop was intended as a stakeholder coordination meeting, in which feedback on the criteria, criteria weighting, and project scoring were discussed and edited. Each time changes were made, a new workshop was conducted to review the results and to provide team discussions on the results of the evaluation.

The overall scoring matrix is documented on [Table 4](#). The top 5 projects are documented in the following:

- **Rank 1: Agricultural and Other Users Offset.** This alternative scored the highest, based on the criteria, and largely due to the potential large offset in groundwater pumping, and the negligible need for infrastructure.
- **Tie – Rank 2: Butterfield Channel Recharge and SBWR IPR to Butterfield Channel.** Both of these projects score well in terms of location of benefit and overall increases to the Llagas Basin. Butterfield Channel scores well in terms of cost, while SBWR scores well in resiliency.

- **Rank 4: South County Water Treatment Plant (Increased Deliveries).** This project scores well with the provision that a substantial increase in yield is possible. Should deliveries be increased, there is significant potential to rest groundwater wells within the cities.
- **Rank 5: South Bay Water Recycling.** This project scores well in terms of benefits to the groundwater aquifers and resiliency, however, this project will be very costly to implement.

8.0 SUMMARY

As part of continued management efforts to provide a sustainable groundwater resource, Valley Water (VW) is in the process of updating the Water Supply Master Plan and County-Wide Recycled Water Master Plan for their service area. Several projects have been recommended in each report that impact the Llagas and Coyote Valley Subbasins. This report evaluates the impact of these projects, while suggesting enhancements or alternate projects, that may be beneficial to the cities and the groundwater basin. Accordingly, the City of Gilroy has retained the services of Akel Engineering Group to perform a qualitative analysis of the water supply projects, their benefits to the Cities of Gilroy and Morgan Hill, and to provide a ranking of the projects as a useful tool for guiding water supply discussions.

There were seven individual criteria evaluated for each project, and the project was ranked from 0, meaning no benefit, to a 5, which would have a great benefit ([Table 3](#)). Additionally, the seven criteria receive an independent weighting, which provided the importance of each criteria to the cities. Eighteen overall projects were evaluated in accordance with this criteria and are documented on [Table 4](#).

The top 5 projects are documented in the following:

- **Rank 1: Agricultural and Other Users Offset.** This alternative scored the highest, based on the criteria, and largely due to the potential large offset in groundwater pumping, and the negligible need for infrastructure.
- **Tie – Rank 2: Butterfield Channel Recharge and SBWR IPR to Butterfield Channel.** Both of these projects score well in terms of location of benefit and overall increases to the Llagas Basin. Butterfield Channel scores well in terms of cost, while SBWR scores well in resiliency.
- **Rank 4: South County Water Treatment Plant (Increased Deliveries).** This project scores well with the provision that a substantial increase in yield is possible. Should deliveries be increased, there is significant potential to rest groundwater wells within the cities.
- **Rank 5: South Bay Water Recycling.** This project scores well in terms of benefits to the groundwater aquifers and resiliency, however, this project will be very costly to implement.

These 5 potential projects are likely to have significant benefits to the overall sustainability of the groundwater aquifers beneath the City of Gilroy and the City of Morgan Hill. These benefits include potable water offsets, diversification of potable water supply, additional managed recharge of the

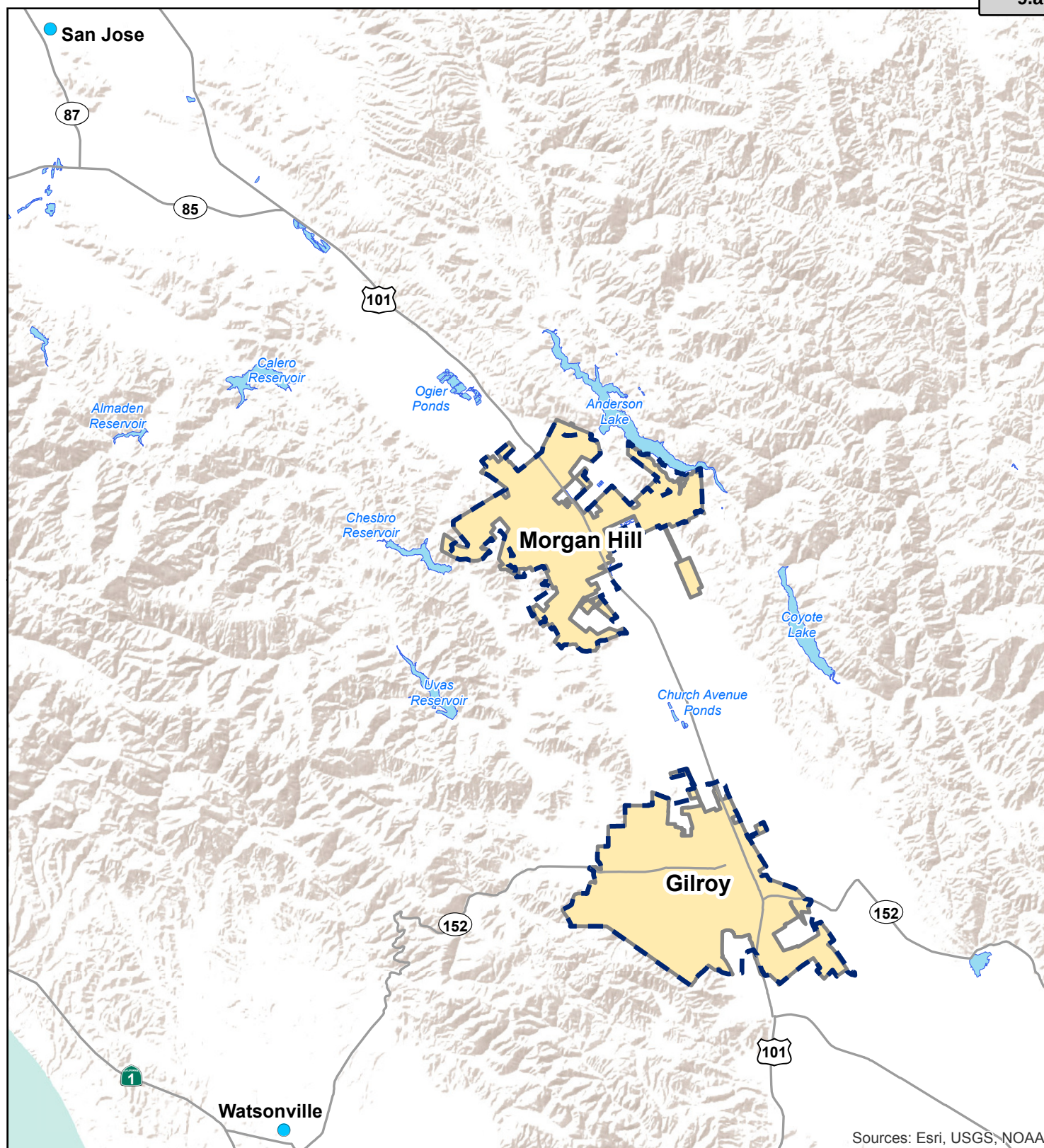
groundwater aquifer, and policy implementation for offsetting aquifer pumping. It is recommended that these identified projects continue to be explored in more-detailed reviews and to establish equitable and sustainable water use and conservation within the South County.

9.0 RECOMMENDATIONS

This report recommends that Morgan Hill and Gilroy continue to explore and expand their joint groundwater policies and objectives. Suggestions for future policy discussions between Gilroy and Morgan Hill may include:

- Explore joint role in regional water supply planning.
- Define minimum level of service for water supply.
- Define risk levels for water supply.
- Identify reasonable recycled water investments benefitting both Morgan Hill and Gilroy.
- Define water supply agreements with Valley Water.

Figures



Legend

 City Limits  Urban Growth Boundary

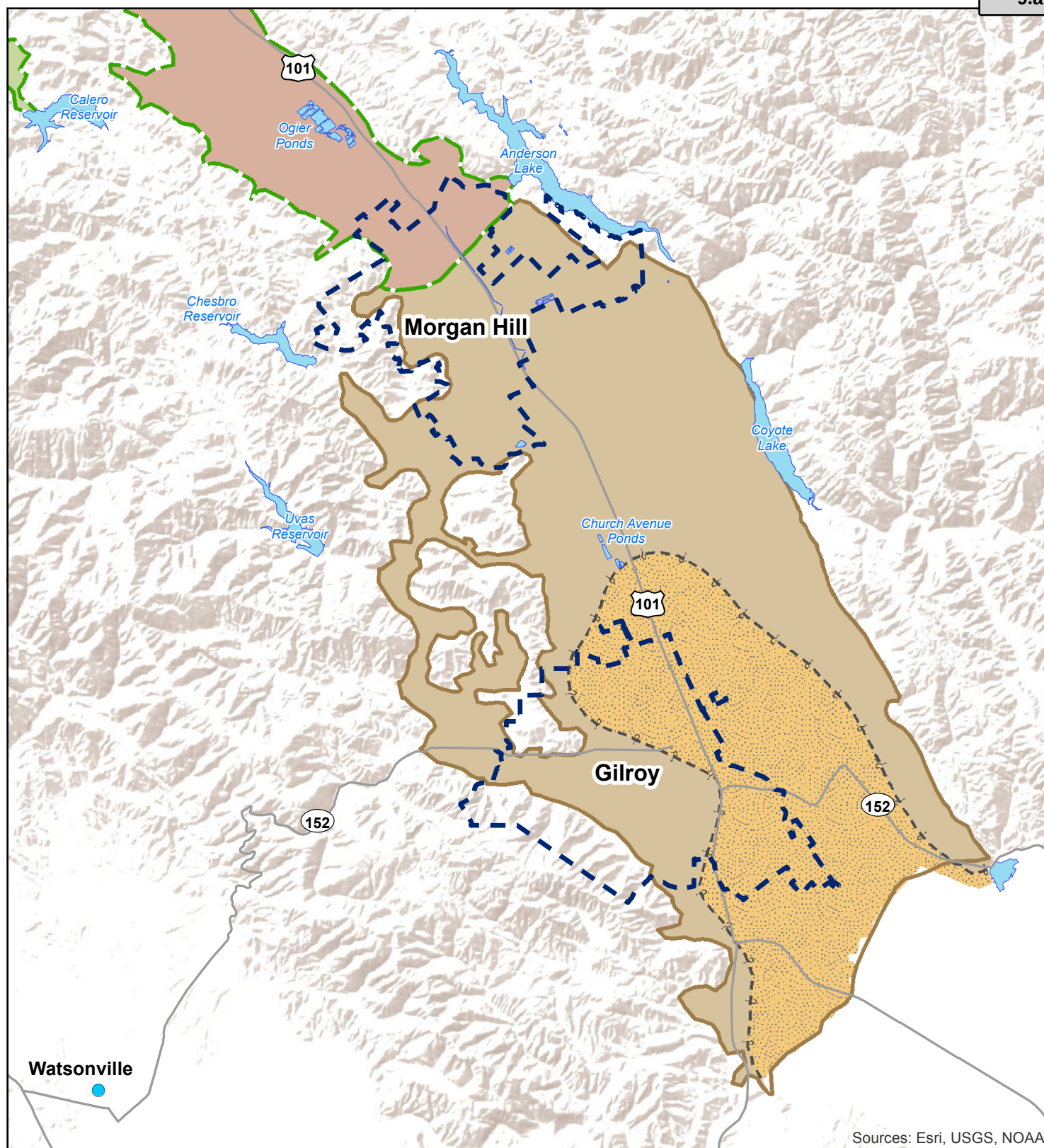
Figure 1 Regional Location Map

Gilroy - Morgan Hill
Supply Strategy



Packet Pg. 261





Legend

Urban Growth Boundary

Groundwater Subbasins

DWR Subbasins

Santa Clara (2-9.02)

Llagas (3-3.01)

Hydrographic Units

Santa Clara Plain Recharge Area

Coyote Valley Recharge Area

Llagas Recharge Area

Llagas Confined Area

Approximate Extent of Confined Area

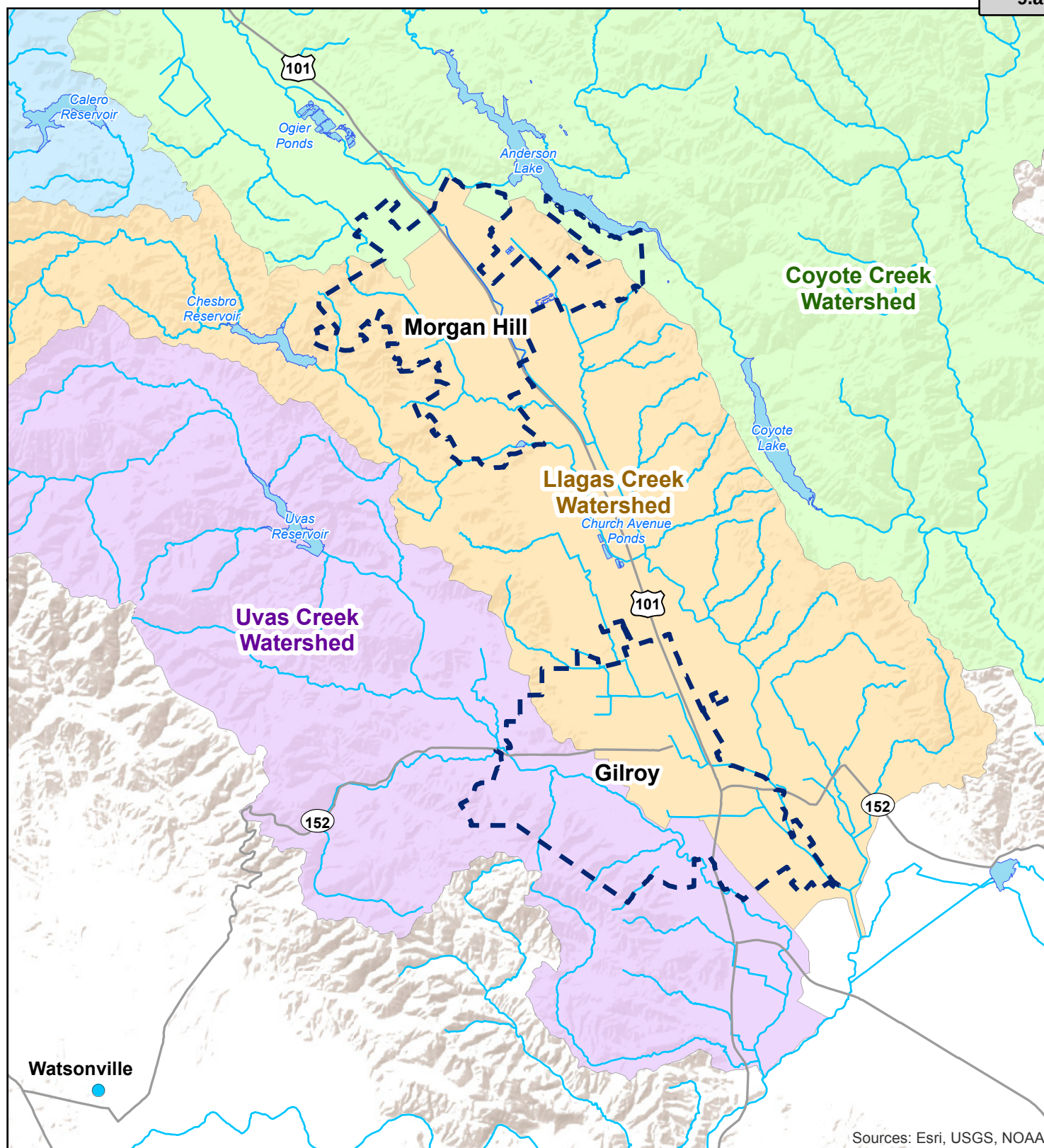
Figure 2 Groundwater Subbasins

Gilroy - Morgan Hill
Supply Strategy



Packet Pg. 262





Sources: Esri, USGS, NOAA

Legend

Santa Clara County Watershed Boundaries

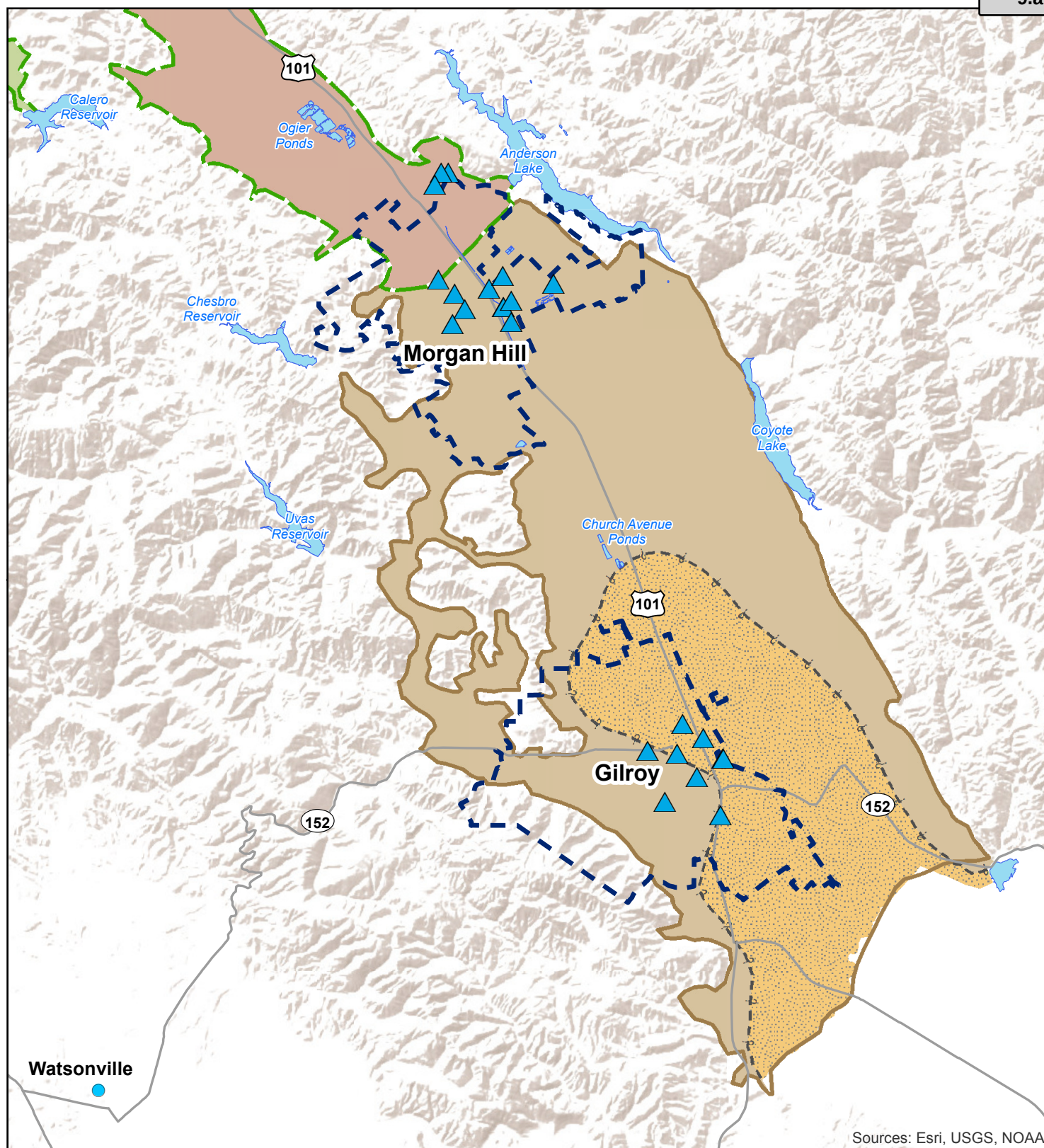
- Coyote
- Guadalupe River
- Llagas
- Uvas

 Urban Growth Boundary Creeks Water Bodies

Figure 3

Creeks and Water Bodies

 Gilroy - Morgan Hill
 Supply Strategy

Sources: Esri, USGS, NOAA

Legend

- Groundwater Wells
- Urban Growth Boundary
- Groundwater Subbasins**
- DWR Subbasins**
- Santa Clara (2-9.02)
- Llagas (3-3.01)

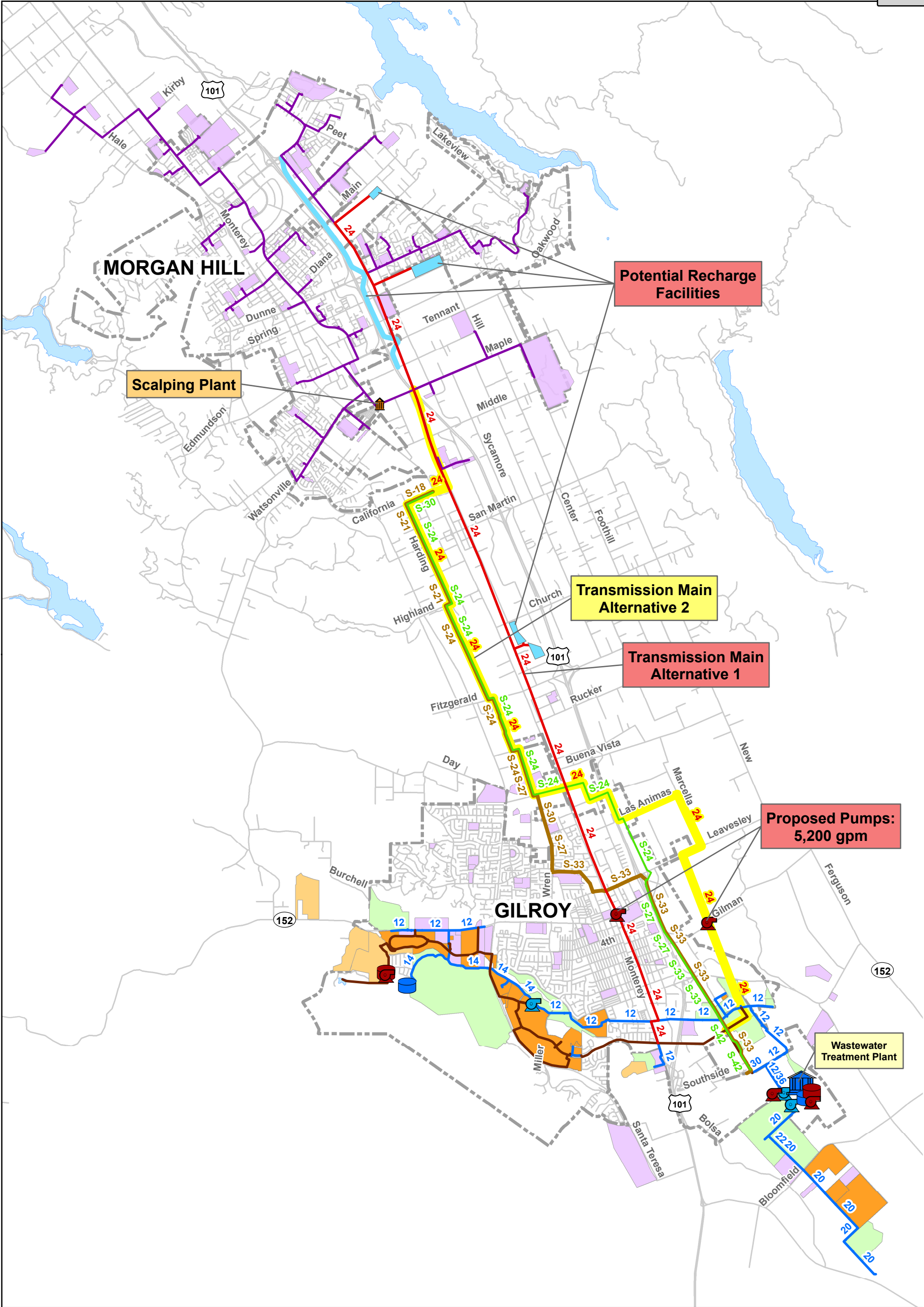
Hydrographic Units

- Santa Clara Plain Recharge Area
- Coyote Valley Recharge Area
- Llagas Recharge Area
- Llagas Confined Area
- Approximate Extent of Confined Area



Figure 4
Groundwater Wells
 Gilroy - Morgan Hill
 Supply Strategy





Legend

Proposed

Storage Tanks

Booster Stations

Scalping Plant

Baseline Improvements for all Alternatives

Recycled Water Recharge Pipeline

Recharge Pipeline Project Alternative 1

Recharge Pipeline Project Alternative 2

Sewer Relief Trunk

Morgan Hill Recycled Water Conceptual Buildout

Existing

WWTP

Storage Tanks

Booster Stations

Recharge Ponds

Recycled Water Pipelines

Existing Users

In Progress Users

Baseline Users

Potential Users

Sewer Joint Trunk

City Limits

Roads

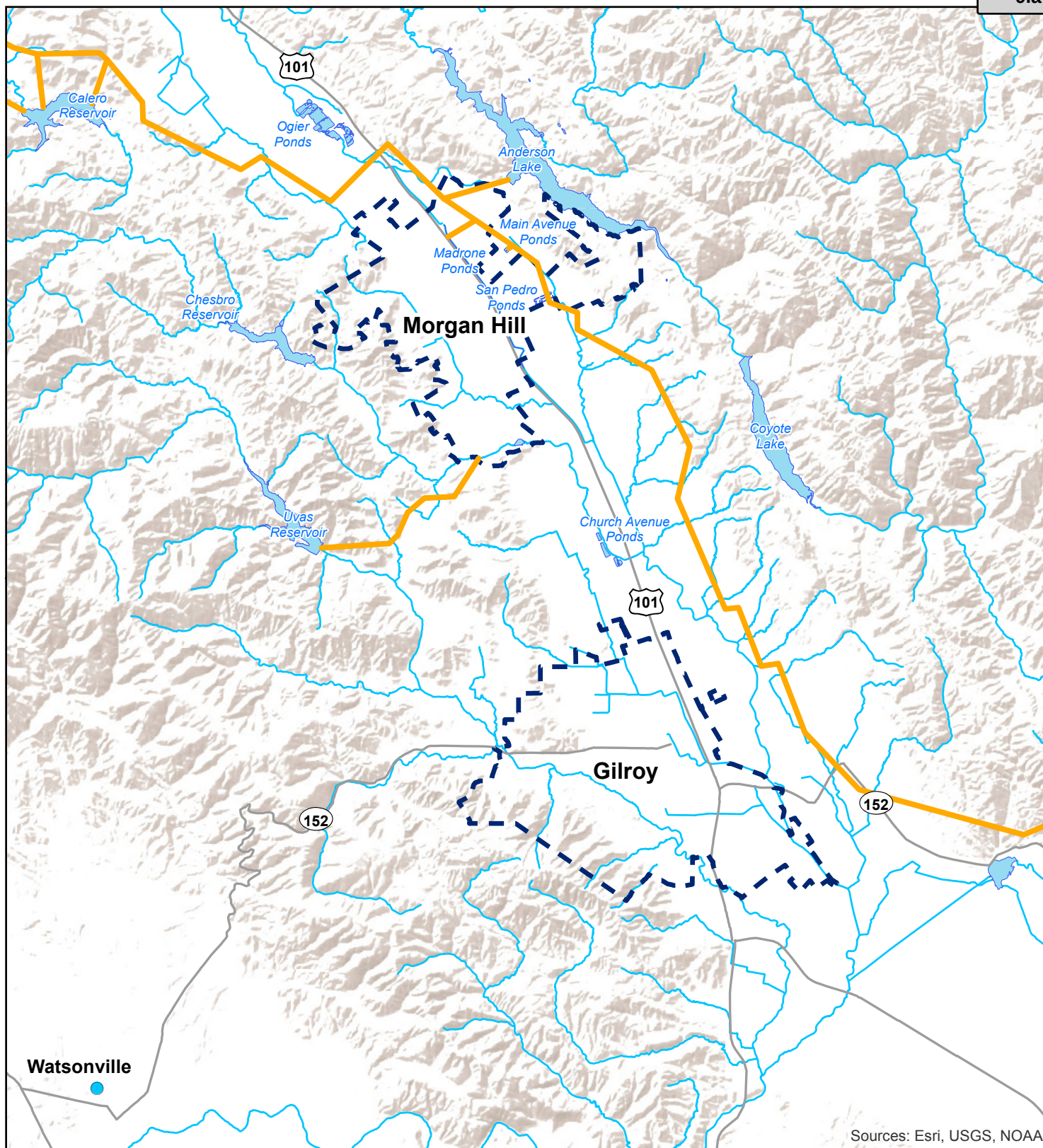
Lakes



Figure 5
Gilroy - Morgan Hill
Recycled Water Alternatives

Gilroy - Morgan Hill
Supply Strategy





Sources: Esri, USGS, NOAA

Legend

- Raw Water Pipeline
- - - Urban Growth Boundary
- ~ Creeks
- Water Bodies

DISCLAIMER: The Raw Water Pipeline is based on a representation of Figure 2 from the DRAFT CVPIA Water Management Plan 2017.



Figure 6 Santa Clara Conduit

Gilroy - Morgan Hill
Supply Strategy



Tables

Table 1 Existing and Projected Supply vs Demand Comparison (Coyote Valley Subarea)
 Gilroy - Morgan Hill Supply Analysis
 City of Gilroy and City of Morgan Hill

Demand Condition	2020	2025	2030	2035	2040
	(afy)	(afy)	(afy)	(afy)	(afy)
1	2	3	4	5	6
Projected Water Supply of the Coyote Valley Subarea¹					
Natural Groundwater recharge	2,400	2,400	2,400	2,400	2,400
Local Surface Water	6,200	6,400	6,300	6,200	6,200
SCVWD CVP Deliveries	3,500	4,400	5,600	6,600	6,800
Total	12,100	13,200	14,300	15,200	15,400
Projected Average Daily Water Demand					
City of Morgan Hill ²	1,282	1,373	1,464	1,555	1,646
Other Users ³	11,986	13,063	14,295	15,474	15,736
Total	13,268	14,436	15,759	17,029	17,382
Supply vs Demand Comparison					
Difference (Supply - Demand)	-1,168	-1,236	-1,459	-1,829	-1,982
Percent of Total Supply	110%	109%	110%	112%	113%

A K E L
 ENGINEERING GROUP, INC.

7/26/2018

Notes:

1. Projected supply per South County Supply document received from SCVWD staff May 27, 2016.
2. City of Morgan Hill demand includes pumping from the Boys Ranch wells, which are located in the Coyote Valley subarea.
3. Demand for other users calculated from document received from SCVWD staff May 27, 2016.

Table 2 Existing and Projected Supply vs Demand Comparison (Llagas Subbasin)
 Gilroy - Morgan Hill Supply Analysis
 City of Gilroy and City of Morgan Hill

Demand Condition	2020	2025	2030	2035
	(AFY)	(AFY)	(AFY)	(AFY)
1	2	3	4	5
Existing and Projected Water Supply of the Llagas Subbasin				
Natural Groundwater Recharge	22,400	22,400	22,400	22,400
Local Surface Water	16,000	18,100	20,300	21,500
SCVWD CVP Deliveries	10,700	10,700	10,700	10,400
Recycled Water Supply	2,800	3,100	3,700	3,700
Total without Recycled Water	49,100	51,300	53,400	54,300
Total with Recycled Water	51,900	54,300	57,100	58,000
Existing and Projected Average Daily Water Demands for the Llagas Subbasin				
City of Gilroy	9,200	10,300	11,600	12,900
City of Morgan Hill	7,000	7,600	8,200	8,700
Other Groundwater Users	32,000	33,000	33,800	34,100
Total	48,200	50,900	53,600	55,700
Supply vs Demand Comparison - Excluding Recycled Water				
Difference (Supply - Demand)	900	400	-200	-1,400
Percent of Total Supply	98%	99%	100%	103%
Supply vs Demand Comparison - Including Recycled Water				
Difference (Supply - Demand)	3,700	3,400	3,500	2,300
Percent of Total Supply	93%	94%	94%	96%

Notes:

3/4/2019

- Source: 2015 Gilroy UWMP

Table 3 Evaluation Criteria - Categories and Scores
Gilroy - Morgan Hill Supply Analysis
City of Gilroy and City of Morgan Hill

Criteria 1 - Increase in Yield (Llagas) The scores in this category range from 0 to 5: 0. No additional water added into the Basin 1. Less than 1,000 AFY additional Basin Supply 2. Potential for over 1,000 AFY additional Basin Supply 3. Potential for over 2,000 AFY additional Basin Supply 4. Potential for over 3,000 AFY additional Basin Supply 5. Potential for over 4,000 AFY additional Basin Supply Note: New projects that move water already available within the basin are given a 0, as they do not provide additional yield, but transfer the yield from one area to another.
Criteria 2 - Increase in Yield (Coyote) The scores in this category range from 0 to 5: 0. No additional water added into the Basin 1. Less than 1,000 AFY additional Basin Supply 2. Potential for over 1,000 AFY additional Basin Supply 3. Potential for up to 2,000 AFY additional Basin Supply 4. Potential for up to 3,000 AFY additional Basin Supply 5. Potential for up to 4,000 AFY additional Basin Supply Note: New projects that move water already available within the basin are given a 0, as they do not provide additional yield, but transfer the yield from one area to another.
Criteria 3 - Cost per AF The scores in this category range from 1 to 5: 1. Cost expected over \$5,000 per AF 2. Cost expected up to \$2,500 per AF 3. Cost expected up to \$1,500 per AF 4. Cost expected up to \$1,000 per AF 5. Cost expected up to \$500 per AF
Category 4 - Location of Benefit The scores in this category range from 1 to 5: 1. Located outside of the Llagas Unconfined or Coyote Valley Aquifer 2. Located on the periphery of the Llagas Unconfined Aquifer or in Coyote 3. Located in the mid to southern portion of the Llagas Unconfined Aquifer 4. Located in the southern portion of Morgan Hill in the Llagas Unconfined Aquifer 5. Located in the northern portion of Morgan Hill in the top of the Llagas Unconfined Aquifer
Category 5 - Cost within Cities The scores in this category range from 1 to 5: 1. Very high cost expected to cities, including O&M, easements, roadwork, etc 2. High cost expected to cities, including O&M, easements, roadwork, etc 3. Moderate cost expected to cities, including O&M, easements, roadwork, etc 4. Low cost expected to cities, including O&M, easements, roadwork, etc 5. Very low cost expected to cities, including O&M, easements, roadwork, etc
Criteria 6 - Implementation / Regulatory The scores in this category range from 1 to 5: 1. Project is not feasible based on construction, regulatory, and/or desirability. 2. Project will need to overcome significant construction, regulatory, and/or desirability difficulties. 3. Project will need to overcome some construction, regulatory, and/or desirability difficulties. 4. Project has very few construction, regulatory, and/or desirability difficulties. 5. Project is advantageous from a construction, regulatory, and/or desirability position.
Criteria 7 - Resiliency The scores in this category range from 1 to 5: 1. Project is highly susceptible to climate change and/or interruptible Delta supply impacts. 2. Project is susceptible to climate change and/or catastrophic event impacts. 3. Project is somewhat susceptible to climate change and/or catastrophic event impacts. 4. Project is resistant to climate change and/or catastrophic event impacts. 5. Project is not noticeably impacted by climate change and/or catastrophic event impacts. Note: Interruptible Delta supply events can be related to earthquakes, biological concerns, and other factors resulting in limited water supply from the Delta.

Table 4 Project Ranking Summary
Gilroy - Morgan Hill Supply Analysis
City of Gilroy and City of Morgan Hill

No. Project Description			Costs				Scoring and Weights (5=Highest Benefit. 0=No Benefit)														Project Ranking		Conflict with Other Alternative Notes	
							Criteria 1 Increase in Yield (Llagas)		Criteria 2 Increase in Yield (Coyote)		Criteria 3 Cost Per AF		Criteria 4 Location of Benefit		Criteria 5 Cost within Cities		Criteria 6 Implementation / Regulatory		Criteria 7 Resiliency					
			Present Value Cost to District	Average Annual Yield	Increase to Basin	Cost/AF	Weight		Weight		Weight		Weight		Weight		Weight		100%					
							20%		5%		15%		20%		20%		5%				15%			
							Score	Weighted Score	Score	Weighted Score	Score	Weighted Score	Score	Weighted Score	Score	Weighted Score	Score	Weighted Score			Score	Weighted Score		
Groundwater Recharge Projects																								
GW-1	Butterfield Channel Recharge	Deliver water from the SCP to Butterfield Channel.	\$20	2,000	2,000	\$400	3	0.6	0	0.0	5	0.8	5	1.0	5	1.0	5	0.3	1	0.2	3.75	2	(14, 15, 16)	This project increases in benefit and potential yield if connected north to the Fisher Pond in Morgan Hill.
GW-2	Anderson Dam Reconstruction	Increase the capacity of Anderson Dam and increase yield to Coyote Creek.	\$1,200	10,000	10,000	\$5,000	3	0.6	5	0.3	1	0.2	2	0.4	5	1.0	3	0.2	3	0.5	3.00		-	Benefit to the basin is limited to Coyote Valley unless additional infrastructure is added.
GW-3	San Pedro Ponds	Retrofit the San Pedro Ponds to reduce impact to local septic.	\$10	1,000	1,000	\$400	2	0.4	0	0.0	5	0.8	5	1.0	5	1.0	4	0.2	1	0.2	3.50		-	Benefit limited to 1,000 AFY and dependent on availability
GW-4	Uvas Pipeline	Construct pipeline from Uvas Reservoir to Llagas Creek.	\$80	1,000	1,000	\$2,500	2	0.4	0	0.0	2	0.3	4	0.8	5	1.0	2	0.1	2	0.3	2.90		-	
GW-5	Church Avenue Pipeline	Deliver water from the SCP to the Church Ponds.	\$30	1,000	1,000	\$900	2	0.4	0	0.0	4	0.6	3	0.6	5	1.0	2	0.1	1	0.2	2.85		(10)	
GW-6	Uvas Reservoir Expansion	Expand the Uvas Reservoir capacity and increase yields to Uvas Creek.	\$330	1,000	1,000	\$21,200	2	0.4	0	0.0	5	0.8	1	0.2	5	1.0	2	0.1	3	0.5	2.90		-	
GW-7	Stormwater Capture	Implement an aggressive stormwater capture program as a means of recharge.					3	0.6	3	0.2	2	0.3	5	1.0	2	0.4	4	0.2	3	0.5	3.10		-	Requires land acquisition, development code consistency, and revised storm drainage infrastructure planning.
Recycled Water Projects																								
RW-1	RW Master Plan (Alt. 1 and 2) ¹	Deliver AWTF enhanced NPR water from SBWR to NPR in Morgan Hill.	\$80	3,000	3,000	\$1,100	4	0.8	4	0.2	3	0.5	5	1.0	1	0.2	3	0.2	5	0.8	3.55	5	(4, 11)	Requires distribution network in City.
RW-2	RW Master Plan (Alt. 3 and 4) ¹	Divert flow from the Joint Trunk and recycle the water for IPR in the Church Ponds.	\$80	3,000	0	\$1,100	2	0.4	0	0.0	3	0.5	3	0.6	1	0.2	2	0.1	5	0.8	2.50		(6)	Requires distribution network in City.
RW-3	Morgan Hill Scalping Plant (NPR)	Divert flow from the Joint Trunk and recycle the water for NPR in Morgan Hill.	\$80	3,000	0	\$1,100	0	0.0	0	0.0	3	0.5	5	1.0	1	0.2	2	0.1	5	0.8	2.50		(9, 11)	
RW-4	SCRWA Pump Station to Morgan Hill	Deliver NPR water from SCRWA to Morgan Hill.		3,000	0		0	0.0	0	0.0	1	0.2	5	1.0	1	0.2	2	0.1	5	0.8	2.20		(4, 9)	Requires distribution network in City.
RW-5	SCRWA IPR Upgrade and Pump Station to Morgan Hill	Deliver IPR water from SCRWA to Butterfield Channel.		3,000	0		2	0.4	0	0.0	1	0.2	5	1.0	2	0.4	2	0.1	5	0.8	2.80		(1, 15, 16)	
RW-6	RW Master Plan - AWTF IPR to Butterfield	Divert flow from the Joint Trunk and recycle the water for IPR in the Butterfield Channel.		3,000	0		2	0.4	0	0.0	3	0.5	5	1.0	3	0.6	3	0.2	5	0.8	3.35		(1, 14, 16)	
RW-7	RW Master Plan - SBWR IPR to Butterfield	Deliver AWTF water from SBWR to IPR in Butterfield Channel.		3,000	3,000		4	0.8	0	0.0	3	0.5	5	1.0	3	0.6	3	0.2	5	0.8	3.75	2	(1, 14, 15)	
Other Water Supply Projects																								
OS-1a	South County Water Treatment Plant	Construct a new Potable Water Treatment Plant with SCP deliveries.	\$110	2,000	2,000	\$2,300	3	0.6	1	0.1	1	0.2	5	1.0	4	0.8	3	0.2	1	0.2	2.90		-	Yield of 2,000 AFY is too low. Request range of available yield from SCP.
OS-1b	South County Water Treatment Plant	Construct a new Potable Water Treatment Plant with SCP deliveries.		11,000			5	1.0	5	0.3	2	0.3	5	1.0	4	0.8	3	0.2	1	0.2	3.65	4	-	The yield has been updated to be realistic of the current water supply needs.
OS-2	Buy and Wheel Water	Purchase and wheel water to the cities.					5	1.0	5	0.3	1	0.2	5	1.0	1	0.2	1	0.1	2	0.3	2.95		-	
OS-3	Agricultural and Other Users Offset	Policy and regulatory guidance to reduce agricultural and other users pumping.					5	1.0	5	0.3	1	0.2	3	0.6	5	1.0	3	0.2	5	0.8	3.90	1	-	

Definitions of Acronyms
NPR: Non-Potable Reuse
IPR: Indirect Potable Reuse
SCP: Santa Clara Pipeline
SBWR: South Bay Water Recycling
AWTF: Advanced Water Treatment Facility
SCRWA: South County Regional Wastewater Authority

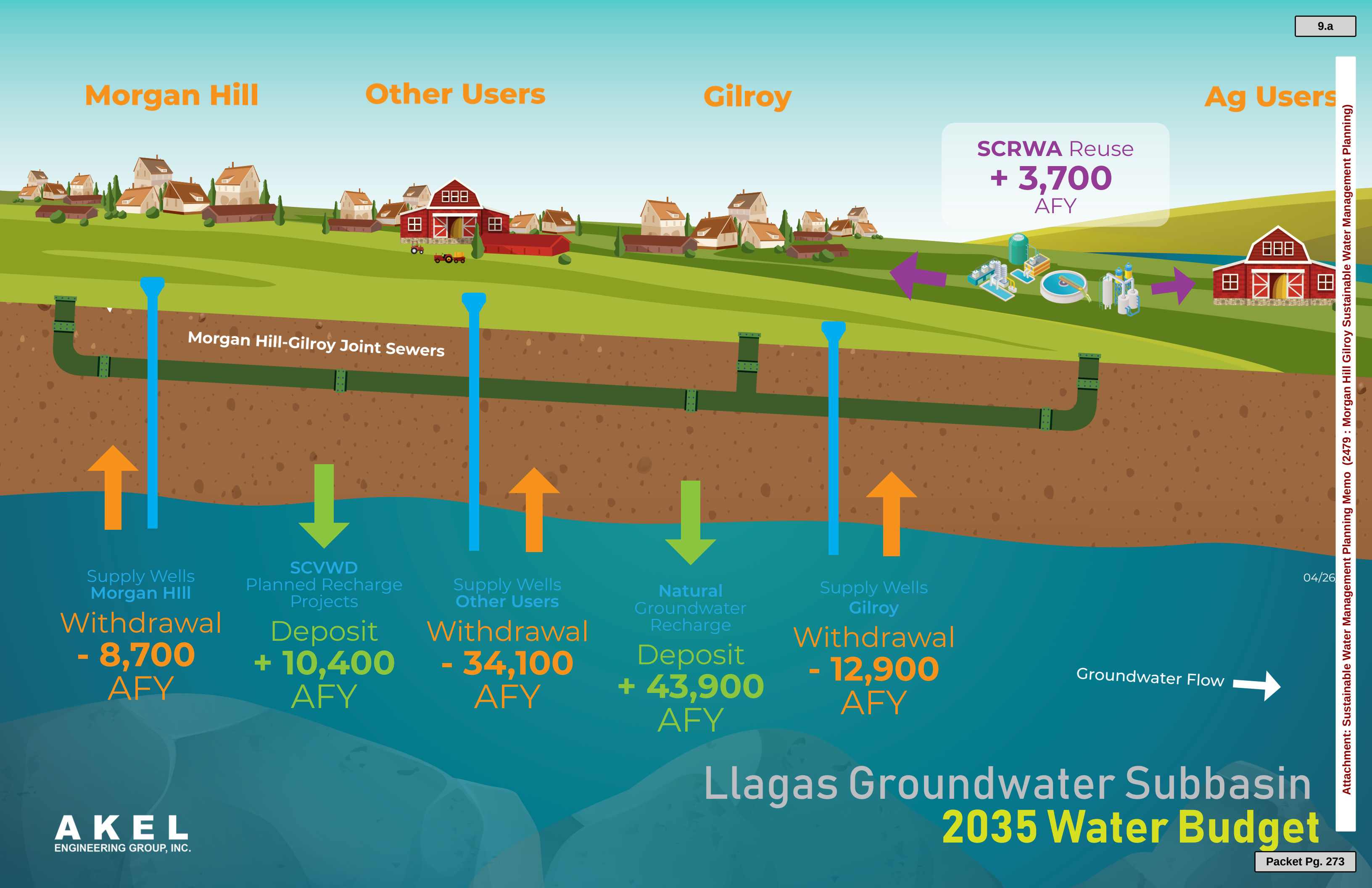
Definitions of Criteria
Increase in Yield: This criteria scores whether there is a net positive yield to the basins (ie Scalping in Morgan Hill transfers an existing yield, it does not increase it).
Cost Per AF: Cost per AF of water as provided by SCVWD in the Water Supply Master Plan update December 2018
Location of Benefit: Based on input from SCVWD staff, it is more beneficial for groundwater recharge in the upper Llagas Basin in Morgan Hill, thus scores are based on proximity to that area.
Cost within Cities: Based on additional cost within the City (road work, expected O&M, easements, new pipeline networks, etc)
Implementation / Regulatory: This criteria is based on the feasibility of construction for the project, and the likelihood of the project. This also addresses regulatory feasibility.
Resiliency: This criteria is intended to address whether long term effects of climate change or an interruptible Delta supply will have a negative impact on the project.

Notes:
1. RW Master Plan Costs and Yields Consistent with the Scalping Plant Alternative.

9/25/2019

Appendix

Llagas Groundwater Subbasin 2035 Budget



From: [Chris Ghione](#)
To: [Michelle Bigelow](#); [Angie Gonzalez](#)
Cc: [Christina Turner](#)
Subject: FW: comments on Morgan Hill Sustainable Water Management Planning September 2019
Date: Friday, October 18, 2019 2:29:09 PM

Supplemental for the Water Supply item on next week's Council Meeting.

-----Original Message-----

From: D. Muirhead <doug.muirhead@stanfordalumni.org>
 Sent: Friday, October 18, 2019 10:31 AM
 To: Chris Ghione <Chris.Ghione@morganhill.ca.gov>
 Subject: comments on Morgan Hill Sustainable Water Management Planning September 2019

Hello Public Services Director Ghione,

Thank you for the extended preview period for the Technical Memorandum on water supply in South County as viewed by the Cities of Morgan Hill and Gilroy. Random comments follow. Regards, DougM

Talking Points:

- 1) Distillation of possible projects
 - 2) Not regional cooperation
 - 3) Missing constraints and uncertainties
 - a) Small water system viability and substitution
 - b) Standards development to allow Recycled water for basin recharge
 - c) Morgan Hill water reuse restricted by SCRWA and Gilroy users
- Comment #1: Aquifers suffer dramatically if imported water unavailable
 Comment #2: Llagas Subbasin managed under SGMA GMP
 Constraint #1: South County Regional Wastewater Authority Demands
 Comment #3: Pump recycled water from Gilroy to Morgan Hill
 Constraint #2: Implementation and Regulatory hurdles Constraint #3: Increase storage in Llagas Subbasin
 Comment #4: Reduce agricultural pumping

1) It is useful to have a distillation of possible projects identified in the uncompleted Water District Water Supply Master Plan and Water Reuse Master Plan. For our planning and budgeting purposes, it is unfortunate that these two plans will not be complete until next year.

The previous South County Recycled Water Master Plan was written in 2015.

Of the seven people on the dais, only two Council members were around in 2016 when we had the last major discussion on water supply and recycled water.

In preparing this distillation, staff likely had more information than what has been presented to the public by the Water District in various Board and Committee meetings (those meetings are the source of my knowledge).

2) As a proponent of regional cooperation, as is the City Council of Morgan Hill, I am troubled by a focus that does not include the domestic and agricultural needs of non-City water users and the long-range plan for sustainable agriculture in South County.

3) I also believe that any policy and planning discussion on water supply needs to acknowledge constraints and uncertainties around any given project.

- 3a) There is both activity and conflict between the State and LAFCO on small water system viability and extension of City services outside of the Urban Service Area where one policy goal violates a different goal.
- 3b) Recycled water of enhanced quality for groundwater basin recharge and even human consumption is still undergoing standards development.
- 3c) The ability of Morgan Hill to provide any local water reuse is secondary

to the needs of the South County Wastewater Treatment Plant and the allocations already in place for Gilroy users of the partner Recycled Water facility.

Comment #1:

[Policy Objective: If imported water is unavailable to recharge groundwater basins for an extended period of time, the aquifers would suffer dramatically.]

"dramatically" is a significant change from the 2015 UWMP, where all but one projection claims recharge will be adequately handled by the Water District.

In the CIP, you allocate \$2.0 million for New Well Property/Construction, saying "new water wells are required to meet the City's water supply needs as Morgan Hill grows and to provide the necessary reliability during drought conditions". I used to interpret this as just putting more straws in the ground. Does it now also mean deeper wells as groundwater levels drop due to lack of recharge during extended drought?

Comment #2:

[Policy Objective: The Llagas Subbasin does not have formal allocation limits, and no corresponding water supply agreements exist between the cities and VW, thus the status of the supplies is difficult to determine.]

The Water District prepared a Groundwater Management Plan (GMP) in November 2016 which was then accepted as the alternate management plan under SGMA.

The District and the Retailers then agreed on a framework for managing the basin if it is under future stress.

Constraint #1: South County Regional Wastewater Authority Demands

I do not understand if there is any difference in the scalping plants:

RW-2 Scalping Plant. This project is considered as Alternatives 3 and 4 in the Recycled Water Master Plan, and would construct a recycled water scalping plant in Morgan Hill, and treat and deliver advance purified water to the Church Ponds for indirect potable reuse (IPR) groundwater recharge.

RW-3 Scalping Plant for NPR. This project would treat wastewater for delivery as NPR to a recycled water system in the City of Morgan Hill.

RW-6 Scalping Plant to IPR. This project alters Alternatives 3 and 4 in the Recycled Water Master Plan, and would construct a recycled water scalping plant in Morgan Hill, and treat and deliver advance purified water to the Butterfield Channel for indirect potable reuse (IPR) groundwater recharge.

The Recycled Water Feasibility Evaluation from March 2016 listed a number of negative impacts on the SCRWA plant from water reuse diversion in Morgan Hill.

More recently, SCRWA expansion plans have identified issues with organic loading (biologic controls) as the reason that MH cannot be allowed to divert waste water nor implement greywater systems. [see Note 1]

No one seems willing to cite our right in the 1997 Joint Powers Authority agreement to create our own facilities.

My preferred focus is both local resiliency and local control.

Comment #3: [New Projects Added for Consideration:

pump recycled water from Gilroy to Morgan Hill]

I am not in favor of spending energy pushing water uphill from Gilroy to Morgan Hill. We also face an initial cost because we did not add extra pipe for the reverse flow when doing sewer trunk expansion.

RW-4 SCRWA Pump Station to Morgan Hill. This project would construct a pump station at the SCRWA treatment plant and pump recycled water to Morgan Hill for NPR.

RW-5 SCRWA IPR Upgrade and Pump Station to Morgan Hill. This project would upgrade the SCRWA treatment plant to Advanced Water Treatment.

A pump station would be constructed at the SCRWA treatment plant and pump recycled water to Morgan Hill for IPR in the Butterfield Channel.

The 2015 Master Plan Update from May 2016, Key Findings from Alternatives Evaluation, offers an alternative transport mechanism. The Santa Clara Conduit, part of the US Bureau of Reclamation's Central Valley Project, is in close proximity to the SCRWA WWTP. With the adoption of additional regulations, recycled water could be added to the Santa Clara Conduit for transport to Morgan Hill.

Constraint #2: [Evaluation Criteria - Implementation and Regulatory]

I think that only mentioning Implementation and Regulatory hurdles in the final Evaluation Criteria does not give a true picture of several projects for discussion purposes:

- a) Additional groundwater recharge locations could be created if we could reduce the number and location of existing potable water supply wells by connecting users to municipal supply systems and preventing new wells from being drilled within a set zone near IPR project sites. [see Note 2]
- b) Increase recharge through San Pedro Ponds by extending City sewer services to homes in County land that use septic systems. [see Note 3]
- c) Using the Santa Clara Conduit as a transport mechanism for recycled water.

State law, LAFCO policies, and County General Plan policies discourage the extension of Urban Services outside of City boundaries in order to prevent leapfrog development and sprawl. At the same time, new State laws seek to limit the creation of new public water systems in order to ensure safe drinking water quality and to consolidate failing and struggling water systems with larger, better managed and maintained systems that are located nearby.

Constraint #3:

[EVALUATION Criteria - Increase storage in Llagas Subbasin]

The increase in yield is defined as additional water to the basin, and does not account for inter-basin transfers.

[EVALUATION Criteria - Location of Benefit]

This is based on the geographical location of the benefit for the project. For example, areas of recharge in the northern most portion of the Llagas Subbasin have the highest benefit to the cities.

The Llagas Subbasin has a finite capacity. Due to high groundwater levels, artesian flows are currently being experienced in South County.

Recharge in San Pedro Ponds when groundwater levels are high cause flooding of basements in nearby homes.

Because of the downward north-south gradient to the basin, recharge to benefit Morgan Hill and San Martin needs to occur in the northern part of South County.

Comment #4: [OS-3 reduce agricultural pumping]

The project would initiate a program to provide a policy and regulatory framework to reduce agricultural pumping within the South County specifically during droughts or imported water supply curtailments.

This alternative scored the highest, largely due to the potential large offset in groundwater pumping, and the negligible need for infrastructure.

In my opinion, this runs counter to the efforts for Sustainable Agriculture being promoted by the County and Open Space Authority, as well as a replacement funding mechanism for the Water District Open Space Credit. The authority for groundwater basin management belongs to the Water District under SGMA.

[Note 1]

A scalping plant diverts flow away from the sewer line for use in recycled water applications. This can cause substantial reductions in sewer system flows downstream of the scalping plant. If flows drop too low odor issues can arise from the anaerobic decomposition of organics.

Clogging can also become an issue when flows are so low that debris does not get flushed through the system. Eliminating the need for on-site solids treatment could cause negative impacts on the SCRWA WWTP. The biological processes that would occur in a scalping plant would reduce BOD loadings to the SCRWA WWTP but could substantially change the composition of the influent wastewater. Inconsistent sludge wasting at the scalping facility could also cause downstream problems with the biological processes. Small changes in the influent wastewater composition could cause major problems with the SCRWA WWTP.

[Note 2a]

The 2015 Master Plan Update from May 2016, Emerging Technologies/IPR/DPR, identifies that a significant impediment to IPR is the large number and density of potable water supply wells in the subbasin. The number and location of potable water supply wells limits locations where IPR facilities can be sited. One way to reduce the number and location of existing potable water supply wells is to connect users to municipal supply systems and preventing new wells from being drilled within a set zone near IPR project sites.

[Note 2b]

LAFCO MEETING: October 2, 2019

#8: WATER SERVICE EXTENSIONS INTO THE UNINCORPORATED AREA Over the past year, LAFCO staff has facilitated inter-jurisdictional discussions with County Planning Department staff, County Department of Environmental Health staff, State Water Resources Control Board staff, and Santa Clara Valley Water District staff concerning small water systems in the unincorporated area that are struggling to meet the SWRCB's technical, managerial, and financial requirements. We believe these agencies have overlapping interests and there may be a way to meet our mandates.

[Note 3a]

GW-3 San Pedro Ponds. This project would extend sewer services to nearby homes currently relying on septic tanks in order to allow the full capacity of the San Pedro Ponds to be utilized. These ponds are located in the City of Morgan Hill and recharge the Llagas Subbasin. However, due to septic tanks in the area, the full capacity of this recharge basin is not utilized.

[Note 3b]

LAFCO Executive Officer Report: February 6, 2019

MEETING ON SAN PEDRO PERCOLATION PONDS On October 22, 2018, in response to an inquiry from the Santa Clara Valley Water District (SCVWD) staff, LAFCO staff met with staff from the SCVWD, County, and Santa Clara Valley Open Space Authority in order to discuss the SCVWD's San Pedro Percolation Ponds and potential options for increasing groundwater recharge.

WARNING: This message is from an external user. Confidential information such as social security numbers, credit card numbers, bank routing numbers, gift card numbers, wire transfer information and other personally identifiable information should not be transmitted to this user. For question, please contact the Morgan Hill IT Department by opening a new helpdesk request online or call 408-909-0055.



CITY COUNCIL STAFF REPORT

MEETING DATE: October 23, 2019

PREPARED BY: Dat Nguyen, Finance Director

APPROVED BY: City Manager

ADOPT RESOLUTION UPDATING THE CITY'S SELECT DEVELOPMENT IMPACT FEES

RECOMMENDATION(S)

1. Open/close the public hearing;
2. Adopt Final Draft of Development Impact Fee Update Study prepared by Willdan Financial Services; and
3. Adopt resolution updating the City's select Development Impact Fees.

COUNCIL PRIORITIES, GOALS & STRATEGIES

Ongoing Priorities

Enhancing Public Safety
 Protecting the Environment
 Maintaining Fiscal Responsibility
 Supporting Our Youth
 Seniors
 and Entire Community
 Fostering a Positive Organizational Culture

2019 Strategic Priorities

Economic Development
 Financial Stewardship
 Infrastructure

GUIDING DOCUMENTS

Bikeways
 Trails
 Parks and Recreation Masterplan
 General Plan/Housing Element
 Public Safety Master Plan
 Sewer System Master Plan
 Vision Zero
 Water System Master Plan

REPORT NARRATIVE:

This item is continued from the City Council meeting on September 4, 2019. At the September 4, 2019 meeting, City Council requested a continuance of the public hearing to the October 2, 2019 meeting to give the law office Hanson Bridgett LLP more time to review the materials relating to the City's proposed development impact fee provided in the City's initial response to the firm's Public Records Act request.

Since that time, the City has produced additional materials, including numerous e-mail messages, in response to the Public Records Act request. Representatives from the Hanson Bridgett firm requested additional time to review the records, so staff requested,

and Council granted a continuance of the hearing to a date certain of October 23, 2019.

In 2016, the City of Morgan Hill adopted its updated General Plan, outlining a plan for the growth of the City through the year 2035. In 2017, the City adopted its:

- 1) Public Safety Master Plan, serving as a foundational document for service delivery decision well into the future;
- 2) Utilities Master Plan Documents to help the Council and the public understand the future build out of the City's water and wastewater systems; and
- 3) Bikeways, Trails, Parks, and Recreation Master Plan to guide the improvement and future development of the City's bikeways, trails, parks, and recreation system in Morgan Hill.

More recently, in 2018, the City adopted its Storm Drainage Master Plan to evaluate the adequacy of the existing stormwater drainage system capacity, recommending improvements to mitigate existing deficiencies and for servicing future growth. Growth brings the need for both new and expanded infrastructure. A key element of planning for growth is identifying the funding mechanism to pay for such infrastructures.

The City relies on various resources to fund new infrastructure; a portion of funding may come from outside sources, such as federal or state grants, but much of the funding, must be raised at the local level. Therefore, the City works to ensure that new development pays for the infrastructure needs it creates. The City has in place a development impact fee program, assessing various impact fees to new developments to fund infrastructure improvements. Such fee assessments are allowed under the Mitigation Fee Act, California Government Code Section 66000 et seq. (the "Act").

The General Plan requires the City to periodically update the schedule of development impact fees authorized by the Act to address the impacts of growth on City infrastructure.

On February 8, 2019, the 2019 Draft Development Impact Fee Update Study ("Update Study") (Attachment No. 1), prepared by Willdan Financial Services, was released to the community via eblast along with the posting on the City's website.

The maximum justified total impact fees shown in this study would increase total impact fees by about 17% to 37% for residential development, depending on dwelling unit type of residential construction, and by about 11% to 48% for non-residential development, depending on type of construction. The increases are significant in both dollar and percentage terms. However, they are necessary as fees collected would enable the City to maintain adequate public facilities to accommodate new development.

The table below shows the total maximum justified impact fee, change amount, and percentage increases from the current City's total impact fee.

Land Use	Current Fee	Per Update Study		
		Maximum Justified Fee	Amount Change from Current Fee	% Change from Current Fee
<i>Residential (per dwelling unit)</i>				
Single Family	\$ 38,682	\$ 53,148	\$ 14,466	37%
Multi-Family (>1,200SF)	32,377	41,271	8,894	27%
Multi-Family (<1,200SF)	28,672	33,662	4,990	17%
<i>Nonresidential (per KSF or per hotel room)</i>				
Commercial	\$ 13,476	\$ 19,923	\$ 6,446	48%
Office	9,067	12,628	3,561	39%
Industrial	6,090	8,655	2,564	42%
Auto Dealership	11,673	15,666	3,993	34%
Hotel	3,835	4,251	415	11%

On February 20, 2019, the Update Study was introduced to the City Council. The City Council directed staff to proceed with updating the City's development impact fees as presented in the Update Study. In addition, Council had agreed with staff's recommendation for the following items:

- Reduce the total Priority Bikeways projects to one-third or approximately \$4 million as the City realistically would only be able to raise \$3 million from outside sources for the projects, resulting in a lower than maximum justified traffic impact fee schedule.
- Reduce the new parks to be built by half due to lack of outside sources to fund the operating and maintenance (O&M), resulting in a lower than maximum justified park impact fee schedule.
- Full implementation on July 1, 2019, without phasing in the increases.

On March 21, 2019, two community meeting sessions were held at the Development Services Center – Grand Conference Room. A total of six (6) community members attended the meetings. Concerns raised included the phasing in of increases, and accessory dwelling unit (ADU) density. The majority of the community members that attended the meetings expressed that both in the dollar and percentage terms, the increases from the existing fees are high and the proposed amount does not take into account the Residential Development Control System (RDACS) contributions which amounted to an average of approximately \$18,000 per allotment, based on the last RDACS competition. As such, they requested that Council reconsider the phase-in directive that the Council provided to the staff at the February 20, 2019 meeting.

As for the ADU fees, some community members believe the density factor used in the Update Study is high. Morgan Hill Municipal Code Chapter 18.84 and existing state law allow owners to build a maximum of 1,200 square feet for a detached structure. The Update Study uses a residential density factor of 2.0 residents per unit for this category. After further consultation with Planning staff members, staff believes the factor used in the Update Study is appropriate and no further adjustment is recommended. In addition, this is the same factor that was used in prior studies.

On April 2, 2019, staff received a letter from the law office of Hanson Bridgett LLP (Attachment No. 6), raising concerns involving technical aspects of the Act, and potential impact to affordable housing development in Morgan Hill from the proposed impact fee increases. Staff's response (Attachment No. 7) addresses the impact on affordable housing development in Morgan Hill, and the consultant's response (Attachment No. 8) addresses the technical aspects of the mitigation fee act.

Based on the comments received from the community, staff and consultant have made the following changes to the Update Study that was introduced to the City Council in February 2019:

- Adjust the overall dwelling units in order to match residential population growth outlined in General Plan 2035, using the latest density factors
- Changed the Multi-Family residential units to Greater or Less Than 1,200 SF
- Adjust costs for inflation to June 2019
- Added more text throughout to better describe increased project costs
- Remove Police and Fire impact fees from the General Public Facilities to Public Safety Facilities

Due to potential changes in state legislation, staff is now recommending that City Council only accept the impact fee increases from the Update Study that would impact public health and safety. These include Traffic, Water, Storm Drainage, and Public Safety Facilities fees. Fees that are not related to public health and safety, including General Public Facilities and Parks are proposed to be excluded from the update. An update to the Library Facilities impact fee is also proposed to be included because the Update Study shows the proposed impact fee amount is lower than the existing impact fee amount due to changes in service population.

The table below shows the total proposed impact fee, change amount, and percentage increases from the City's current total impact fee.

Land Use	Current Fee	Proposed		
		Proposed Fee	Amount Change from Current Fee	% Change from Current Fee
<i>Residential (per dwelling unit)</i>				
Single Family	\$ 38,682	\$ 43,695	\$ 5,013	13%
Multi-Family (>1,200SF)	32,377	33,417	1,040	3%
Multi-Family (<1,200SF)	28,672	27,388	(1,284)	-4%
<i>Nonresidential (per KSF or per hotel room)</i>				
Commercial	\$ 13,476	\$ 19,510	\$ 6,033	45%
Office	9,067	12,131	3,064	34%
Industrial	6,090	8,251	2,160	35%
Auto Dealership	11,673	15,500	3,827	33%
Hotel	3,835	4,209	373	10%

In addition to the proposed update to the City's select development impact fees, staff will be proposing amendments to the City's existing Quimby Act (Govt. Code § 66477) fee ordinance, which requires residential developers to set aside land, donate conservation easements, or pay fees for park improvements. The amendments to the City's Quimby Act ordinance will be brought for Council consideration in October.

Additional comparison schedules to existing fees are provided as Attachment No. 3 & 4.

COMMUNITY ENGAGEMENT: Inform

Public notice was published in the local newspaper on August 23, 2019, informing the community of the Development Impact Fees adjustment and adoption of the new fees. In addition, two community meeting sessions were held on March 21, 2019, to present the study, and to receive feedback from the community.

ALTERNATIVE ACTIONS:

The City Council could direct staff to make adjustments to the proposed impact fees, phase in the increases, or delay updating the impact fees.

PRIOR CITY COUNCIL AND COMMISSION ACTIONS:

On September 27, 2017, the City Council approved a consultant agreement with Willdan Financial Services to update the City's development impact fees.

On February 20, 2019, the Updated Study was introduced to the City Council.

On September 4, 2019, the City Council received a presentation on the revised Impact Fee Study and continued the item to the October 2, 2019 meeting. The item was subsequently continued to the October 23, 2019 meeting.

FISCAL AND RESOURCE IMPACT:

The fiscal impact of preparing this report is included in the staff's annual workplan. The proposed impact fees would provide sufficient funding from new development for capital improvements related to that development. The effective date of the updated fees will be 60 days from the adoption date by the City Council.

CEQA (California Environmental Quality Act):

Project, Description of CEQA requirements.

These actions are exempt from CEQA under Section 15273 of Guidelines for CEQA, because they establish, modify, and approve rates and charges for the purposes of obtaining funds for capital projects.

LINKS/ATTACHMENTS:

1. Attachment 1: Morgan Hill Development Impact Fee Update Study - Final Draft 7-9-19
2. Attachment 2: Resolution
3. Attachment 3: DIF - Max Justified per Study vs Existing comparison 09042019
4. Attachment 4: DIF - Proposed vs Existing comparison 09042019
5. Attachment 5: Letter from BIA
6. Attachment 6: Hanson Bridgett LLP
7. Attachment 7: Staff Response to Hanson Bridgett Comments
8. Attachment 8: Willdan Response to Hanson Bridgett Comments
9. Presentation
10. Letter from Glenrock Builders
- 11.14 Supplement 1
- 12.14 Supplement 2

CITY OF MORGAN HILL

DEVELOPMENT IMPACT FEE UPDATE STUDY

FINAL DRAFT

JULY 9, 2019



Oakland Office

1700 Broadway
6th Floor
Oakland, CA 94612
Tel: (510) 832-0899
Fax: (510) 832-0898

Corporate Office

27368 Via Industria
Suite 110
Temecula, CA 92590
Tel: (800) 755-MUNI (6864)
Fax: (909) 587-3510

www.willdan.com

Other Regional Offices

Lancaster, CA
Memphis, TN
Orlando, FL
Phoenix, AZ
Sacramento, CA
Seattle, WA

This page intentionally left blank.

TABLE OF CONTENTS

EXECUTIVE SUMMARY	1
Background and Study Objectives	1
Facility Standards and Costs	1
Use of Fee Revenues	2
Development Impact Fee Schedule Summary	2
Other Funding Needed	4
1. INTRODUCTION.....	5
Public Facilities Financing in California	5
Study Objectives	5
Morgan Hill Impact Fee Program	6
Fee Program Maintenance	6
Study Methodology	6
Types of Facility Standards	7
New Development Facility Needs and Costs	7
Organization of the Report	8
2. GROWTH FORECASTS.....	10
Land Use Types	10
Existing and Future Development	11
Occupant Densities	12
3. GENERAL PUBLIC FACILITIES.....	14
Service Population	14
Facility Inventories and Standards	15
Existing Inventory	15
Planned Facilities	15
Cost Allocation	16
Revenue Projection	16
Use of Fee Revenue	17
Fee Schedule	17
4. TRAFFIC FACILITIES.....	19
Trip Generation by Land Use	19
Growth in Trip Demand Through 2035	20
Traffic Impact Fee Project Costs	20
Cost Allocation	22
Fee Schedule	23
5. LIBRARY FACILITIES.....	25
Service Population	25
Facility Inventories and Standards	25
Cost Allocation	26

Use of Fee Revenue	27
Revenue Projection	27
Fee Schedule	27
6. PARK FACILITIES	29
Service Population	29
Facility Inventories and Standards	29
Existing Inventory	29
Parkland Unit Costs	33
Park Facility Standards	34
Facilities Needed to Accommodate New Development	35
Parks Cost per Capita	36
Use of Fee Revenue	37
Fee Schedule	37
7. WATER FACILITIES.....	38
Water Demand	38
Equivalent Dwelling Unit Growth	39
Facility Needs and Costs	39
Fee Schedule	42
8. STORM DRAIN FACILITIES FEE	43
Storm Drain Demand	43
Equivalent Dwelling Unit Growth	44
Planned Facilities	44
Allocation of Facilities to New Development	47
Non-Fee Funding Required	47
Fee Schedule	47
9. PUBLIC SAFETY FACILITIES	49
Service Population	49
Facility Inventories and Standards	50
Existing Inventory	50
Planned Facilities	50
Cost Allocation	52
Revenue Projection	52
Use of Fee Revenue	53
Fee Schedule	53
10. IMPLEMENTATION	55
Impact Fee Program Adoption Process	55
Inflation Adjustment	55
Reporting Requirements	55
Programming Revenues and Projects with the CIP	55
11. MITIGATION FEE ACT FINDINGS.....	56
Purpose of Fee	56

Use of Fee Revenues	56
Benefit Relationship	56
Burden Relationship	56
Proportionality	57
APPENDIX	A-1

Executive Summary

This report summarizes an analysis of the maximum justified development impact fees allowable to support future development in Morgan Hill through 2035. It is the City's intent that the costs representing future development's share of public facilities and capital improvements be imposed on that development in the form of a development impact fee, also known as a public facilities fee. The public facilities and improvements included in this analysis are divided into the fee categories listed below:

- General Public Facilities;
- Traffic Facilities;
- Library Facilities;
- Park Facilities;
- Water Facilities;
- Storm Drain Facilities; and,
- Public Safety Facilities.

Background and Study Objectives

The primary policy objective of a development impact fee program is to ensure that new development pays the capital costs associated with growth. Although growth also imposes operating costs, there is no similar system to generate revenue from new development for services. The primary purpose of this report is to calculate and present fees that will enable the City to expand its inventory of public facilities as new development creates increases in service demands.

The City imposes public facilities fees under authority granted by the *Mitigation Fee Act* (the *Act*), contained in *California Government Code* Sections 66000 *et seq.* This report provides the necessary findings required by the *Act* for adoption of the fees presented in the fee schedules contained herein.

All development impact fee-funded capital projects should be programmed through the City's six-year Capital Improvement Plan (CIP). Using a CIP can help the City identify and direct its fee revenue to public facilities projects that will accommodate future growth. By programming fee revenues to specific capital projects, the City can help ensure a reasonable relationship between new development and the use of fee revenues as required by the *Mitigation Fee Act*.

Facility Standards and Costs

There are three approaches typically used to calculate facilities standards and allocate the costs of planned facilities to accommodate growth in compliance with the *Mitigation Fee Act* requirements.

The **planned facilities** approach allocates costs based on the ratio of planned facilities that serve new development to the increase in demand associated with new development. This approach is appropriate when specific planned facilities that only benefit new development can be identified, or when the specific share of facilities benefiting new development can be identified. Examples include street improvements to avoid deficient levels of service or a water main extension to a previously undeveloped area. This approach is used for the traffic facilities, park facilities, water facilities and the storm drain facilities fees in this report.

The **existing inventory** approach is based on a facility standard derived from the City's existing level of facilities and existing demand for services. This approach results in no facility deficiencies

attributable to existing development. This approach is often used when a long-range plan for new facilities is not available. Only the initial facilities to be funded with fees are identified in the fee study. Future facilities to serve growth will be identified through the City's annual capital improvement plan and budget process and/or completion of a new facility master plan. This approach is used for the library facilities fees and general public facilities and public safety facilities fees in this study.

The **system plan** approach is based on a master facilities plan in situations where the needed facilities serve both existing and new development. This approach allocates existing and planned facilities across existing and new development to determine new development's fair share of facility needs. This approach is used when it is not possible to differentiate the benefits of new facilities between new and existing development. Often the system plan is based on increasing facility standards, so the City must find non-impact fee revenue sources to fund existing development's fair share of planned facilities. This approach is not used in this report.

Use of Fee Revenues

Impact fee revenue must be spent on new facilities or expansion of current facilities to serve new development. Facilities can be generally defined as capital acquisition items with a useful life greater than five years. Impact fee revenue can be spent on capital facilities to serve new development, including but not limited to: land acquisition, construction of buildings and infrastructure, the acquisition of vehicles or equipment, information technology, software licenses and equipment.

Development Impact Fee Schedule Summary

Table E.1 summarizes the maximum justified development impact fees that meet the City's identified needs and comply with the requirements of the *Mitigation Fee Act*.

E.1: Maximum Justified Development Impact Fees

Land Use	General Public Facilities	Traffic Facilities	Library Facilities	Parks	Water	Storm Drainage	Public Safety Facilities	Total
<i>Residential (DU)</i>								
Single Family	\$ 1,833	\$ 3,373	\$ 1,953	\$ 13,961	\$ 9,318	\$ 1,557	\$ 1,941	\$ 33,936
Multi-Family (Greater than 1,200 SF)	1,621	2,091	1,727	12,342	4,286	1,105	1,716	24,888
Multi-Family (Less than 1,200 SF)	1,214	1,316	1,293	9,245	3,261	514	1,285	18,128
<i>Nonresidential (per KSF or hotel room)</i>								
Commercial	\$ 469	\$ 12,514	-	-	\$ 2,236	\$ 965	\$ 498	\$ 16,682
Office	563	5,026	-	-	2,236	965	597	9,387
Industrial	469	3,272	-	-	1,584	592	498	6,415
Auto Dealership	188	8,837	-	-	2,236	965	199	12,425
Hotel	56	2,024	-	-	746	311	60	3,197

Sources: Tabs 3.6, 4.6, 5.6, 6.9, 7.5, 8.5 and 9.6.

Other Funding Needed

Impact fees may only fund the share of public facilities related to new development in Morgan Hill. They may not be used to fund the share of facility needs generated by existing development or by development outside of the City. As shown in **Table E.2**, approximately \$68.9 million in additional funding will be needed to complete the projects the City currently plans to develop. Non-fee funding is needed because these facilities are needed partially to remedy existing deficiencies and partly to accommodate new development.

The City will need to develop alternative funding sources to fund existing development's share of the planned facilities. Potential sources of revenue include but are not limited to: existing or new general fund revenues, revenues to Residential Development Control System (RDSCS) in-lieu accounts, existing or new taxes, special assessments, and grants.

Table E.2: Non-Impact Fee Funding Required

Fee Category	Total Project Cost	Development Fee Revenue	Additional Funding Required
General Public Facilities	\$ 18,000,000	\$ 8,362,130	\$ 9,637,870
Traffic Facilities	56,323,974	34,354,764	21,969,210
Library Facilities	5,580,000	7,895,800	-
Parks	56,429,000	56,429,000	-
Sewer	81,617,139	59,259,594	22,357,545
Water	46,689,058	33,396,751	13,292,307
Storm Drainage ¹	12,042,945	8,080,922	-
Public Safety Facilities	10,450,001	8,854,020	1,595,981
	<u>\$ 287,132,117</u>	<u>\$ 216,632,981</u>	<u>\$ 68,852,912</u>

¹ Existing fund balances fund the difference between total project cost and projected impact fee revenue.

Sources: City of Morgan Hill; Tables 3.3, 3.5, 4.3, 4.4, 4.5, 5.3, 5.5, 6.7, 7.3, 7.4, 8.3, 9.3 and 9.5.

1. Introduction

This report presents an analysis of the need for public facilities to accommodate new development in Morgan Hill. This chapter provides background for the study and explains the study approach under the following sections:

- Public Facilities Financing in California;
- Study Objectives;
- Morgan Hill Impact Fee Program;
- Fee Program Maintenance;
- Study Methodology; and
- Organization of the Report.

Public Facilities Financing in California

The changing fiscal landscape in California during the past 40 years has steadily undercut the financial capacity of local governments to fund infrastructure. Three dominant trends stand out:

- The passage of a string of tax limitation measures, starting with Proposition 13 in 1978 and continuing through the passage of Proposition 218 in 1996;
- Declining popular support for bond measures to finance infrastructure for the next generation of residents and businesses; and
- Steep reductions in federal and state assistance.

Faced with these trends, many cities and counties have had to adopt a policy of “growth pays its own way.” This policy shifts the burden of funding infrastructure expansion from existing ratepayers and taxpayers onto new development. This funding shift has been accomplished primarily through the imposition of assessments, special taxes, and development impact fees also known as public facilities fees. Assessments and special taxes require the approval of property owners and are appropriate when the funded facilities are directly related to the developing property. Development impact fees, on the other hand, are an appropriate funding source for facilities that benefit all development jurisdiction-wide. Development impact fees need only a majority vote of the legislative body for adoption.

Study Objectives

The primary policy objective of a public facilities fee program is to ensure that new development pays the capital costs associated with growth. Policy 16.4(c) of the Morgan Hill General Plan states that the City will “Fully utilize existing strategies to achieve an urban level of public services throughout the city, including require [ing] developers to dedicate land and/or pay to offset the costs relating to the provision and expansion of public services and facilities.” The primary purpose of this report is to update the City’s impact fees based on the most current available facility plans and growth projections. The proposed fees will enable the City to expand its inventory of public facilities as new development leads to increases in service demands.

The City imposes public facilities fees under authority granted by the Mitigation Fee Act (the Act), contained in California Government Code Sections 66000 et seq. This report provides the necessary findings required by the Act for adoption of the fees presented in the fee schedules presented in this report.

Morgan Hill is forecast to experience moderate growth through this study’s planning horizon of 2035. This growth will create an increase in demand for public services and the City facilities

required to deliver them. Given the revenue challenges described above, Morgan Hill has decided to use a development impact fee program to ensure that new development funds the share of facility costs associated with growth. This report makes use of the most current available growth forecasts and facility plans to update the City's existing fee program to ensure that the City's fee program is representative of the facility needs resulting from new development.

Morgan Hill Impact Fee Program

Morgan Hill currently charges impact fees to fund the expansion of general public facilities, water facilities, storm drain facilities, park facilities, recreation and community center facilities, library facilities, fire facilities, police facilities, traffic facilities, and sewer facilities to serve new development. Most of the fees were established in 2002 or 2003 and have since been comprehensively updated, in addition to periodic updates for inflation.

This study provides the documentation needed for a comprehensive update of the City's impact fee program, with the exception of the City's recreation facilities fee and the sewer facilities fee. Two former fee categories, fire and police facilities fees, will be incorporated into a new public safety facilities fee, and the individual categories discontinued. All existing revenue within these two restricted fee funds must be spent on the purpose for which it was collected.

Fee Program Maintenance

Once a fee program has been adopted it must be properly maintained to ensure that the revenue collected adequately funds the facilities needed by new development. To avoid collecting inadequate revenue, the inventories of existing facilities and costs for planned facilities must be updated periodically for inflation, and the fees recalculated to reflect the higher costs. The use of established indices for each facility included in the inventories (land, buildings, and equipment), such as the *Engineering News-Record*, is necessary to accurately adjust the impact fees. For a list of recommended indices, see Chapter 10.

While fee updates using inflation indices are appropriate for annual or periodic updates to ensure that fee revenues keep up with increases in the costs of public facilities, it is recommended to conduct more extensive updates of the fee documentation and calculation (such as this study) when significant new data on growth forecasts and/or facility plans become available. For further detail on fee program implementation, see Chapter 10.

Morgan Hill last completed comprehensive review of the general public facilities, library, park, storm drain, fire and police impact fees in 2010. The city last comprehensively updated the community recreation centers and traffic facilities fees in 2015. Impact fees must be adjusted for inflation to fund new development's fair share of planned facilities. If impact fees are not adjusted for inflation, then deficiencies will grow, since the impact fees will no longer fully fund new development's fair share of planned facilities.

Study Methodology

Development impact fees are calculated to fund the cost of facilities required to accommodate growth. The six steps followed in this development impact fee study include:

1. **Estimate existing development and future growth:** Identify a base year for existing development and a growth forecast that reflects increased demand for public facilities;
2. **Identify facility standards:** Determine the facility standards used to plan for new and expanded facilities;
3. **Determine facilities required to serve new development:** Estimate the total amount of planned facilities, and identify the share required to accommodate new development;

4. **Determine the cost of facilities required to serve new development:** Estimate the total amount and the share of the cost of planned facilities required to accommodate new development;
5. **Calculate fee schedule:** Allocate facilities costs per unit of new development to calculate the development impact fee schedule; and
6. **Identify alternative funding requirements:** Determine if any non-fee funding is required to complete projects.

The key public policy issue in development impact fee studies is the identification of facility standards (step #2, above). Facility standards document a reasonable relationship between new development and the need for new facilities. Standards ensure that new development does not fund deficiencies associated with existing development.

Types of Facility Standards

There are three separate components of facility standards:

- ♦ *Demand standards* determine the amount of facilities required to accommodate growth, for example, park acres per thousand residents, square feet of library space per capita, or gallons of water per day. Demand standards may also reflect a level of service such as the vehicle volume-to-capacity (V/C) ratio used in traffic planning.
- ♦ *Design standards* determine how a facility should be designed to meet expected demand, for example, park improvement requirements and technology infrastructure for city office space. Design standards are typically not explicitly evaluated as part of an impact fee analysis but can have a significant impact on the cost of facilities. Our approach incorporates the cost of planned facilities built to satisfy the City's facility design standards.
- ♦ *Cost standards* are an alternate method for determining the amount of facilities required to accommodate growth based on facility costs per unit of demand. *Cost standards* are useful when demand standards were not explicitly developed for the facility planning process. *Cost standards* also enable different types of facilities to be analyzed based on a single measure (cost or value) and are useful when different facilities are funded by a single fee program. Examples include facility costs per capita, cost per vehicle trip, or cost per gallon of water per day.

New Development Facility Needs and Costs

A number of approaches are used to identify facility needs and costs to serve new development. This is often a two-step process: (1) identify total facility needs, and (2) allocate to new development its fair share of those needs.

There are three common methods for determining new development's fair share of planned facilities costs: the **planned facilities method**, the **existing inventory method** and the **system plan method**. Often the method selected depends on the degree to which the community has engaged in comprehensive facility master planning to identify facility needs.

The formula used by each approach and the advantages and disadvantages of each method is summarized below:

Planned Facilities Method

The planned facilities method allocates costs based on the ratio of planned facility costs to demand from new development as follows:

$$\frac{\text{Cost of Planned Facilities}}{\text{New Development Demand}} = \$/\text{unit of demand}$$

This method is appropriate when planned facilities will entirely serve new development, or when a fair share allocation of planned facilities to new development can be estimated. An example of the former is a water main extension to a previously undeveloped area. An example of the latter is expansion of an existing library building and book collection, which will be needed only if new development occurs, but which, if built, will in part benefit existing development, as well. Under this method new development funds the expansion of facilities at the standards used in the applicable planning documents. This method is used to calculate the traffic facilities, park facilities, water facilities and the storm drain facilities fees in this study.

Existing Inventory Method

The existing inventory method allocates costs based on the ratio of existing facilities to demand from existing development as follows:

$$\frac{\text{Current Value of Existing Facilities}}{\text{Existing Development Demand}} = \$/\text{unit of demand}$$

Under this method new development funds the expansion of facilities at the same standard currently serving existing development. By definition the existing inventory method results in no facility deficiencies attributable to existing development. This method is often used when a long-range plan for new facilities is not available. Only the initial facilities to be funded with fees are identified in the fee study. Future facilities to serve growth are identified through an annual capital improvement plan and budget process, possibly after completion of a new facility master plan. This method is used to calculate the library facilities fees and general public facilities and public safety facilities fees in this study.

System Plan Method

This method calculates the fee based on: the value of existing facilities plus the cost of planned facilities, divided by demand from existing plus new development:

$$\frac{\text{Value of Existing Facilities} + \text{Cost of Planned Facilities}}{\text{Existing} + \text{New Development Demand}} = \$/\text{unit of demand}$$

This method is useful when planned facilities need to be analyzed as part of a system that benefits both existing and new development. It is difficult, for example, to allocate a new fire station solely to new development when that station will operate as part of an integrated system of fire stations that together achieve the desired level of service.

The system plan method ensures that new development does not pay for existing deficiencies. Often facility standards based on policies such as those found in General Plans are higher than existing facility standards. This method enables the calculation of the existing deficiency required to bring existing development up to the policy-based standard. The local agency must secure non-fee funding for that portion of planned facilities required to correct the deficiency to ensure that new development receives the level of service funded by the impact fee. This method is not used in this report.

Organization of the Report

The determination of a public facilities fee begins with the selection of a planning horizon and development of growth projections for population and employment. These projections are used throughout the analysis of different facility categories, and are summarized in Chapter 2.

Chapters 3 through 9 identify facility standards and planned facilities, allocate the cost of planned facilities between new development and existing development, and identify the maximum justified development impact fee for each of the following facility categories:

- General Public Facilities;
- Traffic Facilities;

- Library Facilities;
- Park Facilities;
- Water Facilities;
- Storm Drain Facilities; and,
- Public Safety Facilities.

Chapter 10 details the procedures that the City must follow when implementing a development impact fee program. Impact fee program adoption procedures are found in *California Government Code* Sections 66016 through 66018.

The five statutory findings required for adoption of the proposed public facilities fees in accordance with the Mitigation Fee Act are documented in Chapter 11.

2. Growth Forecasts

Growth projections are used as indicators of demand to determine facility needs and allocate those needs between existing and new development. This chapter explains the source for the growth projections used in this study based on a 2019 base year and a planning horizon of 2035.

Estimates of existing development and projections of future growth are critical assumptions used throughout this report. These estimates are used as follows:

- The estimate of existing development in 2019 is used as an indicator of existing facility demand and to determine existing facility standards.
- The estimate of total development at the 2035 planning horizon is used as an indicator of future demand to determine total facilities needed to accommodate growth and remedy existing facility deficiencies, if any.
- Estimates of growth from 2019 through 2035 are used to (1) allocate facility costs between new development and existing development, and (2) estimate total fee revenues.

The demand for public facilities is based on the service population, dwelling units or nonresidential development creating the need for the facilities. The service population for general public facilities includes residents and workers. The service population for parks and libraries includes only residents. Demand for water facilities is based on flow generation factors that vary by land use. The demand for storm drain facilities is based on the ratio of impervious surface to non-impervious surface that a development will create. Water and storm drain demand factors are provided per dwelling unit, per thousand building square feet of nonresidential space and per hotel room.

Land Use Types

To ensure a reasonable relationship between each fee and the type of development paying the fee, growth projections distinguish between different land use types. The land use types that impact fees have been calculated for are defined below.

- **Single family:** Detached and attached one-unit dwellings. Per *Municipal Code Section 18.04.155*, a single family detached dwelling unit is defined as, “a dwelling designed to contain a single dwelling unit situated on a single lot.” Per *Municipal Code Section 18.04.154*, a single family attached dwelling unit is defined as, “a dwelling attached to another dwelling on at least fifty percent of the length of the attached side of the building, sometimes called a townhouse, duet, or row house.”
- **Multi-family:** All attached multi-family dwellings including duplexes and condominiums. Per *Municipal Code Section 18.04.150*, a multi-family unit is defined as, “a building designed and used as a residence for three or more families living independently of each other and containing three or more dwelling units. Per *Municipal Code Section 18.04.157*, a duplex is defined as, “a structure which is designed and used as a residence for two families living independently of each other and containing two dwelling units.”
 - **Greater than 1,200 square feet:** Multi-family units with more than 1,200 square feet of living space.
 - **Less than 1,200 square feet:** Multi-family units with less than 1,200 square feet of living space.
- **Commercial:** All commercial, retail and educational development.
- **Office:** All general, professional, and medical office development.

- **Industrial:** All manufacturing and warehouse development.
- **Automobile Dealerships:** All land uses selling new or used automobile or other motor vehicles.
- **Hotel/Motel:** All lodging development, including hotels and motels.

Some developments may include more than one land use type, such as a mixed-use development with both multi-family and commercial uses. In those cases, the facilities fee would be calculated separately for each land use type.

The City has the discretion to determine which land use type best reflects a development project's characteristics for purposes of imposing an impact fee and may adjust fees for special or unique uses to reflect the impact characteristics of the use.

Existing and Future Development

Table 2.1 shows the estimated number of residents, dwelling units, employees, and building square feet in Morgan Hill, both in 2019 and in 2035. Existing residents and dwelling units are based on California Department of Finance (DOF) data. These estimates exclude "group quarters" resident populations, since they do not contribute to demand for facilities. Estimates of residents in 2035 also exclude group quarters residents and is based on Municipal Code Section 18.78.040 - Population Limit of the voter-approved Residential Development Control System (RDCS), which established a maximum population of 58,200.¹

Base year dwelling units for single family units are based on DOF data. Multi-family units less than 1,200 square feet are assumed to be equivalent to the senior/ downtown/accessory dwelling unit estimates from the City's 2015 Traffic Impact Fee study. Multifamily base year units greater than 1,200 square feet are estimated as the difference between total units, single family units from DOF and multi-family units less than 1,200 square feet. Total dwelling units in 2035 are estimated based on input from the City and the current occupant density factors in Table 2.2, such that the growth increment calculated by multiplying the growth in dwelling units, by the occupancy density factors from Table 2.2 matches the projected growth in residents.

Base year employees are estimated based on data provided by the US Census' American Community Survey and exclude local government employees. Future employees are estimated based on data from the Association of Bay Area Governments (ABAG) used in the Morgan Hill General Plan. Estimates of base year and planning horizon building square feet come from the Morgan Hill 2035 Final EIR.

¹ 58,200 less existing Group Quarters Population of 386 = 57,814.

Table 2.1: Existing and New Development

	2019	2035	Increase
<u>Residents</u> ¹	45,360	57,814	12,454
<u>Dwelling Units</u> ²			
Single Family	11,598	13,170	1,572
Multi-Family (Greater than 1,200 SF)	2,407	4,694	2,287
Multi-Family (Less than 1,200 SF)	<u>1,100</u>	<u>1,900</u>	<u>800</u>
Total	15,105	19,252	4,147
<u>Employment</u> ³	16,446	21,520	5,074
<u>Building Square Feet (000s)</u> ⁴			
Commercial	2,610	3,727	1,117
Office	522	1,151	629
Industrial	5,935	7,715	1,780
Auto Dealership	<u>120</u>	<u>176</u>	<u>56</u>
Total	9,187	12,769	3,582
<u>Hotel Rooms</u>	919	1,134	215

¹ Excludes "group quarters" resident populations. Existing residents from DOF data.

Estimates of residents in 2035 based on Section 18.78.040 - Population Limit of the voter-approved Residential Development Control System (RDCS), which established a maximum population of 58,200. 58,200 less existing Group Quarters Population 386 = 57,814.

² Base year dwelling units for single family based on DOF data. Multi-family units less than 1,200 sq. ft. are assumed to be equivalent to the senior/ down town n/accessory dwelling unit estimates from the City's 2015 Traffic Impact Fee study. Multifamily base year units greater than 1,200 sq. ft. are estimated as the difference between total units, single family units from DOF and multi-family units less than 1,200 square feet. Total dwelling units in 2035 based on input from the City and the current occupant density factors in Table 2.2.

³ Estimate of 16,894 total workers from American Community Survey Table B08604. 448 local government workers are further excluded from that figure based on data from OnTheMap.ces.census.gov.

⁴ Building square feet data from 2035 horizon year projection summarized on page 5-2 of the responses to comments in the Morgan Hill 2035 Final EIR.

Sources: California Department of Finance (DOF) Table E-5, 2019; U.S. Census Bureau, LEHD Origin-Destination Employment Statistics (2002-2015) accessed at <https://onthemap.ces.census.gov>; City of Morgan Hill General Plan 2035 EIR; Willdan Financial Services.

Occupant Densities

The general public facilities, library facilities, park facilities and public safety facilities fees are based on allocating a cost per resident or employee to new development. Occupant density assumptions ensure a reasonable relationship between the size of a development project, the increase in service population associated with the project, and the amount of the fee.

Occupant densities (residents per dwelling unit or workers per building square foot or hotel room) are the most appropriate characteristics to use for these impact fees. The fee imposed should be based on the land use type that most closely represents the probable occupant density or impervious surface (for storm drain fees) of the development.

The average occupant density factors used in this report are shown in **Table 2.2**. The residential density factors are based on data for Morgan Hill from the U.S. Census' American Community Survey. The nonresidential factors are based on data from the City of Morgan Hill General Plan 2035 EIR.

Table 2.2: Occupant Density

<u>Residential</u>		
Single Family	3.02	Residents per dwelling unit
Multi-Family (Greater than 1,200 SF)	2.67	Residents per dwelling unit
Multi-Family (Less than 1,200 SF)	2.00	Residents per dwelling unit
<u>Nonresidential</u>		
Commercial	2.50	Employees per 1,000 square feet
Office	3.00	Employees per 1,000 square feet
Industrial	2.50	Employees per 1,000 square feet
Auto Dealership	1.00	Employees per 1,000 square feet
Hotel/Motel	0.30	Employees per room

Sources: U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates, Tables B25024 and B25033; City of Morgan Hill General Plan 2035 EIR; Willdan Financial Services.

3. General Public Facilities

This chapter documents the impact fee for general public facilities. The general public facilities in this fee category include a variety of facilities including City Hall, the Development Services Center and the corporation yard.

Service Population

General public facilities are used to provide services to both residents and businesses. The service population used to determine the demand for general public facilities includes both residents and workers.

Table 3.1 shows the existing and future projected service population for general public facilities. While specific data is not available to estimate the actual ratio of demand per resident to demand by businesses (per worker) for these services, it is reasonable to assume that demand for these services is less for one employee compared to one resident, because nonresidential buildings are typically occupied less intensively than dwelling units. The 0.31-weighting factor for workers is based on a 40-hour workweek divided by the total number of non-work hours in a week (128) and reflects the degree to which nonresidential development yields a lesser demand for general public facilities.

Table 3.1: General Public Facilities Service Population

	A Persons	B Weighting Factor	A x B = C Service Population
<u>Residents</u>			
Existing (2019)	45,360	1.00	45,360
New Development (2019-2035)	12,454	1.00	12,454
Total (2035)	57,814		57,814
<u>Workers</u>			
Existing (2019)	16,446	0.31	5,100
New Development (2019-2035)	5,074	0.31	1,600
Total (2035)	21,520		6,700
<u>Combined Residents and Weighted Workers</u>			
Existing (2019)			50,460
New Development (2019-2035)			14,054
Total (2035)			64,514

¹ Workers are weighted at 0.31 of residents based on a 40 hour work week out of a possible 128 non-work hours in a week (40/128 = 0.31)

Sources: Table 2.1; Willdan Financial Services.

Facility Inventories and Standards

This section describes the City's general public facility inventory, the cost of planned facilities and facility standards.

Existing Inventory

Table 3.2 shows the existing inventory of general public facilities, along with the facilities' estimated replacement value. The estimated land value was developed based on data from four recent appraisals of City owned property and is used consistently throughout this report to value City-owned land. Building values are based on the estimated replacement cost of each facility. Building values were informed by the City's recent construction cost experience. Table 3.2 also lists the replacement cost of the City's owned fleet of general public facilities vehicles, including public works and other fleet vehicles.

Table 3.2: Existing General Public Facilities Inventory

	Inventory	Unit	Unit Cost	Replacement Cost
<u>Land (acres)</u>				
City Hall, with Villas	4.81	acres	\$ 790,000	\$ 3,800,000
Development Services Center	1.65	acres	790,000	1,304,000
Public Works Corporation Yard	<u>2.07</u>	acres	790,000	<u>1,635,000</u>
Subtotal - Land	8.53			\$ 6,739,000
<u>Buildings (square feet)</u>				
City Hall, with Villas ¹	16,800	sq. ft.	\$ 580	\$ 9,744,000
City Hall Improvements				2,051,000
Development Services Center ¹	12,600	sq. ft.	580	3,603,000
Public Works Corporation Yard	<u>5,228</u>	sq. ft.	300	<u>1,568,000</u>
Subtotal - Buildings	34,628			\$ 16,966,000
<u>Vehicles²</u>				<u>\$ 5,777,700</u>
<u>Existing Fund Balance³</u>				<u>\$ 520,300</u>
Total Value - Existing Facilities				\$ 30,003,000

¹ City Hall and Development Services Center building unit costs are based on the actual construction cost of the Development Services Center.

² The City owns 93 vehicles and pieces of public works equipment listed within the general public facilities category.

³ Existing fund balance as of 6/30/2018.

Sources: City of Morgan Hill; Willdan Financial Services.

Planned Facilities

Table 3.3 shows the additional general public facilities the City plans to develop through the 2035 planning horizon. The City plans to replace and expand its City Hall annex with a larger permanent facility to accommodate future demand caused by new development. No land costs

are included because the project will take place on property that the City currently owns. In addition to the improvements to City Hall, the City plans on moving the existing corporation yard from its current site, to a larger facility.

Table 3.3: Planned General Public Facilities

	Value
Corporation Yard Improvements and Expansion	\$ 15,000,000
Replace and Expand City Hall Annex With Permanent Structure	3,000,000
Total Cost of Planned Facilities	\$ 18,000,000

Sources: City of Morgan Hill.

Cost Allocation

Table 3.4 calculates the existing cost per capita facility standard by dividing the value of the existing facilities inventory by the existing service population. The resulting cost per capita is the basis of the impact fee. Funding facilities at this level will ensure that as development occurs, new development will contribute to public use center facilities at the same standard that existing development has contributed thus far. By definition, using the existing standard methodology does not result in existing deficiencies.

Table 3.4: General Public Facilities Existing Standard

Value of Existing Facilities	\$ 30,003,000
Existing Service Population	50,460
Cost per Capita	\$ 595
Facility Standard per Resident	\$ 595
Facility Standard per Worker ¹	184

¹ Based on a weighing factor of 0.31.

Sources: Tables 3.1, 3.2 and 3.3.

Revenue Projection

The City plans to use general public facilities fee revenue to construct improvements to add to the system of general public facilities to serve new development. **Table 3.5** details a projection of fee revenue, based on the service population growth increment identified in Table 3.1. To fully fund the planned facilities, the City will have to identify \$9.6 million of alternative funding through the planning horizon. However, because the existing standard was used to calculate the fees, the City will meet the requirements of the Mitigation Fee Act so long as the projected \$8.4 million of fee revenue is used to fund new or expanded facilities to serve new development.

The City can use any other funding source other than impact fees to fund the balance of the planned facilities. Potential sources of revenue include, but are not limited to, existing or new general fund revenues, existing or new taxes, special assessments, grants and donations.

Table 3.5: Revenue Projection - Existing Standard

Cost per Capita	\$ 595
Growth in Service Population (2019- 2035)	14,054
Fee Revenue	\$ 8,362,130
Net Cost of Planned Facilities	18,000,000
Non-Fee Revenue to Be Identified	\$ (9,637,870)

Sources: Tables 3.1, 3.3 and 3.4.

Use of Fee Revenue

The City can use general public facilities fee revenues for the construction or purchase of buildings, equipment and land that are part of the system of general public facilities serving new development. The City plans to use the fee revenues to fund the facilities shown in Table 3.3.

Fee Schedule

Table 3.6 shows the maximum justified general public facilities fee schedule. The cost per capita is converted to a fee per unit of new development based on dwelling unit and employment densities (persons per dwelling unit or employees per 1,000 square feet of nonresidential building space). The total fee includes a two percent (2%) percent administrative charge to fund costs that include: a standard overhead charge applied to all City programs for legal, accounting, and other departmental and citywide administrative support, and fee program administrative costs including revenue collection, revenue and cost accounting, mandated public reporting, and fee justification analyses.

In Willdan's experience with impact fee programs, two percent of the base fee adequately covers the cost of fee program administration. The administrative charge should be reviewed and adjusted during comprehensive impact fee updates to ensure that revenue generated from the charge sufficiently covers, but does not exceed, the administrative costs associated with the fee program.

Table 3.6: General Public Facilities Fee - Existing Standard

Land Use	A	B	C = A x B		D = C x 0.02	E = C + D	F	G = E x F
	Cost Per Capita	Density	Base Fee ¹	Admin Charge ^{1, 2}		Total Fee ¹	Nonres. KSF per Acre ³	Fee per Acre
<u>Residential</u>								
Single Family	\$ 595	3.02	\$ 1,797	\$ 36		\$ 1,833		
Multi-Family (Greater than 1,200 SF)	595	2.67	1,589	32		1,621		
Multi-Family (Less than 1,200 SF)	595	2.00	1,190	24		1,214		
<u>Nonresidential</u>								
Commercial	\$ 184	2.50	\$ 460	\$ 9		\$ 469	21.78	\$10,215
Office	184	3.00	552	11		563	21.78	12,262
Industrial	184	2.50	460	9		469	26.14	12,260
Auto Dealership	184	1.00	184	4		188	26.14	4,914
Hotel	184	0.30	55	1		56	21.78	1,220

¹ Fee per dwelling unit, per 1,000 square feet of nonresidential, or per room for hotel.

² Administrative charge of 2.0 percent for (1) legal, accounting, and other administrative support and (2) impact fee program administrative costs including revenue collection, revenue and cost accounting, mandated public reporting, and fee justification analyses.

³ Based on assumed floor-area-ratio from the General Plan. FAR for commercial and office assumed to be 0.5 based on the "General Office" land use. FAR for Industrial and auto dealership assumed to be 0.6 based on the "Industrial" land use.

Sources: Tables 2.2 and 3.4.

4. Traffic Facilities

This chapter summarizes an analysis of the need for transportation facilities, including roadway segments, bike improvements and multimodal intersection improvements, to accommodate new development. The chapter documents a reasonable relationship between new development and the impact fee for funding of these facilities.

Trip Generation by Land Use

The share of roadway improvement costs allocated to each unit of new development is based on the relative amount of new trip demand generated by that development. Trip demand during the afternoon peak hour of traffic is used because this is generally the busiest time of day for traffic, and road improvements are needed to provide capacity to accommodate peak levels of traffic. The traffic study used for this analysis identified improvements needed to mitigate future deficiencies during the peak hour.

Table 4.1 shows trip generation rate assumptions used in this analysis (dwelling unit, 1,000 square feet of nonresidential development or hotel room). As new development generates increased vehicle trips for the City's transportation network, additional capacity in the system will be needed in the form of the improvements described in this report. Trip generation by major land use category allow the analysis to incorporate different estimates of demand for transportation facilities. Trip generation rates are applied to development projections to allocate improvement costs by land use type. The trip generation rates used for this analysis are based on years of study of major land use categories by the Institute of Transportation Engineers (9th Edition).

Table 4.1: PM Peak Hour Trip Rates

ITE Category		PM Peak Hour Trip Rate ¹
<u>Residential</u>		
Single Family	Single Family Housing (210)	1.00
Multi-Family (Greater than 1,200 SF)	Apartment (220)	0.62
Multi-Family (Less than 1,200 SF)	Mid-Rise Apartment (223)	0.39
<u>Nonresidential</u>		
Commercial	Shopping Center (820)	3.71
Office	General Office Building (710)	1.49
Industrial	General Light Industrial (110)	0.97
Auto Dealership	New Car Sales (841)	2.62
Hotel Room (per room)	Hotel (310)	0.60

¹ Trips per dwelling unit or per 1,000 square feet of nonresidential building space, or per hotel room.

Source: Institute of Traffic Engineers, Trip Generation, 9th Edition.

Growth in Trip Demand Through 2035

Peak hour trip demand generated by new development is a reasonable measure of new development's demand for traffic facilities. The need for new or expanded roads and other facilities is typically determined based on peak-hour trip volumes because capacity needs are based on the busiest periods of the day. The trip generation rates from Table 4.1, multiplied by dwelling units for residential land use categories or by thousands of square feet of building space or hotel rooms for nonresidential categories from Table 2.1, equals the total peak hour trip demand generated by that land use type. **Table 4.2** shows the trip demand generated by existing development and anticipated new development in Morgan Hill through the 2035 planning horizon.

Table 4.2: Land Use Scenario and Total Trips

Land Use	PM Peak	2019		Growth 2019 to 2035		Total - 2035	
	Hour Trip Rate	Units / 1,000 SF	Trips	Units / 1,000 SF	Trips	Units / 1,000 SF	Trips
<u>Residential</u>							
Single Family	1.00	11,598	11,598	1,572	1,572	13,170	13,170
Multi-Family (Greater than 1,200 SF)	0.62	2,407	1,492	2,287	1,418	4,694	2,910
Multi-Family (Less than 1,200 SF)	0.39	<u>1,100</u>	<u>429</u>	<u>800</u>	<u>312</u>	<u>1,900</u>	<u>741</u>
Total		15,105	13,519	4,659	3,302	19,764	16,821
<u>Nonresidential</u>							
Commercial	3.71	2,610	9,682	1,117	4,145	3,727	13,827
Office	1.49	522	777	629	938	1,151	1,715
Industrial	0.97	5,935	5,757	1,780	1,727	7,715	7,484
Auto Dealership	2.62	120	314	56	147	176	461
Hotel Rooms	0.60	<u>919</u>	<u>551</u>	<u>215</u>	<u>129</u>	<u>1,134</u>	<u>680</u>
Subtotal		10,106	17,081	3,797	7,086	13,903	24,167
Total			30,600		10,388		40,988
			74.7%		25.3%		100%

Sources: Tables 2.1 and 4.1.

Traffic Impact Fee Project Costs

Table 4.3 shows the improvements needed to accommodate projected 2035 traffic volumes. Project costs were estimated by City Staff. Each project included in the fee program, was either included in the original fee program, or is needed as a direct result of trip demand from new development. Consequently, the entire cost of planned facilities, with no existing deficiencies is allocated to new development in this impact fee.

Consistent with the current fee program, this update assumes that developers will dedicate 36' of right-of-way, including (site work and landscaping) on each side. Developers will dedicate 26' of road improvements, including (curb, gutter & pavement) on each side. The impact fee will fund the remainder of the improvements.

Table 4.3: Project Cost Summary

No	Road	Location	Total Project Cost	Total Project Cost ¹	Cost Allocation to New Development	Allocation To Existing Deficiencies	Total Cost Allocated To New Development
1	Cochrane Road	Monterey Road to Hwy 101	\$ 377,452	\$ 423,848	100%	0%	\$ 423,848
2	Cochrane Road	Hwy 101 to Mission View Drive	504,229	566,208	100%	0%	566,208
3	Cochrane Road	Mission View Drive to Peet Road	753,315	845,911	100%	0%	845,911
4	Dunne Avenue	Hill Road to Gallop Drive	691,081	776,027	100%	0%	776,027
5	Dunne Avenue	Del Monte Avenue to Monterey Road	147,180	165,271	100%	0%	165,271
6	Hill Road/Peet Road	Half Road to Cochrane Road	-	-	100%	0%	-
7	Hill Road	Main Avenue to Barrett Avenue	1,071,486	1,203,191	100%	0%	1,203,191
8	Madrone Parkway	Hale Avenue to Monterey Road	898,829	2,000,000	100%	0%	2,000,000
9	Madrone Parkway	Monterey Road to Butterfield Blvd.	493,629	554,305	100%	0%	554,305
10	Main Avenue	Depot Street to Butterfield Blvd.	36,341	40,808	100%	0%	40,808
11	Main Avenue	Laurel Street to Condit Road	652,393	732,584	100%	0%	732,584
12	Main Avenue	Condit Road To Hill Road	-	-	100%	0%	-
13	Murphy/Mission View Dr.	Cochrane Road to Half Road	762,521	856,248	100%	0%	856,248
14	Murphy/Mission View Dr.	Half Road to Main Avenue	1,183,284	1,328,731	100%	0%	1,328,731
15	Murphy Avenue	Main Avenue to Diana Avenue	1,183,284	1,328,731	100%	0%	1,328,731
16	Murphy Avenue	Diana Avenue to Barrett Avenue	1,522,820	1,710,002	100%	0%	1,710,002
17	Hale Avenue ²	Various	630,059	22,000,000	56.8%	43.2%	12,500,000
25	Butterfield Blvd.	Madrone Parkway to Cochrane Road	511,043	573,859	100%	0%	573,859
26	Tennant Avenue	E HWY 101 to Murphy Avenue	1,286,920	1,445,105	100%	0%	1,445,105
27	Tennant Avenue	Juan Hernandez Drive to HWY 101	790,942	888,163	100%	0%	888,163
28	Watsonville Road	Monterey Road to La Alameda Drive	454,110	509,928	100%	0%	509,928
29	Monterey Road	Tilton Avenue to Cochrane Road	2,291,726	2,573,420	100%	0%	2,573,420
30	Monterey Road	Cochrane Road to Main Avenue	1,977,697	2,220,791	100%	0%	2,220,791
31	Monterey Road	Dunne Avenue to Middle Avenue	1,327,651	1,490,843	100%	0%	1,490,843
Total			\$ 19,547,992	\$ 44,233,974			\$ 34,733,974

¹ Total project costs increased 12.3% based on changes in ENR's Construction Cost Index from 2015 to June, 2019.

² This project includes former projects numbered 17 to 24 from existing fee program. Total project cost is \$22,000,000. VTA Measure B will contribute \$9,500,000 towards this project, so the net impact fee contribution is \$12,500,000.

Source: City of Morgan Hill.

Table 4.4 lists the priority bikeway projects and multimodal intersection improvement projects identified in Table 5-1 of the City's Bikeways, Trails, Parks and Recreation Master Plan (2017). A share of these projects is allocated to new development, based on new development's share of total trip demand in 2035, as identified in Table 4.2.

Table 4.4: Priority Bikeway Projects

Project Description	Location	Total Project Cost
Buffered Bike Lanes	Cochrane Rd and Malaguerra Ave from Monterey Rd to Coyote Creek Trailhead	\$ 1,200,000
Buffered Bike Lanes	Monterey Rd from Tilton Ave to Butterfield Blvd/Watsonville Rd	2,400,000
Buffered Bike Lanes	Burnett Rd from Monterey Rd to Coyote Creek (Sobrato School Access)	750,000
Buffered Bike Lanes	Santa Teresa Corridor, Hale Ave from Tilton Ave to W Main Ave	750,000
Buffered Bike Lanes	West Main Ave from Monterey Rd to Dewitt Ave	450,000
Protected Bike Lanes	E Main Ave from Monterey Rd to Hill Rd (Live Oak High School Access and Coyote Creek Connection) (Interim step Buffered Bike Lanes)	3,800,000
Bicycle Boulevard	Morning Star Dr/Peet Rd from Eagle View Dr to Cochrane Rd to Coyote Creek Trailhead	480,000
Bicycle Boulevard	Depot Street from E Main Ave to E Dunne Ave	380,000
Multi-Modal Intersection Improvements	Monterey Rd Downtown between E Main Ave and E Dunne Ave	790,000
Multi-Modal Intersection Improvements	E Main Ave and Butterfield Blvd	350,000
Multi-Modal Intersection Improvements	W Main Ave and Hale Ave	10,000
Multi-Modal Intersection Improvements	Cochrane Rd and Highway 101 (North & South ramps, Madrone Pkwy and Depaul Dr)	130,000
Multi-Modal Intersection Improvements	Monterey Rd and Cochrane Rd	350,000
Multi-Modal Intersection Improvements	Butterfield Blvd and Cochrane Rd	130,000
Multi-Modal Intersection Improvements	Monterey Rd and Tilton Ave/Burnett Ave	120,000
Total		\$12,090,000
Allocation to New Development		25.3%
Cost Allocated to New Development		\$ 3,058,770

Sources: Table 5-1, Bikeways, Trails, Parks and Recreation Master Plan, 2017; Table 4.2, Willdan Financial Services.

Cost Allocation

Based on the total improvement costs allocated to new development shown in Tables 4.3 and 4.4, and the anticipated new trip demand shown in Table 4.2, **Table 4.5** calculates new development's cost per trip demand unit. Existing fund balances are subtracted from the total project costs to ensure that the impact fee only funds new development's share of the improvements.

Table 4.5: Cost per Trip to Accommodate Growth

Fee Program Share of Planned Facilities Costs	\$ 34,733,974
New Development Allocation of Bike Project Costs	3,058,770
Less Existing Fund Balance	<u>(3,437,980)</u>
Net Costs	\$ 34,354,764
 Growth in Trip Demand	 <u>10,388</u>
 Cost per Trip	 \$ 3,307

Sources: Tables 4.2, 4.3 and 4.4; Willdan Financial Services.

Fee Schedule

Table 4.6 shows the maximum justified traffic facilities fee schedule. The cost per trip is multiplied by the PM peak hour trip rate for each land use to determine the fee per dwelling unit, on 1,000 square feet of nonresidential building space. The total fee includes a two-percent (2%) administrative charge to fund costs that include: a standard overhead charge applied to City programs for legal, accounting, and other departmental and administrative support, and fee program administrative costs including revenue collection, revenue and cost accounting, mandated public reporting, and fee justification analyses.

In Willdan's experience with impact fee programs, two-percent of the base fee adequately covers the cost of fee program administration. The administrative charge should be reviewed and adjusted during comprehensive impact fee updates to ensure that revenue generated from the charge sufficiently covers, but does not exceed, the administrative costs associated with the fee program.

Table 4.6: Maximum Justified Traffic Impact Fee Schedule

Land Use	A	B	C = A x B		D = C x 0.02	E = C + D	E / 1,000
	Cost Per Trip	PM Peak Hour Trip Rate	Base Fee ¹	Admin Charge ^{1, 2}		Total Fee ¹	Fee per Sq. Ft.
<u><i>Residential</i></u>							
Single Family	\$ 3,307	1.00	\$ 3,307	\$ 66		\$ 3,373	
Multi-Family (Greater than 1,200 SF)	3,307	0.62	2,050	41		2,091	
Multi-Family (Less than 1,200 SF)	3,307	0.39	1,290	26		1,316	
<u><i>Nonresidential</i></u> ³							
Commercial	\$ 3,307	3.71	\$ 12,269	\$ 245		\$ 12,514	\$ 12.51
Office	3,307	1.49	4,927	99		5,026	5.03
Industrial	3,307	0.97	3,208	64		3,272	3.27
Auto Dealership	3,307	2.62	8,664	173		8,837	8.84
Hotel Room (per room)	3,307	0.60	1,984	40		2,024	2.02

¹ Fee per dwelling unit, per 1,000 square feet of nonresidential or per hotel room.

² Administrative charge of 2.0 percent for (1) legal, accounting, and other administrative support and (2) impact fee program administrative costs including revenue collection, revenue and cost accounting, mandated public reporting, and fee justification analyses.

³ Fee per trip of \$3,307 plus 2% administration cost totaling \$3,373 per trip can be used to calculate fee for any land use using the land use's PM peak hour trip rate.

Sources: Tables 4.1 and 4.5; Willdan Financial Services.

5. Library Facilities

The purpose of the library impact fee is to fund the library facilities needed to serve new development. A maximum justified fee is presented based on maintaining the existing standard of library facilities.

Service Population

Library facilities primarily provide services to residents. The service population used to determine the demand for library facilities only includes residents and excludes workers. The service area of the Morgan Hill Library is greater than just within the City limits. **Table 5.1** shows the current library facilities service population and the estimated service population at the planning horizon of 2035. Estimates of residents outside of the City are based on ABAG data.

Table 5.1: Library Facilities Service Population

	Residents
<i>Existing Service Population (2019)</i>	
City of Morgan Hill	45,360
Surrounding Unincorporated Area	9,400
Total	54,760
<i>New Development (2019-2035)</i>	
City of Morgan Hill	12,454
Surrounding Unincorporated Area ¹	11,200
Total	23,654
Total (2035)	78,414

¹ Based on annual growth rate of 1.03% estimated based on countywide Santa Clara County growth projections from 2010 to 2035 from ABAG (2013).

Sources: Table 2.1; Willdan Financial Services.

Facility Inventories and Standards

This section describes the City's library facility inventory, facility standards, and cost of planned facilities.

Table 5.2 summarizes the City's current inventory of library facilities, including land, building and collections.

Table 5.2: Existing Library Facilities

	Inventory	Units	Unit Cost ¹	Value
<u>Existing Library</u>				
Land (acres)	4.57	acres	\$ 790,000	\$ 3,610,300
Building	27,909	square feet	900	25,118,100
Collection	166,000	items	36	<u>5,976,000</u>
Total Value - Existing and Planned Library Facilities				\$ 34,704,400

¹ Building cost costs based on recent bid for library expansion project. Cost per item based on data from similar jurisdictions.

² Planned increases in collection based on maintaining ratio of building space to items.

Source: City of Morgan Hill.

Table 5.3 lists the planned library facilities: an expansion to the building and collections. The building cost of \$4.5 million differs from the City's CIP estimate of \$3.5 million because construction costs have risen dramatically since the CIP was published. \$4.5 million represents the City's most recent construction cost estimate for this facility.

Table 5.3: Planned Library Facilities

	Inventory	Units	Unit Cost ¹	Value
<u>Planned Expansion</u>				
Building	5,000	square feet	\$ 900	\$ 4,500,000
Collection ²	30,000	items	36	<u>1,080,000</u>
Total Cost - Planned Facilities				\$ 5,580,000

¹ Unit costs based on recent bid for library expansion project. Cost per item based on data from similar jurisdictions.

² Planned increases in collection based on maintaining ratio of building space to items.

Sources: City of Morgan Hill; Willdan Financial Services.

Cost Allocation

Table 5.4 calculates the existing cost per capita facility standard by dividing the value of the existing facilities inventory by the existing service population. The resulting cost per capita is the basis of the impact fee. Funding facilities at this level will ensure that as development occurs, new development will contribute to public use center facilities at the same standard that existing development has contributed thus far. By definition, using the existing standard methodology does not result in existing deficiencies.

Table 5.4: Library Facilities Existing Standard

Value of Existing Facilities	\$	34,704,400
Existing Service Population		<u>54,760</u>
Facility Standard per Resident	\$	634

Sources: Tables 5.1 and 5.2.

Use of Fee Revenue

The City can use library facilities fee revenues to purchase land, buildings, collections and equipment that are part of the system of library facilities serving new development. The City plans to use the fee revenues to fund the facilities shown in Table 5.3.

Revenue Projection

The library facilities fee revenue exceeds the cost of the planned facilities. The City will have to identify additional library facilities through 2035 to maintain its existing facility standard. **Table 5.5** projects library fee revenue through 2035 based on the cost per capita from Table 5.4, and the service population growth projections in Table 5.1.

Table 5.5: Revenue Projection - Existing Standard

Cost per Capita	\$	634
City Growth in Service Population (2019- 2035)		<u>12,454</u>
Fee Revenue	\$	7,895,800
Net Cost of Planned Facilities		<u>5,580,000</u>
Future Facilities to Be Identified	\$	2,315,800

Sources: Tables 5.1, 5.3 and 5.4.

Fee Schedule

Table 5.5 shows the maximum justified library facilities fee schedule. The cost per capita is converted to a fee per unit of new development based on dwelling unit densities (persons per dwelling unit). The total fee includes a two percent (2%) administrative charge to fund costs that include: a standard overhead charge applied to all City programs for legal, accounting, and other departmental and citywide administrative support, and fee program administrative costs including revenue collection, revenue and cost accounting, mandated public reporting, and fee justification analyses.

In Willdan's experience with impact fee programs, two percent of the base fee adequately covers the cost of fee program administration. The administrative charge should be reviewed and adjusted during comprehensive impact fee updates to ensure that revenue generated from the charge sufficiently covers, but does not exceed, the administrative costs associated with the fee program.

Table 5.6: Library Facilities Fee - Existing Standard

Land Use	A		B	C = A x B		D = C x 0.02	E = C + D
	Cost Per		Density	Admin		Total Fee	
	Capita			Base Fee ¹	Charge ^{1, 2}		
<u>Residential</u>							
Single Family	\$	634	3.02	\$ 1,915	\$ 38	\$ 1,953	
Multi-Family (Greater than 1,200 SF)		634	2.67	1,693	34	1,727	
Multi-Family (Less than 1,200 SF)		634	2.00	1,268	25	1,293	

¹ Fee per dwelling unit.

² Administrative charge of 2.0 percent for (1) legal, accounting, and other administrative support and (2) impact fee program administrative costs including revenue collection, revenue and cost accounting, mandated public reporting, and fee justification

Sources: Tables 2.2 and 5.4.

6. Park Facilities

The purpose of this fee is to generate revenue to fund the park facilities needed to serve new development. The impact fee is based on the parkland standards found in the Morgan Hill Bikeways, Trails, Parks and Recreation Master Plan (2017).

Service Population

Facility standards for parks are typically expressed as a ratio of park acres per 1,000 residents. As residents are the primary users of parks in the City of Morgan Hill, demand for parks and associated facilities is based on the City's residential population, rather than a combined resident-worker service population. **Table 6.1** provides estimates of the City's current resident population and a projection for the year 2035.

Table 6.1: Parks Service Population

	Residents
Existing (2019)	45,360
New Development (2019 - 2035)	12,454
Total (2035)	57,814

Sources: Table 2.1; Willdan Financial Services.

Facility Inventories and Standards

This section describes the City's park facility inventory, facility standards, and park facility costs.

Existing Inventory

Table 6.2 summarizes the City's existing park and open space inventory. In addition to public parkland, there is also a significant amount of parkland and open space in the City that is privately owned and maintained. **Table 6.3** displays the privately-owned park and open space land in the City.

Table 6.2: Existing Parkland Inventory

	Developed Park Acres	Undeveloped Acres	Total Park/Open Space Acres
<u><i>Community Parks</i></u>			
Community Park	26.00	-	26.00
Galvan Park	7.50	-	7.50
Subtotal	33.50	-	33.50
<u><i>Neighborhood Parks</i></u>			
Diana Park	3.08	-	3.08
Jackson Park	1.30	-	1.30
Oak Creek Park	2.93	-	2.93
Nob Hill Trail Park	3.40	-	3.40
Nordstrom Park	4.57	-	4.57
Paradise Park	5.47	-	5.47
Railroad Park	1.10	-	1.10
Third Street Creek Park	1.10	-	1.10
Subtotal	22.95	-	22.95
<u><i>Mini Parks</i></u>			
21 Mile	0.65	-	0.65
Belle Estates Park	0.46	-	0.46
Civic Center	2.00	-	2.00
Conte Gardens Park	0.50	-	0.50
Diana Estates Park	0.50	-	0.50
Fox Hollow Park	0.20	-	0.20
Hamilton Square Park	0.57	-	0.57
Howard Weichert Park	0.90	-	0.90
Mill Creek Park	0.93	-	0.93
Murphy Springs Park	0.49	-	0.49
Sanchez Park	0.16	-	0.16
Stone Creek Park	0.95	-	0.95
Subtotal	8.31	-	8.31
<u><i>Community Recreation Facilities</i></u>			
Centennial Recreation Center	5.90	-	5.90
Community and Cultural Center	6.00	-	6.00
El Toro Youth Center	0.30	-	0.30
Aquatics Center	8.00	-	8.00
Outdoor Sports Center	38.00	-	38.00
Subtotal	58.20	-	58.20

Sources: City of Morgan Hill; City of Morgan Hill *Bikeways, Trails, Parks and Recreation Master Plan*, 2017.

Table 6.2: Existing Parkland Inventory Continued

	Developed Park Acres	Undeveloped Acres	Total Park/Open Space Acres
<u>Trails</u> ¹			
Butterfield Linear Park	2.09	-	2.09
San Pedro Percolation Ponds Trail	1.21	-	1.21
Madrone Channel Trail	6.00	-	6.00
West Llagas Creek Trail	1.10	-	1.10
Subtotal	10.40	-	10.40
<u>Open Space</u> ²			
El Toro	-	86.00	21.50
Jackson Oaks	-	170.00	42.50
Subtotal	-	256.00	64.00
<u>Joint Use Facilities</u> ³			
Villa Mira Monte	2.40	-	2.40
Subtotal	2.40	-	2.40
Total	135.76	256.00	199.76

¹ Area totals includes trail and landscaping adjacent to trail.

² According to the *Bikeways, Trails, Parks and Recreation Master Plan, 2017* only 25% of open space acreage counts towards the City's parkland standard.

³ The City has joint use agreements for these facilities.

Sources: City of Morgan Hill; City of Morgan Hill *City of Morgan Hill, Bikeways, Trails, Parks and Recreation Master Plan, 2017*.

Table 6.3: Private Parkland Inventory

HOA	Location	Park Acres	Open Space Acres
Alicante	Ventura Ct. & Ventura Dr.	2.00	-
Alicante	Espana Wy. & Katherine Dr.	0.60	-
Barrett Place	Barrett Ave. & Saint John Ct.	0.60	-
Brighton Oaks Community Association	Butterfield Blvd. & Main Avenue	-	0.21
Capriano	Curry Ave. & Hale Ave.	1.50	-
Carriage Square	East Main Ave. & Carriage Lamp Way	1.70	-
Central Park	East Central Ave & Calle Central	2.20	-
Central Park	Cil Hermosa & Calle Buena Vista	0.85	-
Cerro Verde HOA	Calle Mazatan & Main Ave.	-	0.40
Cerro Verde HOA	Central & Butterfield	-	0.20
Cerro Verde HOA	Calle Mazatan & Calle Cerro	0.30	-
Cerro Verde HOA	Calle Verde & CalleCerro	0.30	-
Cottage Green	San Pedro Ave. & San Ramon Dr.	0.70	-
Country Side Villas	Venetian Way and Shasta lane	0.25	-
Coyote Estates	Peet Rd. & Eagle View Dr.	0.70	-
Coyote Estates	Savanah Ct. & Morningstar Dr.	1.60	-
Creekside Village	E.Dunne Ave. & Creekside Cr.	2.10	-
Crescent Park	Belleto Dr. & Bentley Dr.	0.80	-
Del Monte Condominiums	Del mone Ave. & Del Monte Lane	0.85	-
Del Monte Village	Hale Ave & Del Monte Ave. (Private Road)	-	0.40
Diamond Creek	Rome Ave. and Monterey Road	-	0.25
Diamond Creek HOA	Valencia Avenue	-	-
East Dunne Park Owner's Association	Grapevine Ct. & Seville Drive	-	0.49
El Dorado	East Dunne Ave. & Tassajara Cir.	0.20	-
El Toro Oaks	Oak Park Drive and Dewitt Ave.	0.50	-
Esperanza Community Association	Diana Avenue & Cayman Street	0.74	0.07
Excalibur	Excaliber Court	-	0.60
Grand Prix / Calle Siena	Grande Prix Way \$ Calle Siena	0.95	-
Heatherwood HOA	Katybeth & Heatherwood	-	0.10
Heritage Greens	East Dunne Ave & Saddleback Dr.	0.60	-
Hidden Meadow Condos	Viewcrest Lane & Dunne Ave	-	0.50
Hillwood Lane	Hillwood Lane and Hale (behind houses)	-	3.25
Holiday Lake Estates	Btwn Holiday Dr & Copper Hill Dr	-	11.85
Jackson Oaks Clubhouse	390 Oak Hill Ct.	0.90	5.50
Jasper Park	Cory Dr. & San Benancio Way	0.80	-
Kelly Park Circle	Kelly Park Cr. & Murphey Ave	0.25	-
Kendall Hill	Denali Drive and Olympic Drive	0.45	-
Las Casas de San Pedro Condominiums	San Pedro Ln. & San Pedro Ave.	0.80	-
Laurel Oaks	San Marcos Ct. & San Ramon Dr.	0.40	-
Loan Oaks Farms	San Gabriel Ave. & San Vincent Dr.	0.85	-
Loden Place Community Corporation	Stoney Creek Way and Hale Avenue	0.29	0.47
Lone Oak Farm HOA	San Domingo Drive & San Meguel Drive	0.24	0.11
Madrone Parkway Retention Area	Madrone Pkwy. & Buttefield Blvd.	-	10.00
Madrone Plaza	Opal Ln. & Jarvis Dr	0.90	-
Milano	Murpphy Ave. & Mimosa Drive	1.10	-
Mission Ranch	Capastrano Wy. & San Antonio Wy.	2.80	-
Mission Ranch	Cochrane Rd. & Mission View Ave.	2.20	-
Mission Ranch (Phase 13)	Mission View Drive & Avenida Del Los Padres	8.92	0.50
Monte Villa	Llagas Rd. & Carriage Dr.	-	0.35
Montoya Circle	East Main Ave. & Mariposa Dr.	0.80	-
Morgan Hill Ranch Apartments	Cochrane Rd. & Butterfield Blvd.	0.50	-
Morgan Lane Phase 1	Central Ave. & Aston Ct.	4.20	-
Morgan Meadows	East Dunne Ave. & Hill Rd.	-	0.60
Morgan Meadows	Domaine Dr. & Cabernet Cr.	2.30	-

Source: City of Morgan Hill, Bikeways, Trails, Parks and Recreation Master Plan, 2017.

Table 6.3: Private Parkland Inventory - Continued

HOA	Location	Park Acres	Open Space Acres
Morgan Meadows	Malbek Dr. & Merlot Dr.	0.75	-
Morgan Ranch	East Dunne Ave. & Bayo Claros	2.25	-
Morgan Village	East Dunne Ave & Brega Lane	1.85	-
Park Place Condominiums	LaCrosse Drive and Village Way	0.40	-
Parkside at Capriano	Corriander Ave & Basil Ave.	1.40	-
Pear Tree Estates	Pear Dr. & Jean Ct.	0.75	-
Pine Tree Park	Olympia Drive and Bryce Drive	0.50	-
Pine Tree Park	Sugarpine Dr. & Pinecone Ct.	0.25	-
Quail Creek	Via Vivaldi and Santa Teresa Blvd	1.00	-
Quail Meadows	Secretariat Way	-	0.50
Rio Sereno	Calle Sueno and Via Narretto	0.20	-
Rooyal Court Apartments	Del Monte Ave. & Wright Ave.	0.30	-
Royal Court	Wright Ave. & Del Monte Ave.	-	0.20
San Benito and San Pablo	San Benito Pl. and San Pablo Ct.	0.45	-
San Gabriel Court	San Gabriel Court	0.60	-
San Pedro Gardens	Cory Dr. & San Pedro Ave.	0.45	-
San Pedro Gardens	Cory Dr. & San Pedro Ave.	0.25	-
San Pedro Villas	San Jose Dr & San Juan Dr	1.90	-
San Savigno	Bel Air Way	-	0.50
San Savigno	S side Main btw Calle Mazatan & Grand Prix	-	0.15
San Savigno	Calle Asta & Bell Air Way	0.60	-
Shadow Brooks Estates	Shadowbrook Wy & Llagas Creek Dr.	2.00	-
Sherial Park	Jarvis Dr. & Sutter Blvd.	0.48	-
Sherimar Ranch	Jasmine Way & Bradford Way	2.40	-
Siera Ct	Llagas Rd. & Siera Ct.	0.50	-
Sonora Ranch	Peppertree & East Dunne Ave	0.25	-
Sorrento	Via Sorrento and Watsonville Road	0.25	-
St James Place	St. Timothy Pl. and St. Lawrence Dr.	1.75	-
Stonebridge Neighborhood Association	Hale Ave & Clove Avenue	3.06	4.69
Tilton Park Owner's Associatioin	Tilton Avenue & Monterey Road	2.56	0.15
Tuscany Meadows	Shafer Ave. & Katybeth Way	1.00	-
Twin Oaks	Llagas Creek Dr. & ril Marianna Dr.	-	0.60
Ventura of Morgan Hill Home Owners	Cochrane Road & St. Mark's Avenue	-	0.84
Viento	Calle Viento & Calle Viento Ct.	1.30	-
Village Avante Apartments	Cosmo Dr. & Del Monte Ave.	0.50	-
Walnut Grove	San Pedro Ave. & Walnut Grove	-	1.00
Westmoreland Park	Piazza Way	0.25	-
Total		78.93	44.47

Source: City of Morgan Hill, Bikeways, Trails, Parks and Recreation Master Plan, 2017.

Parkland Unit Costs

Table 6.4 shows the estimated cost per acre for parkland. Land acquisition costs are consistent with those used throughout this study. Improvement costs are based on cost estimates provided in the City of Morgan Hill Bikeways, Trails, Parks and Recreation Master Plan (2017). The cost per acre is based on assumed community park improvement costs from Master Plan of \$8,000,000 for the improvement of 10 acres.

Table 6.4: Parkland Unit Costs

	Cost per Acre	Share of Parkland Costs
Standard Park Improvements ¹	\$ 800,000	50%
Land Acquisition	790,000	50%
Total Cost per Acre	\$1,590,000	100%

Note: Figures have been rounded.

¹ Based on assumed community park improvement costs from Master Plan @ \$8,000,000 for the improvement of 10 acres.

Sources: City of Morgan Hill Bikeways, Trails, Parks and Recreation Master Plan, 2017, Table 5-3; Willdan Financial Services.

Park Facility Standards

The Master Plan sets forth park facility standards for the City. The Master Plan specifies a Citywide park standard of 5.0 acres per thousand residents. Per the Master Plan, private parkland counts towards the standard, but only at 50% of total acreage. Open space acreage is counted towards the standard, but only at 25% of total acreage. Private open space is not included in the calculation of the standard. The City's existing parkland facilities standard exceeds the standard recommended by the Master Plan.

Table 6.5 shows the existing parkland standards based on including discounted private parks and open space as described above. As shown, the City currently provides park facilities above the Master Plan standard, with no deficiencies. Impact fees cannot fund private parks, and the City does not intend to use impact fee revenue to purchase future open space. As such park standards are shown three ways:

- Existing Master Plan Standard: Calculated including discounted private parks and open space.
- Existing Parks Standard (Impact Fee): Calculated only including public parkland
- Existing Other Parks Standard: Calculated only including discounted open space, and discounted private parks.

Table 6.5: Parkland Standards

Type of Acreage	Total Developed Acreage	Total Undeveloped Acreage	Existing Master Plan Standard ¹	Existing Parks Standard (Impact Fees) ²	Existing Other Parks Standard
Community Parks	33.50	-	33.50	33.50	-
Neighborhood Parks	22.95	-	22.95	22.95	-
Mini Parks	8.31	-	8.31	8.31	-
Community Recreation Facilities	58.20	-	58.20	58.20	-
Trails	10.40	-	10.40	10.40	-
Schools	2.40	-	2.40	2.40	-
Open Space	-	256.00	64.00	-	64.00
Private Parkland	78.93	-	39.47	-	39.47
Private Open Space	44.47	-	-	-	-
Total	259.16	256.00	239.23	135.76	103.47
Current Population			45,360	45,360	45,360
Standard			5.27	2.99	2.28

¹ The Master Plan recommends a citywide (including public and private) parks standard of 5.0 acres per 1,000 population. Per the Master Plan, private parkland counts towards the standard, but only at 50% of total acreage. Open space acreage is counted towards the standard, but only at 25% of total acreage. Private open space is not included in the calculation of the standard. The City's existing parkland facilities standard exceeds the standard recommended by the Master Plan.

² For the purposes of calculating a parks standard to base impact fees on, only publicly owned parkland is included. Open space, and privately owned parkland are excluded from the standard. It is assumed that the existing ratio of public to private parkland will be maintained through the planning horizon as additional private parkland is added.

Sources: City of Morgan Hill; Tables 6.1 - 6.4, Willdan Financial Services.

Facilities Needed to Accommodate New Development

Table 6.6 shows the park facilities needed to accommodate new development at the “impact fee” standard. To achieve the General Plan standard by the planning horizon, new development must fund the improvement of existing undeveloped parkland, and fund the purchase and development of 37.24 additional parkland acres. The existing park impact fee fund balance is \$2,787,306. This fund balance is converted into equivalent developed acres and credited against the total parkland needs. As such, the City only needs to develop 35.49 acres of parkland to achieve the desired standard at the planning horizon. This translates to the need for new development to contribute at a standard of 2.85 acres per 1,000 residents through this impact fee.

Table 6.6: Parkland Facility Needs

	Calculation	Amount	Unit
Existing City Owned Park Standard	A	2.99	Acres per 1,000 Capita
Growth in Service Population	B	12,454	Residents
Acres needed at Buildout to Maintain Standard	$C = A \times (B / 1,000)$	37.24	Acres
Existing Fund Balance	D	\$2,787,306	
Cost per Acre (Land and Improvements)	E	1,590,000	
Fund Balance Developed Park Acreage Equivalent ¹	$F = D / E$	1.75	Acres
Net Developed Parkland Needs	$G = C - F$	35.49	Acres
Growth in Service Population	H	12,454	Residents
Acres per 1,000 new residents needed to achieve standard	$I = G / (H / 1,000)$	2.85	Acres per 1,000 Capita

¹ Existing fund balance converted to equivalent developed park acreage by dividing fund balance by the cost per developed park acre developed in Table 6.4 (\$1,590,000).

Sources: Tables 6.1, 6.4 and 6.5; Willdan Financial Services.

Table 6.7 shows the calculation of the cost of purchasing and improving 35.49 acres. This cost is approximately \$56.4 million through 2035.

Table 6.7: Cost of Planned Parkland Facilities Needs

	Calculation	Total
Acres needed to meet Standard	A	35.49
Cost per acre - Land	B	\$ 790,000
Cost per acre - Improvements	C	800,000
Total Parkland and Improvement cost Per Acre	$D = B + C$	\$ 1,590,000
Land Needs	$E = A \times B$	\$ 28,037,000
Improvements Needs	$F = A \times C$	28,392,000
Net Cost of Planned Park Facilities to Serve New Development	$G = E + F$	\$ 56,429,000

Sources: Tables 6.6 and 6.4; Willdan Financial Services.

Parks Cost per Capita

Table 6.8 shows the cost per capita of providing new parkland and park facilities at a 2.95 acre per 1,000 capita facility standard. The per acre unit costs are multiplied by the acreage standards to determine the total amount of costs needed to serve 1,000 residents for each type of parkland, respectively. Then, those costs are divided by 1,000 to determine the cost needed to serve one resident.

Table 6.8: Park Improvements Cost per Capita

Parkland Investment Cost (per acre)	\$ 1,590,000
Facility Standard (acres per 1,000 residents)	2.85
Total Investment Per 1,000 capita	\$ 4,532,000
Investment Per Resident	\$ 4,532

Sources: Tables 6.6, and 6.8; Willdan Financial Services.

Use of Fee Revenue

The City plans to use park facilities fee revenue to acquire parkland and construct improvements to add to the system of park and recreation facilities that serves new development. The City may only use impact fee revenue to provide facilities needed to serve new development. The City may not use impact fee revenue for the portion of park facilities needed to meet the Master Plan standards for private parkland.

Fee Schedule

Table 6.9 shows the maximum justified park facilities fee schedule. The maximum justified fees are based on the costs per capita shown in Table 6.8. The cost per capita is converted to a fee per unit of new development based on the average number of residents per dwelling unit, as shown in Table 2.2. The total fee includes a two percent (2%) administrative charge to fund costs that include: a standard overhead charge applied to all City programs for legal, accounting, and other departmental and citywide administrative support, and fee program administrative costs including revenue collection, revenue and cost accounting, mandated public reporting, and fee justification analyses.

In Willdan's experience with impact fee programs, two percent of the base fee adequately covers the cost of fee program administration. The administrative charge should be reviewed and adjusted during comprehensive impact fee updates to ensure that revenue generated from the charge sufficiently covers, but does not exceed, the administrative costs associated with the fee program.

Table 6.9: Park Facilities Fee Schedule

Land Use	A		B		C = A x B		D = C x 0.02		E = C + D	
	Cost per		Density		Base Fee		Admin Charge ¹		Total Fee	
Single Family	\$	4,532		3.02	\$	13,687	\$	274	\$	13,961
Multi-Family (Greater than 1,200 SF)		4,532		2.67		12,100		242		12,342
Multi-Family (Less than 1,200 SF)		4,532		2.00		9,064		181		9,245

¹ Administrative charge of 2.0 percent for (1) legal, accounting, and other administrative support and (2) impact fee program administrative costs including revenue collection, revenue and cost accounting, mandated public reporting, and fee justification analyses.

Sources: Tables 2.2 and 6.8; Willdan Financial Services.

7. Water Facilities

This chapter summarizes an analysis of the need for water facilities to accommodate growth within the City of Morgan Hill. It documents a reasonable relationship between new development and an impact fee to fund water facilities that serve new development.

Water Demand

Estimates of new development and its consequent increased water demand provide the basis for calculating the water facilities fee. The need for water facilities improvements is based on the water demand placed on the system by development. A reasonable measure of demand is a flow generation rate, expressed as the number of gallons per day generated by a specific type of land use. Flow generation rates are a reasonable measure of demand on the City's system of water improvements because they represent the average rate of demand that will be placed on the system per land use designation.

Table 7.1 shows the calculation of water demand flow generation factors by land use category. The data is based the *City of Morgan Hill Water System Plan (2017)*. Water demand for a given land use is related to the demand for a single-family unit to calculate equivalent dwelling units (EDU).

Table 7.1: Water Demand by Land Use

Land Use Type	Flow Generation (GDP/NA) ¹	Density ²	Average Flow Generation/ DU, KSF, Room	Equivalent Dwelling Unit (EDU)
<u>Residential</u>				
Single Family	1,266	5.00	253.20	1.00
Multi-Family (Greater than 1,200 SF)	1,856	16.00	116.00	0.46
Multi-Family (Less than 1,200 SF)	3,130	35.00	89.43	0.35
<u>Nonresidential</u>				
Commercial	1,350	21.78	61.98	0.24
Office	1,350	21.78	61.98	0.24
Industrial	1,120	26.14	42.85	0.17
Auto Dealership	1,350	21.78	61.98	0.24
Hotel	1,350	67.02	20.14	0.08

¹ Gallons per day per net acre.

² Dwelling units per acre for residential, thousand square feet per acre for nonresidential or hotel rooms per acre. Nonresidential based upon the maximum floor area ratio (FAR) assumption of 0.5 for commercial, 0.5 for office, 0.6 for industrial, 0.5 for auto dealership, and 0.5 for hotel.

Sources: City of Morgan Hill General Plan 2035, Table CNF-2; City of Morgan Hill Water System Master Plan, 2017, Table 3.4; Willdan Financial Services.

Equivalent Dwelling Unit Growth

Table 7.2 calculates the existing and projected equivalent dwelling units (EDU) based on each land use's water demand factors displayed in Table 7.1. An equivalent dwelling unit represents the demand of all other land uses equivalent to one single family unit. Also displayed is the total existing and future EDUs for water facilities by land use.

Table 7.2: Water Facilities Equivalent Dwelling Units

	EDU Factor ¹	Existing (DU/KSF)	Projected Growth (DU/KSF)	Existing EDUs	Growth in EDUs	Total
<u><i>Residential</i></u>						
Single Family	1.00	11,598	1,572	11,598	1,572	13,170
Multi-Family (Greater than 1,200 SF)	0.46	2,407	2,287	1,107	1,052	2,159
Multi-Family (Less than 1,200 SF)	0.35	1,100	800	385	280	665
Subtotal		15,105	4,659	13,090	2,904	15,994
<u><i>Nonresidential</i></u>						
Commercial ²	0.24	2,610	1,117	626	268	894
Office	0.24	522	629	125	151	276
Industrial	0.17	5,935	1,780	1,009	303	1,312
Auto Dealership	0.24	120	56	29	13	42
Hotel	0.08	919	215	74	17	91
Subtotal		10,106	3,797	1,863	752	2,615
Total				14,953	3,656	18,609
Percent of Total				80.4%	19.6%	100.0%

¹ Per dwelling unit (residential) or thousand building square feet (nonresidential), or hotel room.

Sources: Tables 2.1 and 7.1, Willdan Financial Services.

Facility Needs and Costs

The City recently completed a water system master plan that identified necessary improvements to its water system. The Morgan Hill Water System Master Plan (2017) also identified the share of improvements needed to serve existing development, and the share needed to serve new development. **Table 7.3** lists the water projects, costs and allocation to existing and new development, based on Table ES.3 of the Master Plan.

Table 7.3: Costs to Serve New Development

Improv. No.	Pressure Zone	Alignment	Limits	Baseline Constr. ¹ Costs	Estimated Const. Costs ²	Capacity Improv. Cost ³	Allocation			
							Existing Users (%)	Future Users (%)	Existing Users (\$)	Future Users (\$)
Pipeline Improvements										
BR-P1	Boys Ranch	ROW	Cochrane Rd to Coyote Rd	\$ 354,806	\$ 461,248	\$ 599,623	0%	100%	\$ -	\$ 599,623
BR-P2	Boys Ranch	Cochrane Rd	Half Rd to approx 1,700' n/o Half Rd	376,982	490,077	637,100	0%	100%	-	637,100
BR-P3	Boys Ranch	Half Rd	Mission View Dr to Peet Rd	770,433	1,001,563	1,302,032	0%	100%	-	1,302,032
BR-P4	Boys Ranch	Mission View Dr	Between Cochrane Rd and 2,100' nw/o Cochrane Rd	99,789	129,726	168,644	100%	0%	168,644	-
BR-P5	Boys Ranch	Mission View Dr	Half Rd to 2,100' nw/o Half Rd	513,621	667,708	868,020	0%	100%	-	868,020
BR-P6	Boys Ranch	Half Rd	Serene Dr to Conduit Rd	403,560	524,627	682,016	0%	100%	-	682,016
NH-P1	Nob Hill	Hale Ave Extension	Spring Ave to Main Ave	1,112,847	1,446,702	1,880,712	100%	0%	1,880,712	-
NH-P2	Nob Hill	Spring Ave	Del Monte Ave to Monterey Rd	182,784	237,619	308,905	100%	0%	308,905	-
NH-P3	Nob Hill	San Pedro Ave	Butterfield Blvd to Railroad Ave	162,321	211,017	274,322	100%	0%	274,322	-
NH-P4	Nob Hill	Railroad Ave	San Pedro Ave to approx 600' n/o Mast St	103,295	134,284	174,569	0%	100%	-	174,569
NH-P5	Nob Hill	Railroad Ave	Approx 600' n/o Mast St to Mast St	177,077	230,200	299,260	0%	100%	-	299,260
NH-P6	Nob Hill	San Pedro Ave	Peppertree Dr to Hill Rd	709,613	922,497	1,199,246	0%	100%	-	1,199,246
NH-P7	Nob Hill	Hill Rd	San Pedro Ave to Tennant Ave	731,788	951,325	1,236,723	0%	100%	-	1,236,723
NH-P8	Nob Hill	Tennant Ave	Hill Rd to Conduit Rd	1,075,507	1,398,159	1,817,607	0%	100%	-	1,817,607
NH-P9	Nob Hill	Monterey Rd	John Wilson Way to Middle Ave	521,122	677,458	880,696	0%	100%	-	880,696
NH-P10	Nob Hill	ROW	Monterey Rd to Olive Ave	598,737	778,358	1,011,865	0%	100%	-	1,011,865
RP-7	Nob Hill	First St	From Monterey Rd to Depot St	102,616	133,400	173,420	100%	0%	173,420	-
HL-P1	Holiday 1	Dunne Ave	Flaming Oak Ln to Proposed E Dunne Tank	162,321	211,017	274,322	40%	60%	109,729	164,593
HL-P2	Holiday 1	Dunne Ave	Proposed E Dunne Tank to Flaming Oak Ln	134,519	174,875	227,338	40%	60%	90,935	136,403
HL-P3	Holiday Lake	Dunne Ave	Proposed E Dunne Tank to Flaming Oak Ln	599,225	778,993	1,012,690	0%	100%	-	1,012,690
HL-P4	Holiday Lake	Oak Leaf Dr	Dunne Ave to 650' w/o Lori Dr	562,538	731,299	950,689	0%	100%	-	950,689
HL-P5	Holiday Lake	Lake View Dr	Oak Leaf Dr to Holiday Lake Tanks	697,058	906,176	1,178,029	0%	100%	-	1,178,029
RP-1	Holiday Lake	Shady Ln	From Holiday Dr to Holiday Dr	436,116	566,951	737,037	100%	0%	737,037	-
RP-4	Holiday Lake	Holiday Tank Site	From Holiday Lake Tanks to Manzanita Dr	153,923	200,100	260,131	100%	0%	260,131	-
RP-5	Holiday Lake	Manzanita Dr	From Holiday Dr to end of Manzanita Dr	282,193	366,851	476,906	100%	0%	476,906	-
RP-6	Holiday Lake	Raccoon Ct	From Holiday Ct to end of Manzanita Dr	290,744	377,968	491,358	100%	0%	491,358	-
RP-2	Jackson Oaks	Hill Top Ct	From Jackson Oaks Dr to approx 550' ne/o Jackson Oaks Dr	105,822	137,569	178,840	100%	0%	178,840	-
RP-3	Jackson Oaks	Oak View Ct	From Jackson Oaks Dr to approx 700' s/o Jackson Oaks Dr	134,683	175,088	227,614	100%	0%	227,614	-
RP-8	Hydropneumatic Zone	Oak Canyon Dr	From Jackson Oaks Hydropneumatic tank to Jackson Oaks Dr	115,443	150,075	195,098	100%	0%	195,098	-
Subtotal				\$ 11,671,486	\$ 15,172,932	\$ 19,724,811			\$ 5,573,652	\$ 14,151,159

¹ Cost estimates are adjusted to June 2019 costs based on the Engineering News's Record (ENR) construction cost index (CCI).

² Baseline construction costs plus 30% to account for unforeseen events and unknown conditions.

³ Estimated construction costs plus 30% to cover other costs including: engineering design, project administration (developer and City staff), construction management and inspection, and legal costs.

Source: Morgan Hill Water System Master Plan, 2017, Table ES.3; Engineering News's Record, Construction Cost Index; Willdan Financial Services.

Table 7.3: Costs to Serve New Development Continued

				Allocation						
Improv. No.	Pressure Zone	Alignment	Limits	Baseline Constr. ¹ Costs	Estimated Const. Costs ²	Capacity Improv. Cost ³	Existing Users (%)	Future Users (%)	Existing Users (\$)	Future Users (\$)
<u>Storage Reservoir Improvements</u>										
BR-T1	Boys Ranch	Demolish existing 0.55 MG Boys Ranch tank and replace with 1.20 MG tank		\$ 2,205,608	\$ 2,867,290	\$ 3,727,477	30%	70%	\$ 1,118,243	\$ 2,609,234
GA-T1	Glen Ayre	Demolish existing 0.10 MG Glen Ayre tank and replace with 0.25 MG tank		574,377	746,690	970,697	80%	20%	776,558	194,139
ED-T1	Nob Hill	Existing Edmundson tank site		2,067,758	2,688,085	3,494,510	0%	100%	-	3,494,510
WD-T1	Woodland	Demolish existing 0.03 MG Woodland tank and replace with 0.25 MG tank		574,377	746,690	970,697	70%	30%	679,488	291,209
HL-T1	Holiday 1	Dunne Ave approx 500' ne/o Flaming Oak Ln		<u>1,952,883</u>	<u>2,538,747</u>	<u>3,300,371</u>	40%	60%	<u>1,320,149</u>	<u>1,980,223</u>
Subtotal				\$ 7,375,002	\$ 9,587,503	\$ 12,463,754			\$ 3,894,438	\$ 8,569,316
<u>Groundwater Well Improvements</u>										
BR-W1	Boys Ranch	Burnett Ave	Approx 6,000' ne/o Monterey Ave	\$ 2,501,256	\$ 3,251,633	\$ 4,227,123	0%	100%	\$ -	\$ 4,227,123
NH-W2	Nob Hill	Butterfield Blvd	400' E of Railroad Ave and Fisher Ave	<u>2,501,256</u>	<u>3,251,633</u>	<u>4,227,123</u>	0%	100%	-	<u>4,227,123</u>
Subtotal				\$ 5,002,512	\$ 6,503,266	\$ 8,454,246			\$ -	\$ 8,454,246
<u>Pump Station Improvements</u>										
NH-PS1	Nob Hill	Dunne Ave and Magnolia Wy		\$ 1,390,157	\$ 1,807,203	\$ 2,349,365	40%	60%	\$ 939,746	\$ 1,409,619
HL-PS1	Holiday 1	Dunne Ave approx 500' ne/o Flaming Oak Ln		<u>1,190,199</u>	<u>1,547,259</u>	<u>2,011,437</u>	90%	10%	<u>1,810,293</u>	<u>201,144</u>
Subtotal				\$ 2,580,356	\$ 3,354,463	\$ 4,360,801			\$ 2,750,039	\$ 1,610,762
<u>Pressure Reducing Valve Improvements</u>										
HL-PRV1	Holiday 1	Thomas Gr approx 1,100' w/o Gnarled Oak Ln		\$ 50,560	\$ 65,727	\$ 85,446	40%	60%	\$ 34,178	\$ 51,267
Subtotal										
<u>Comprehensive Plan Updates</u>										
Water System Master Plan Updates (Years 2021, 2026, 2031, 2036)				\$ -	\$ -	\$ 800,000	65%	35%	\$ 520,000	\$ 280,000
Urban Water Management Plan Updates (Years 2021, 2026, 2031, 2036)				-	-	400,000	65%	35%	260,000	140,000
Water Rate Study Updates (Years 2021, 2026, 2031, 2036)				<u>-</u>	<u>-</u>	<u>400,000</u>	65%	35%	<u>260,000</u>	<u>140,000</u>
Subtotal				\$ -	\$ -	\$ 1,600,000			\$ 1,040,000	\$ 560,000
Total				\$ 26,679,916	\$ 34,683,890	\$ 46,689,058			\$ 13,292,307	\$ 33,396,751

¹ Cost estimates are adjusted to June 2019 costs based on the Engineering News Record (ENR) construction cost index (CCI).

² Baseline construction costs plus 30% to account for unforeseen events and unknown conditions.

³ Estimated construction costs plus 30% to cover other costs including: engineering design, project administration (developer and City staff), construction management and inspection, and legal costs.

Source: Morgan Hill Water System Master Plan, 2017, Table ES.3; Engineering News Record, Construction Cost Index; Willdan Financial Services.

Table 7.4 calculates a cost per EDU associated by dividing the total cost of projects allocated to new development identified in Table 7.3, by the growth in EDUs identified in Table 7.2

Table 7.4: Cost per EDU

Cost Allocated to New Development	\$33,396,751
Growth in EDUs	3,656
Cost per EDU	\$ 9,135

Sources: Tables 7.2 and 7.3.

Fee Schedule

The maximum justified fee for water facilities is shown in **Table 7.5**. The cost per EDU is converted to a fee per unit of new development based on the EDU factors shown in Table 7.1. The total fee includes an administrative charge to fund costs that include: (1) a standard overhead charge applied to all City programs for legal, accounting, and other departmental and citywide administrative support, (2) capital planning, programming, project management costs associated with the share of projects funded by the facilities fee, and (3) fee program administrative costs including revenue collection, revenue and cost accounting, mandated public reporting, and fee justification analyses.

Table 7.5: Water Facilities Impact Fee

	A	B	C = A x B D = C x 0.02		E = C + D	E / 1,000	F	G = E x F
	Cost Per EDU	EDU Factor	Base Fee ¹	Admin Charge ^{1, 2}	Total Fee ¹	Fee per Sq. Ft.	Nonres. KSF per Acre ³	Fee per Acre
<u>Residential</u>								
Single Family	\$ 9,135	1.00	\$ 9,135	\$ 183	\$ 9,318			
Multi-Family (Greater than 1,200 SF)	9,135	0.46	4,202	84	4,286			
Multi-Family (Less than 1,200 SF)	9,135	0.35	3,197	64	3,261			
<u>Nonresidential</u>								
Commercial	\$ 9,135	0.24	\$ 2,192	\$ 44	\$ 2,236	\$ 2.24	21.78	\$48,700
Office	9,135	0.24	2,192	44	2,236	2.24	21.78	48,700
Industrial	9,135	0.17	1,553	31	1,584	1.58	26.14	41,406
Auto Dealership	9,135	0.24	2,192	44	2,236	2.24	21.78	48,700
Hotel	9,135	0.08	731	15	746	0.75	n/a	n/a

¹ Fee per dwelling unit or per 1,000 square feet of nonresidential or hotel room.

² Administrative charge of 2.0 percent for (1) legal, accounting, and other administrative support and (2) impact fee program administrative costs including revenue collection, revenue and cost accounting, mandated public reporting, and fee justification analyses.

³ Based on assumed floor-area-ratio (FAR) from the General Plan. FAR for commercial, office and auto dealerships assumed to be 0.5 based on the "General Commercial" land use. FAR for Industrial assumed to be 0.6 based on the "Industrial" land use.

Sources: Tables 7.1 and 7.4; Willdan Financial Services.

8. Storm Drain Facilities Fee

This chapter summarizes an analysis of the need for storm drain facilities to accommodate growth within the City of Morgan Hill. It documents a reasonable relationship between new development and a storm drain fee to fund storm drain facilities that serve new development.

Storm Drain Demand

Most new development generates storm water runoff. This runoff must be controlled through storm drain facilities. Storm drain demand is measured by impervious surface. The more impervious surface a land use creates, the more demand for storm drain facilities it creates. **Table 8.1** shows the calculation of equivalent dwelling unit (EDU) demand factors for storm drain facilities based on impervious surface area by land use category. Dwelling unit and thousand square feet per acre assumptions are from the City's General Plan. The area percent impervious factors are derived from the September 2018 *Storm Drainage System Master Plan*, by Akel Engineering Group, Inc.

Table 8.1: Equivalent Dwelling Units

	A	B	$C = (43,560 / A) \times B$	$D = C / \text{Single Family}$
	DU, KSF or Rooms per acre ¹	Average Percent Impervious per Acre	Impervious Square feet per DU, KSF or Room	Equivalent Dwelling Unit (EDU) ²
<i>Residential</i>				
Single Family ³	5.00	35%	3,049	1.00
Multi-Family (Greater than 1,200 SF) ³	16.00	80%	2,178	0.71
Multi-Family (Less than 1,200 SF) ³	35.00	80%	996	0.33
<i>Nonresidential</i>				
Commercial	21.78	95%	1,900	0.62
Office	21.78	95%	1,900	0.62
Industrial	26.14	70%	1,167	0.38
Auto Dealership ⁴	21.78	95%	1,900	0.62
Hotel ⁴	67.02	95%	618	0.20

Note: Figures have been rounded.

¹ Dwelling units for residential and thousand building square feet for non-residential. Density based on estimated development and acreage for each land use type in the City of Morgan Hill *General Plan*. Nonresidential densities are based on floor-area-ratios of 0.5 for commercial, office, hotel and auto dealerships, 0.6 for industrial.

² EDUs per dwelling unit for residential development and per thousand square feet for nonresidential development.

³ Percent impervious for single family based on the "Single Family Medium" land use category from the *Storm Drainage System Master Plan*. Multi-Family based on "Multi-Family Medium."

⁴ Percent impervious for auto dealership and hotel based on the "Commercial" land use category from *Storm Drainage System Master Plan*.

Sources: *Storm Drainage System Master Plan*, Akel Engineering Group, Inc., September 2018; Morgan Hill General Plan; Willdan Financial Services.

Equivalent Dwelling Unit Growth

Table 8.2 calculates the existing and projected equivalent dwelling units (EDU) based on each land use's demand factors displayed in Table 8.1. An equivalent dwelling unit represents the demand of all other land uses equivalent to one single family unit. Also displayed is the total existing and future EDUs for storm drain facilities by land use.

Table 8.2: Storm Drain Facilities Equivalent Dwelling Units

EDU Factor ¹	----- DU or KSF-----		----- EDU -----		
	Existing	Projected Growth	Existing	Growth	Total
<u><i>Residential</i></u>					
Single Family	1.00	11,598	1,572	11,598	13,170
Multi-Family (Greater than 1,200 SF)	0.71	2,407	2,287	1,709	3,333
Multi-Family (Less than 1,200 SF)	0.33	1,100	800	363	627
Subtotal		15,105	4,147	13,670	17,130
<u><i>Nonresidential</i></u>					
Commercial	0.62	2,610	1,117	1,618	2,311
Office	0.62	522	629	324	714
Industrial	0.38	5,935	1,780	2,255	2,931
Auto Dealership	0.62	120	56	74	109
Subtotal		9,187	3,582	4,271	6,065
Hotel Rooms	0.20	919	215	184	227
Total				18,125	5,297
Percent of Total				77%	23%
					100%

¹ Per dwelling unit (residential), thousand building square feet (nonresidential), or hotel room.

Sources: Tables 2.2 and 8.1, Willdan Financial Services.

Planned Facilities

The City of Morgan Hill had the September 2018 *Storm Drainage System Master Plan*, completed by Akel Engineering Group, Inc. The plan identified storm drain projects, and allocated shares of each project to existing and new development. **Table 8.3** shows the storm drain capital improvement plan and cost allocation for storm drain facilities from the *Storm Drainage System Master Plan*.

Table 8.3: Storm Drain Master Plan Improvements

				Allocation						
	Type of			Baseline	Estimated	Capital	Existing	Future	Existing	
No.	Improvement	Description/Street	Description/Limits	Constr.	Const.	Improv.	Users	Users	Users	Future Users
				Costs	Costs ¹	Cost ²	(%)	(%)	(\$)	(\$)
Butterfield Drainage Basin										
BTR-P1	Pipeline	Juan Hernandez Dr	From 150' s/o Saint James Dr to Tennant Ave	\$ 214,401	\$ 278,722	\$ 362,338	0%	100%	\$ -	\$ 362,338
Subtotal				\$ 214,401	\$ 278,722	\$ 362,338			\$ -	\$ 362,338
Coyote Drainage Basin										
COY-P1	Pipeline	Eagle View Dr	From 310' s/o Peet Rd to Peet Rd	\$ 99,302	\$ 129,092	\$ 167,820	0%	100%	\$ -	\$ 167,820
COY-P2	Pipeline	Eagle View Dr	From 1,400 ft s/o Peet Rd to 310' s/o Peet Rd	300,162	390,211	507,274	0%	100%	-	507,274
COY-P3	Pipeline	Peet Rd	From Eagle View Dr to Morningstar Dr	364,106	473,338	615,340	100%	0%	615,340	-
Subtotal				\$ 763,570	\$ 992,641	\$ 1,290,434			\$ 615,340	\$ 675,094
Madrone Drainage Basin										
MAD-P1	Pipeline	Half Rd	From Condit Rd to NB US 101	\$ 174,530	\$ 226,889	\$ 294,956	0%	100%	\$ -	\$ 294,956
MAD-P2	Pipeline	Half Rd	From Peet Rd to Condit Rd	958,412	1,245,936	1,619,716	0%	100%	-	1,619,716
MAD-P3	Pipeline	Dunne Ave	From Condit Rd to NB US 101	180,549	234,713	305,127	100%	0%	305,127	-
MAD-P4	Pipeline	Aspen Wy	From Bluebonnet Wy to Pine Wy	128,641	167,233	217,403	100%	0%	217,403	-
MAD-P5	Pipeline	Bluebonnet Ct	From Almond Wy to Percheron Ct	39,119	50,855	66,111	100%	0%	66,111	-
MAD-P6	Pipeline	Percheron Ct	From Bluebonnet Ct to 170' s/o Bayo Claros Cir	252,768	328,598	427,178	100%	0%	427,178	-
MAD-P7	Pipeline	San Pedro Ave	From Condit Rd to NB US 101	195,594	254,273	330,554	60%	40%	198,332	132,222
Subtotal				\$ 1,929,613	\$ 2,508,497	\$ 3,261,045			\$ 1,214,151	\$ 2,046,894
Little Llagas Drainage Basin										
LLL-P1	Pipeline	Wright Ave	From Monterey Rd to Hale Ave	\$ 414,509	\$ 538,862	\$ 700,521	50%	50%	\$ 350,261	\$ 350,261
LLL-P2	Pipeline	Wright Ave	From 450' sw/o Crest Ave to Hale Ave	276,841	359,893	467,862	50%	50%	233,931	233,931
LLL-P3	Pipeline	Main Ave	From Crest Ave to Hale Ave	234,713	305,127	396,665	50%	50%	198,333	198,333
LLL-P4	Pipeline	Main Ave	From Peak Ave to Crest Ave	248,254	322,731	419,550	50%	50%	209,775	209,775
LLL-P5	Pipeline	Del Monte Ave	From Main Ave to 2nd St	214,401	278,722	362,338	50%	50%	181,169	181,169
LLL-P6	Pipeline	Main Ave	From Del Monte Ave to Monterey Rd	200,108	260,140	338,183	50%	50%	169,092	169,092
LLL-P7	Pipeline	Lone Hill Dr	From Spring Ave to Chargin Wy	168,512	219,066	284,785	20%	80%	56,957	227,828
LLL-P8	Pipeline	La Crosse Dr	From La Barea Dr to 200' se/o intersection of the Vineyard Blvd and La Crosse Dr	546,159	710,007	923,009	100%	0%	923,009	-
LLL-P9	Pipeline	Alamo Dr	From La Rocca Dr to 80' n/o Unnamed St	385,923	501,699	652,209	100%	0%	652,209	-
Subtotal				\$ 2,689,420	\$ 3,496,247	\$ 4,545,122			\$ 2,974,735	\$ 1,570,388

¹ Baseline construction costs plus 30% to account for unforeseen events and unknown conditions.² Estimated construction cost plus 30% to cover other costs including: engineering design, project administration (developer and City staff), construction management and inspection, and legal costs.

Source: Morgan Hill Storm Drainage Master Plan, 2018, Table ES.3; Engineering News Record; Willdan Financial Services.

Table 8.3: Storm Drain Master Plan Improvements - Continued

				Allocation						
	Type of			Baseline	Estimated	Capital	Existing	Future	Existing	
No.	Improvement	Description/Street	Description/Limits	Constr.	Const.	Improv.	Users	Users	Users	Future Users
				Costs ¹	Costs ²	Cost ³	(%)	(%)	(\$)	(\$)
Llagas Drainage Basin										
LLA-P1	Pipeline	Middle Ave	From Olive Ave to Gallant Fox Wy	\$ 204,622	\$ 266,008	\$ 345,811	0%	100%	\$ -	\$ 345,811
LLA-P2	Pipeline	Gallant Fox Wy	From Middle Ave to 1,200' e/o Middle Ave	<u>397,207</u>	<u>516,369</u>	<u>671,280</u>	<u>20%</u>	80%	<u>134,256</u>	<u>537,024</u>
Subtotal				\$ 601,829	\$ 782,377	\$ 1,017,091			\$ 134,256	\$ 882,835
Butterfield Drainage Basin										
BTR-D1	Basin		Approx. 900' nw/o Pollard Ave and Seymour Ave	\$ 1,171,894	1,523,462	1,980,500	50%	50%	\$ 990,250	\$ 990,250
Fisher Drainage Basin										
FIS-D1	Basin		Approx 1,000' sw/o Sutter Blvd and Butterfield Blvd	\$ 609,641	792,534	1,030,294	50%	50%	\$ 515,147	\$ 515,147
Other Storm Drainage Improvements										
Hale	Misc	Hale Ave	From Hillwood Lane to Spring Avenue and Dewitt Avenue	\$ 5,000,000	5,000,000	5,000,000	0%	100%	\$ -	\$ 5,000,000
Total									\$ 6,443,879	\$ 12,042,945
Less Existing Fund Balance ³										<u>3,962,023</u>
Net Cost of Planned Facilities										\$ 8,080,922

¹ Baseline construction costs plus 30% to account for unforeseen events and unknown conditions.

² Estimated construction cost plus 30% to cover other costs including: engineering design, project administration (developer and City staff), construction management and inspection, and legal costs.

³ Existing fund balance of \$10,405,902 as of June 30, 2018. \$3,962,023 remaining after funding existing user costs.

Source: Morgan Hill Storm Drainage Master Plan, 2018, Table ES.3; Engineering News Record; Willdan Financial Services.

Allocation of Facilities to New Development

Table 8.4 allocates new development's share of storm drain facilities to new development. New development's share of the costs is equal to the total cost of the projects net of the existing fund balances. The facility standard, in this case a planned facilities standard, is calculated by dividing new development's share of planned facilities by the growth in EDUs.

Table 8.4: Cost per Equivalent Dwelling Unit

Cost Allocated to New Development	\$ 8,080,922
Growth in EDUs	<u>5,297</u>
Cost per EDU	\$ 1,526

Sources: Tables 8.2 and 8.3; Willdan Financial Services.

Non-Fee Funding Required

No non-fee funding will be required to fund the facilities, as existing storm drain fund balances are sufficient to fully fund existing development's share of those facilities. Impact fee revenue will fully fund new development's share of the facilities.

Fee Schedule

The impact fee for storm drain facilities is shown in **Table 8.5**. The cost per EDU is converted to a fee per unit of new development based on the EDU factors shown in Table 8.1. The total fee includes a two percent (2%) administrative charge to fund costs that include: (1) a standard overhead charge applied to all City programs for legal, accounting, and other departmental and citywide administrative support, (2) fee program administrative costs including revenue collection, revenue and cost accounting, mandated public reporting, and fee justification analyses.

In Willdan's experience with impact fee programs, two percent of the base fee adequately covers the cost of fee program administration. The administrative charge should be reviewed and adjusted during comprehensive impact fee updates to ensure that revenue generated from the charge sufficiently covers, but does not exceed, the administrative costs associated with the fee program.

Table 8.5: Storm Drain Facilities Fee

	A	B	C = A x B D = C x 0.02		E = C + D		F	G = E x F
	Cost Per EDU	EDU	Base Fee ¹	Admin Fee ^{1,2}	Total Fee ¹	Fee per Sq. Ft.	Nonres. KSF per Acre ³	Fee per Acre
<u>Residential</u>								
Single Family	\$ 1,526	1.00	\$ 1,526	\$ 31	\$ 1,557			
Multi-Family (Greater than 1,200 SF)	1,526	0.71	1,083	22	1,105			
Multi-Family (Less than 1,200 SF)	1,526	0.33	504	10	514			
<u>Nonresidential</u>								
Commercial	\$ 1,526	0.62	\$ 946	\$ 19	\$ 965	\$ 0.97	21.78	\$ 21,018
Office	1,526	0.62	946	19	965	0.97	21.78	21,018
Industrial	1,526	0.38	580	12	592	0.59	26.14	15,475
Auto Dealership	1,526	0.62	946	19	965	0.97	21.78	21,018
Hotel	1,526	0.20	305	6	311	NA	n/a	n/a

Note: KSF = 1,000 Square Feet

¹ Fee per dwelling unit, per 1,000 square feet of nonresidential, or per room for hotel.

² Administrative charge of 2.0 percent for (1) legal, accounting, and other administrative support and (2) impact fee program administrative costs including revenue collection, revenue and cost accounting, mandated public reporting, and fee justification analysis.

³ Based on assumed floor-area-ratio (FAR) from the General Plan. FAR for commercial, office and auto dealerships assumed to be 0.5 based on the "General Commercial" land use. FAR for Industrial assumed to be 0.6 based on the "Industrial" land use.

Sources: Tables 8.1 and 8.4; Willdan Financial Services.

9. Public Safety Facilities

This chapter documents the impact fee for public safety facilities. The public safety facilities in this fee category include a variety of facilities including police and fire facilities.

Service Population

Public safety facilities are used to provide services to both residents and businesses. The service population used to determine the demand for public safety facilities includes both residents and workers.

Table 9.1 shows the existing and future projected service population for public safety facilities. While specific data is not available to estimate the actual ratio of demand per resident to demand by businesses (per worker) for these services, it is reasonable to assume that demand for these services is less for one employee compared to one resident, because nonresidential buildings are typically occupied less intensively than dwelling units. The 0.31-weighting factor for workers is based on a 40-hour workweek divided by the total number of non-work hours in a week (128) and reflects the degree to which nonresidential development yields a lesser demand for public safety facilities.

Table 9.1: Public Safety Facilities Service Population

	A Persons	B Weighting Factor	A × B = C Service Population
<u>Residents</u>			
Existing (2019)	45,360	1.00	45,360
New Development (2019-2035)	12,454	1.00	12,454
Total (2035)	57,814		57,814
<u>Workers</u>			
Existing (2019)	16,446	0.31	5,100
New Development (2019-2035)	5,074	0.31	1,600
Total (2035)	21,520		6,700
<u>Combined Residents and Weighted Workers</u>			
Existing (2019)			50,460
New Development (2019-2035)			14,054
Total (2035)			64,514

¹ Workers are weighted at 0.31 of residents based on a 40 hour work week out of a possible 128 non-work hours in a week (40/128 = 0.31)

Sources: Table 2.1; Willdan Financial Services.

Facility Inventories and Standards

This section describes the City's public safety facility inventory, the cost of planned facilities and facility standards.

Existing Inventory

Table 9.2 shows the existing inventory of public safety facilities, along with the facilities' estimated replacement value. The estimated land value was developed based on data from four recent appraisals of City owned property and is used consistently throughout this report to value City-owned land. Building values are based on the estimated replacement cost of each facility. Building values were informed by the City's recent construction cost experience. The present value of debt service payment made to date on the police headquarters building is also listed as an owned asset. Likewise, the present value of remaining payments is subsequently listed as a planned facility in the next table. Table 9.2 also lists the replacement cost of the City's owned fleet of public safety facilities vehicles, including police vehicles and fire apparatus.

Table 9.2: Existing Public Safety Facilities Inventory

	Inventory	Unit	Unit Cost	Replacement Cost
<u>Land (acres)</u>				
Dunne Hill Fire Station	0.29	acres	\$ 790,000	\$ 229,000
El Toro Fire Station ¹	0.50	acres	790,000	395,000
Third Fire Station Land	1.78	acres	790,000	1,406,000
Police Station	3.71	acres	790,000	2,931,000
Subtotal - Land	6.28			\$ 4,961,000
<u>Buildings (square feet)</u>				
Dunne Hill Fire Station	3,316	sq. ft.	\$ 1,000	3,316,000
El Toro Fire Station	5,180	sq. ft.	1,000	5,180,000
Police Headquarters Building ⁴			NA	11,121,324
Subtotal - Buildings	8,496			\$ 19,617,324
<u>Vehicles³</u>				\$ 7,233,000
Total Value - Existing Facilities				\$ 31,811,324

¹ Total site is 1.89 acres. Only 0.5 acres is utilized for fire department activities.

² City Hall and Development Services Center building unit costs are based on the actual construction cost of the Development Services Center.

³ The City owns 44 public safety vehicles and apparatus.

⁴ Total value of building, less new development's share of remaining debt service.

Sources: City of Morgan Hill; Willdan Financial Services.

Planned Facilities

Table 9.3 shows the additional public safety facilities the City plans to develop through the 2035 planning horizon. The City plans to expand an existing fire station, and to build a new fire station,

in addition to buying new fire apparatus'. These facilities are required as a direct result of new fire service demands brought on by new development. Additionally, a third fire station has been recommended per the City's Public Safety Master Plan. During the dissolution of the Redevelopment Agency, the settlement agreement provided for the City to retain property on Butterfield Boulevard for this third fire station. However, the agreement requires the property be constructed by 2024. In addition to the cost of the construction of the building, there would be approximately \$1.5 million in new equipment costs associated with outfitting the station. The project budget accounts for a facility approximately 5,000 feet in size. Design and construction would be timed for the building to be completed by the deadline established in the settlement agreement.

Note that project costs for the new fire facilities are greater than the costs from the City's CIP because construction costs have risen dramatically since the CIP was published. The costs in Table 9.3 represent the City's most recent construction cost estimates for these facilities.

The City also plans to expand the police department and its inventory of police equipment that is required as a direct result of new police service demands brought on by new development. Also included in the list of planned facilities is the half of present value of outstanding debt payments for the Police Headquarters. The City assumes that half of the outstanding debt service would be funded through the General Fund, and half would be funded by impact fees.

Table 9.3: Planned Public Safety Facilities

	Value
Total Debt Outstanding - Police Headquarters ¹	\$ 2,757,720
Police Department Expansion and Equipment ²	2,270,000
Existing Fire Station Expansion	2,000,000
New Fire Station ³	5,000,000
Quint 105' Aerial (Equipped) ⁴	1,032,600
Type 3 Engine (Equipped) ⁴	396,700
Pickup - F250 ³	65,200
Personal Protective Equipment (9 FTEs) ⁴	97,800
Total Cost of Planned Facilities	\$13,620,020
Less Existing Fund Balances ⁵	\$ 3,170,019
Net Project Cost	\$10,450,001

¹ Discounted to 2019\$. Discount rate assumed to be 3.5% per year. The amount represents the remaining outstanding debt payments for the Police Facility Bonds which were originally issued in 2004, and subsequently refunded in 2015. The bonds were issued to partially fund the acquisition and construction of the New Police Facility, which cost approximately \$10 million at the time. When the debt was issued, the City assumed that the General Fund would pay for half of the annual debt service and the other half would be funded through impact fees. As such, only 50% of the outstanding debt is shown here.

² Includes equipment costs for 11 additional police officers.

³ New fire station consisting of 5,000 square foot building.

⁴ Adjusted from 2012 to current using the Consumer Price Index - All Urban Consumers - (CPI-U) 1913-2018.

⁵ Existing fund balances as of 6/30/2018.

Sources: City of Morgan Hill; Willdan Financial Services.

Cost Allocation

Table 9.4 calculates the existing cost per capita facility standard by dividing the value of the existing facilities inventory by the existing service population. The resulting cost per capita is the basis of the impact fee. Funding facilities at this level will ensure that as development occurs, new development will contribute to public use center facilities at the same standard that existing development has contributed thus far. By definition, using the existing standard methodology does not result in existing deficiencies.

Table 9.4: Public Safety Facilities Existing Standard

Value of Existing Facilities	\$	31,811,324
Existing Service Population		50,460
Cost per Capita	\$	630
Facility Standard per Resident	\$	630
Facility Standard per Worker ²		195

¹ Based on a weighing factor of 0.31.

Sources: Tables 9.1 and 9.2.

Revenue Projection

The City plans to use public safety facilities fee revenue to construct improvements to add to the system of public safety facilities to serve new development. **Table 9.5** details a projection of fee revenue, based on the service population growth increment identified in Table 9.1. To fully fund the planned facilities, the City will have to identify \$1.6 million of alternative funding through the planning horizon. However, because the existing standard was used to calculate the fees, the City will meet the requirements of the Mitigation Fee Act so long as the projected \$8.9 million of fee revenue is used to fund new or expanded facilities to serve new development.

The City can use any other funding source other than impact fees to fund the balance of the planned facilities. Potential sources of revenue include, but are not limited to, existing or new general fund revenues, existing or new taxes, special assessments, grants and donations.

Table 9.5: Revenue Projection - Existing Standard

Cost per Capita	\$ 630
Growth in Service Population (2019- 2035)	14,054
Fee Revenue	\$ 8,854,020
Net Cost of Planned Facilities	10,450,001
Non-Fee Revenue to Be Identified	\$ (1,595,981)

Sources: Tables 9.1, 9.3 and 9.4.

Use of Fee Revenue

The City can use public safety facilities fee revenues for the construction or purchase of buildings, equipment and land that are part of the system of public safety facilities serving new development. The City plans to use the fee revenues to fund the facilities shown in Table 9.3.

Fee Schedule

Table 9.6 shows the maximum justified public safety facilities fee schedule. The cost per capita is converted to a fee per unit of new development based on dwelling unit and employment densities (persons per dwelling unit or employees per 1,000 square feet of nonresidential building space). The total fee includes a two percent (2%) percent administrative charge to fund costs that include: a standard overhead charge applied to all City programs for legal, accounting, and other departmental and citywide administrative support, and fee program administrative costs including revenue collection, revenue and cost accounting, mandated public reporting, and fee justification analyses.

In Willdan's experience with impact fee programs, two percent of the base fee adequately covers the cost of fee program administration. The administrative charge should be reviewed and adjusted during comprehensive impact fee updates to ensure that revenue generated from the charge sufficiently covers, but does not exceed, the administrative costs associated with the fee program.

Table 9.6: Public Safety Facilities Fee - Existing Standard

Land Use	A	B	C = A x B		D = C x 0.02	E = C + D	F	G = E x F
	Cost Per Capita	Density	Base Fee ¹	Admin Charge ^{1, 2}		Total Fee ¹	Nonres. KSF per Acre ³	Fee per Acre
<u>Residential</u>								
Single Family	\$ 630	3.02	\$ 1,903	\$ 38		\$ 1,941		
Multi-Family (Greater than 1,200 SF)	630	2.67	1,682	34		1,716		
Multi-Family (Less than 1,200 SF)	630	2.00	1,260	25		1,285		
<u>Nonresidential</u>								
Commercial	\$ 195	2.50	\$ 488	\$ 10		\$ 498	21.78	\$10,846
Office	195	3.00	585	12		597	21.78	13,003
Industrial	195	2.50	488	10		498	26.14	13,018
Auto Dealership	195	1.00	195	4		199	26.14	5,202
Hotel	195	0.30	59	1		60	21.78	1,307

¹ Fee per dwelling unit, per 1,000 square feet of nonresidential, or per room for hotel.

² Administrative charge of 2.0 percent for (1) legal, accounting, and other administrative support and (2) impact fee program administrative costs including revenue collection, revenue and cost accounting, mandated public reporting, and fee justification analyses.

³ Based on assumed floor-area-ratio from the General Plan. FAR for commercial and office assumed to be 0.5 based on the "General Office" land use. FAR for Industrial and auto dealership assumed to be 0.6 based on the "Industrial" land use.

Sources: Tables 2.2 and 9.4.

10. Implementation

Impact Fee Program Adoption Process

Impact fee program adoption procedures are found in the *California Government Code* section 66016. Adoption of an impact fee program requires the City Council to follow certain procedures including holding a public hearing. Data, such as an impact fee report, must be made available at least 10 days prior to the public hearing. The City's legal counsel should be consulted for any other procedural requirements as well as advice regarding adoption of an enabling ordinance and/or a resolution. After adoption there is a mandatory 60-day waiting period before the fees go into effect.

Inflation Adjustment

The City has kept its impact fee program up to date by periodically adjusting the fees for inflation. Such adjustments should be completed regularly to ensure that new development will fully fund its share of needed facilities. We recommend that the following indices be used for adjusting fees for inflation:

- ♦ Buildings – Engineering News-Record's Construction Cost Index (CCI)
- ♦ Equipment – Consumer Price Index, All Items, 1982-84=100 for All Urban Consumers (CPI-U)

The indices recommended can be found for local jurisdictions (state, region), and for the nation. With the exception of land, we recommend that the national indices be used to adjust for inflation, as the national indices are not subject to frequent dramatic fluctuations that the localized indices are subject to.

Due to the highly variable nature of land costs, there is no particular index that captures fluctuations in land values. We recommend that the City adjust land values based on recent land purchases, sales or appraisals at the time of the update.

While fee updates using inflation indices are appropriate for periodic updates to ensure that fee revenues keep up with increases in the costs of public facilities, the City will also need to conduct more extensive updates of the fee documentation and calculation (such as this study) when significant new data on growth forecasts and/or facility plans become available.

Reporting Requirements

The City complies with the annual and five-year reporting requirements of the *Mitigation Fee Act*. For facilities to be funded by a combination of public fees and other revenues, identification of the source and amount of these non-fee revenues is essential. Identification of the timing of receipt of other revenues to fund the facilities is also important.

Programming Revenues and Projects with the CIP

The City maintains a five-year Capital Improvement Program (CIP) to plan for future infrastructure needs. The CIP identifies costs and phasing for specific capital projects. The use of the CIP in this manner documents a reasonable relationship between new development and the use of those revenues.

The City may decide to alter the scope of the planned projects or to substitute new projects if those new projects continue to represent an expansion of the City's facilities. If the total cost of facilities varies from the total cost used as a basis for the fees, the City should consider revising the fees accordingly.

11. Mitigation Fee Act Findings

Public facilities fees are one-time fees typically paid when a building permit is issued and imposed on development projects by local agencies responsible for regulating land use (cities and counties). To guide the widespread imposition of public facilities fees the State Legislature adopted the *Mitigation Fee Act* (the *Act*) with Assembly Bill 1600 in 1987 and subsequent amendments. The *Act*, contained in *California Government Code* Sections 66000 through 66025, establishes requirements on local agencies for the imposition and administration of fee programs. The *Act* requires local agencies to document five findings when adopting a fee.

The five statutory findings required for adoption of the public facilities fees documented in this report are presented in this chapter and supported in detail by the preceding chapters. All statutory references are to the *Act*.

Purpose of Fee

- ♦ *Identify the purpose of the fee (§66001(a)(1) of the Act).*

Development impact fees are designed to ensure that new development will not burden the existing service population with the cost of facilities required to accommodate growth. The purpose of the fees proposed by this report is to provide a funding source from new development for capital improvements to serve that development. The fees advance a legitimate City interest by enabling the City to provide municipal services to new development.

Use of Fee Revenues

- ♦ *Identify the use to which the fees will be put. If the use is financing facilities, the facilities shall be identified. That identification may, but need not, be made by reference to a capital improvement plan as specified in §65403 or §66002, may be made in applicable general or specific plan requirements, or may be made in other public documents that identify the facilities for which the fees are charged (§66001(a)(2) of the Act).*

Fees proposed in this report, if enacted by the City, would be used to fund expanded facilities to serve new development. Facilities funded by these fees are designated to be located within the City's sphere of influence. Fees addressed in this report have been identified by the City to be restricted to funding the following facility categories: general public facilities, traffic facilities, library facilities, parks, water facilities and storm drain facilities.

Benefit Relationship

- ♦ *Determine the reasonable relationship between the fees' use and the type of development project on which the fees are imposed (§66001(a)(3) of the Act).*

The City will restrict fee revenue to the acquisition of land, construction of facilities and buildings, and purchase of related equipment, furnishings, vehicles, and services used to serve new development. Facilities funded by the fees are expected to provide a citywide network of facilities accessible to the additional residents and workers associated with new development. Under the *Act*, fees are not intended to fund planned facilities needed to correct existing deficiencies. Thus, a reasonable relationship can be shown between the use of fee revenue and the new development residential and non-residential use classifications that will pay the fees.

Burden Relationship

- ♦ *Determine the reasonable relationship between the need for the public facilities and the types of development on which the fees are imposed (§66001(a)(4) of the Act).*

Facilities need is based on a facility standard that represents the demand generated by new development for those facilities. For each facility category, demand is measured by a single facility standard that can be applied across land use types to ensure a reasonable relationship to the type of development. For most facility categories service population standards are calculated based upon the number of residents associated with residential development and the number of workers associated with non-residential development. To calculate a single, per capita standard, one worker is weighted less than one resident based on an analysis of the relative use demand between residential and non-residential development.

The standards used to identify growth needs are also used to determine if planned facilities will partially serve the existing service population by correcting existing deficiencies. This approach ensures that new development will only be responsible for its fair share of planned facilities, and that the fees will not unfairly burden new development with the cost of facilities associated with serving the existing service population.

Chapter 2, Growth Forecasts provides a description of how service population and growth forecasts are calculated. Facility standards are described in the *Facility Standards* sections of each facility category chapter.

Proportionality

- ♦ *Determine how there is a reasonable relationship between the fees amount and the cost of the facilities or portion of the facilities attributable to the development on which the fee is imposed (§66001(b) of the Act).*

The reasonable relationship between each facilities fee for a specific new development project and the cost of the facilities attributable to that project is based on the estimated new development growth the project will accommodate. Fees for a specific project are based on the project's size. Larger new development projects can result in a higher service population resulting in higher fee revenue than smaller projects in the same land use classification. Thus, the fees ensure a reasonable relationship between a specific new development project and the cost of the facilities attributable to that project.

See *Chapter 2, Growth Forecasts*, or the *Service Population*, or *Equivalent Dwelling Units* sections in each facility category chapter for a description of how service populations or other factors are determined for different types of land uses. See the *Fee Schedule* section of each facility category chapter for a presentation of the maximum justified facilities fees.

Appendix

Table A.1: Police: Lease Payments for Police Building

Date	Payment (nom. dollars)	Discount Factor ¹	Payment (real dollars)
<i>Past Payments</i>			
Jan-05	\$ 122,132	1.619	\$ 197,694
Jul-05	328,156	1.619	531,185
Jan-06	155,606	1.564	243,361
Jul-06	295,606	1.564	462,315
Jan-07	153,506	1.511	231,958
Jul-07	298,506	1.511	451,063
Jan-08	151,331	1.460	220,939
Jul-08	301,331	1.460	439,934
Jan-09	148,706	1.411	209,765
Jul-09	303,706	1.411	428,408
Jan-10	145,994	1.363	198,974
Jul-10	305,994	1.363	417,038
Jan-11	143,194	1.317	188,559
Jul-11	308,194	1.317	405,832
Jan-12	140,306	1.272	178,509
Jul-12	310,306	1.272	394,796
Jan-13	136,906	1.229	168,293
Jul-13	311,906	1.229	383,412
Jan-14	133,844	1.188	158,964
Jul-14	313,844	1.188	372,748
Jan-15	130,694	1.148	149,974
Jul-15	320,694	1.148	368,003
Jan-16	127,131	1.109	140,953
Jul-16	322,131	1.109	357,153
Jan-17	123,475	1.071	132,270
Jul-17	328,475	1.071	351,871
Jan-18	119,375	1.035	123,553
Jul-18	329,375	1.035	340,903
Jan-19	115,175	1.000	115,175
Subtotal	\$ 6,425,601		\$ 8,363,604

¹Discount rate assumed to be 3.5% per year.

Source: City of Morgan Hill.

Table A.1: Police: Lease Payments for Police Building - Continued

Date	Payment (nom. dollars)	Discount Factor ¹	Payment (real dollars)
<i>Future Payments</i>			
Jul-19	335,175	1.000	335,175
Jan-20	110,638	0.966	106,896
Jul-20	340,638	0.966	329,118
Jan-21	105,750	0.934	98,719
Jul-21	345,750	0.934	322,761
Jan-22	100,500	0.902	90,645
Jul-22	350,500	0.902	316,131
Jan-23	94,875	0.871	82,678
Jul-23	354,875	0.871	309,253
Jan-24	89,025	0.842	74,957
Jul-24	359,025	0.842	302,289
Jan-25	82,950	0.814	67,480
Jul-25	367,950	0.814	299,328
Jan-26	76,395	0.786	60,046
Jul-26	371,395	0.786	291,913
Jan-27	69,463	0.759	52,751
Jul-27	379,463	0.759	288,168
Jan-28	62,178	0.734	45,622
Jul-28	387,178	0.734	284,084
Jan-29	54,540	0.709	38,664
Jul-29	394,540	0.709	279,697
Jan-30	46,550	0.685	31,884
Jul-30	401,550	0.685	275,040
Jan-31	38,119	0.662	25,226
Jul-31	413,119	0.662	273,395
Jan-32	29,213	0.639	18,679
Jul-32	419,213	0.639	268,046
Jan-33	19,950	0.618	12,325
Jul-33	429,950	0.618	265,615
Jan-34	10,213	0.597	6,096
Jul-34	440,213	0.597	262,759
Subtotal	\$ 7,080,888		\$ 5,515,440

¹Discount rate assumed to be 3.5% per year.

Sources: City of Morgan Hill; Willdan Financial Services.

RESOLUTION NO.

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF MORGAN HILL ADJUSTING THE SELECTED DEVELOPMENT IMPACT FEES

WHEREAS, new development within the City of Morgan Hill ("City") will continue to result in additional population and business growth, and such growth will continue to place additional burdens on various City facilities, infrastructure and services, requiring construction of expanded and/or new City facilities and services; and

WHEREAS, all development within the City should bear a proportionate financial burden in the construction and improvement of public facilities and services necessary to service the growth engendered by such development; and

WHEREAS, the imposition of development impact fees is the preferred method of ensuring that new development bears its proportionate share of the cost of public facilities and service improvements; and

WHEREAS, imposition of impact fees to finance public facilities and service improvements required by new development is necessary in order to avoid adversely impacting existing facilities and services; and

WHEREAS, consistent with these principles, Chapter 3.56 of the City's Municipal Code establishes Development Impact Mitigation Fees; and

WHEREAS, Municipal Code Section 3.56.060 provides for revision of established fees, including increases, by resolution; and

WHEREAS, the City Council has received and duly considered the report authored by Willdan Financial Services ("Willdan") entitled "Development Impact Fee Update Study" dated July 9, 2019 (the "Willdan Report"), and presented to the City Council on September 4, 2019, continued thereafter to October 2, 2019 and October 23, 2019; and

WHEREAS, the Willdan Report analyzed the City's existing land use patterns and zoning, and the goals and objectives of the City's General Plan 2035, 2017 Public Safety Master Plan, 2017 Utilities Master Plans, 2017 Bikeways, Trails, Parks, and Recreation Master Plan, and 2018 Storm Drainage Master Plan; and

WHEREAS, the Willdan Report determined the public facilities and system improvements engendered by anticipated development in light of those various plans and existing and projected land use patterns and zoning; and

WHEREAS, the Willdan Report demonstrates, the development impact fees adjusted by this resolution are based upon estimated costs for new public facilities and service improvements that will be required, incrementally, by new development within the City's sphere of influence; and

WHEREAS, the Willdan Report demonstrates, the development impact fees adjusted by this resolution do not exceed the reasonable cost of providing public facilities and service improvements occasioned by development projects within the City; and

WHEREAS, the fees recommended by the Willdan Report rationally relate to the reasonable cost of providing public facilities occasioned by the development projects and service improvements within the City's sphere of influence; and

WHEREAS, the Willdan Report and all background data referenced in the report were available for public inspection and review at the City Clerk's office of the City of Morgan Hill; and

WHEREAS, City staff emailed information regarding the proposed adoption of and public hearing on the fees and a copy of the Willdan Report to all known regular real estate and development firms and individuals who have done business in the City in the recent past; and

WHEREAS, on March 21, 2019, Willdan and City staff hosted two special briefing sessions on the Willdan Report for those firms and individuals to provide them an opportunity to query the consultant and staff on how the development impact fees were calculated; and

WHEREAS, a public hearing on adoption of this resolution and the fees attached hereto as Exhibit A and incorporated herein by reference, was noticed pursuant to and in compliance with Government Code section 6062(a), and set as part of a regular City Council meeting held on September 4, 2019, continued thereafter to October 2, 2019 and October 23, 2019, in the Council Chamber located at City Hall, 17555 Peak Avenue; and

WHEREAS, the City Council has received and duly considered all written and oral comments provided to it by staff and the public, which comments are hereby incorporated into the record on this matter; and

WHEREAS, the City Council deems it necessary that the development impact fees be adjusted to ensure that new development in the City continues to pay its proportionate share of public facilities and service improvements necessary to accommodate such development in order to promote the public health, safety and welfare; and

WHEREAS, the City Council hereby incorporates the findings made in Municipal Code Section 3.56.010 and applies them in support of the adoption of this Resolution; and

WHEREAS, the Projects approved pursuant hereto are exempt from the California Environmental Quality Act (CEQA) under Section 15273 of Guidelines for CEQA and Public Resources Code Section 21080(b)(8) because they establish, modify and approve rates and charges for the purposes of obtaining funds for capital projects; and

WHEREAS, further reasons supporting the adjustment of the development impact fees described in, and that is the subject of, this Resolution are set forth in detail in that certain City Council Staff Report entitled "Adopt a Resolution Updating the City's Select Development Impact Fees" submitted for City Council consideration at its meeting of September 4, 2019, continued thereafter to October 2, 2019 and October 23, 2019, submitted to the City Council by the City Manager (the "Staff Report"), the contents of which Staff Report are incorporated herein by this reference.

THEREFORE, BE IT RESOLVED by the City Council of the City of Morgan Hill that:

Section 1. The recitals, findings and determinations set forth above are true and correct and are incorporated by reference herein.

Section 2. The City Council hereby further finds as follows, with respect to the requirements of California Government Code sections 66000 through 66025:

- A. *Purpose of Fee.* The purpose of the fees recommended in the Willdan Report is to provide a funding source from new development for capital improvements to serve that development. The fees advance a legitimate City interest by enabling the City to provide municipal services to new development.
- B. *Use of Fee Revenues.* The proposed fees would be used to fund expanded facilities to serve new development. Facilities funded by these fees are designated to be located within the City's sphere of influence. Fees addressed in the Willdan Report are restricted to funding the following facility categories: traffic, library, water, storm drainage and public safety facilities.
- C. *Benefit Relationship.* Use of fee revenue will be restricted to the acquisition of land, construction of facilities and buildings, and purchase of related equipment, furnishings, vehicles, and services used to serve new development. Facilities funded by the fees are expected to provide a City-wide network of facilities accessible to the additional residents and workers associated with new development. Fees are not intended to fund planned facilities needed to correct existing deficiencies. Thus, a reasonable relationship can be shown between the use of fee revenue and the new development of residential and non-residential use classifications that will pay the fees.
- D. *Burden Relationship.* Facilities need is based on a facility standard that represents the demand generated by new development for those facilities. For each facility category, demand is measured by a single facility standard that can be applied across land use types to ensure a reasonable relationship to the type of development. The standards used to identify growth needs are also used to determine if planned facilities will partially serve the existing service population by correcting existing deficiencies. This approach ensures that new development will only be responsible for its fair share of planned facilities, and that the fees will not unfairly burden new development with the cost of facilities associated with serving the existing service population.
- E. *Proportionality.* The reasonable relationship between each facilities fee for a specific new development project and the cost of the facilities attributable to

that project is based on the estimated new development growth the project will accommodate. Fees for a specific project are based on the project's size. Larger new development projects can result in a higher service population resulting in higher fee revenue than smaller projects in the same land use classification. Thus, the fees ensure a reasonable relationship between a specific new development project and the cost of the facilities attributable to that project.

Section 3. The City Council hereby adjusts the selected development impact fees as stated in Exhibit A, which is attached hereto and incorporated by this reference. Except as modified herein, Resolution No 5592 and its attached fee schedule, along with the corresponding automatic annual adjustments pursuant to Municipal Code Section 3.56.050, shall remain in full force and effect.

Section 4. The City Council hereby orders that all adjustments in the selected development impact fees be effective 60 days following adoption of this ordinance.

Section 5. The City Council hereby finds the approval of the adjustments in the selected development impact fees of the City of Morgan Hill to be exempt from CEQA.

Section 6. If any section, subsection, subdivision, sentence, clause, phrase, word, or portion of this resolution is, for any reason, held to be invalid by the decision of any court of competent jurisdiction, such decision shall not affect the validity of the remaining portions of this resolution and each section, subsection, subdivision, sentence, clause, phrase, word or portion thereof, irrespective of the fact that any one or more sections, subsections, subdivision, sentences, clauses, phrases, words, or portions thereof be declared invalid.

PASSED AND ADOPTED by the City Council of the City of Morgan Hill at its meeting held on this 23rd day of October 2019 by the following vote:

AYES:
NOES:
ABSTAIN:
ABSENT:

COUNCIL MEMBERS:
COUNCIL MEMBERS:
COUNCIL MEMBERS:
COUNCIL MEMBERS:

DATE: _____

Rich Constantine, MAYOR

∞ **CERTIFICATION** ∞

I, **Irma Torrez, City Clerk of the City of Morgan Hill, California**, do hereby certify that the foregoing is a true and correct copy of Resolution No. XX-XXX, adopted by the City Council at a regular meeting held on October 23, 2019.

WITNESS MY HAND AND THE SEAL OF THE CITY OF MORGAN HILL.

DATE: _____

IRMA TORREZ, City Clerk

Attachment: Attachment 2: Resolution (2481 : Updating Development Impact Fees)

Exhibit A

UPDATED SELECT DEVELOPMENT IMPACT FEES

Land Use	Traffic Facilities	Library Facilities	Water	Storm Drainage	Public Safety Facilities
<i>Residential (DU)</i>					
Single Family	\$ 3,373	\$ 1,953	\$ 9,318	\$ 1,557	\$ 1,941
Multi-Family (>1,200SF)	2,091	1,727	4,286	1,105	1,716
Multi-Family (<1,200SF)	1,316	1,293	3,261	514	1,285
<i>Nonresidential (per KSF or per hotel room)</i>					
Commercial	12,514	-	2,236	965	498
Office	5,026	-	2,236	965	597
Industrial	3,272	-	1,584	592	498
Auto Dealership	8,837	-	2,236	965	199
Hotel	2,024	-	746	311	60

Maximum Justified Development Impact Fees per Study versus Existing Fees Comparison

Maximum Justified Development Impact Fees

Land Use	General Public Facilities	Traffic Facilities	Library Facilities	Parks	Sewer	Water	Storm Drainage	CRC	Public Safety Facilities	Total
<u>Residential (DU)</u>										
Single Family	\$ 1,833	\$ 3,373	\$ 1,953	\$ 13,961	\$ 15,269	\$ 9,318	\$ 1,557	\$ 3,943	\$ 1,941	\$ 53,148
Multi-Family (>1,200SF)	1,621	2,091	1,727	12,342	12,923	4,286	1,105	3,460	1,716	41,271
Multi-Family (<1,200SF)	1,214	1,316	1,293	9,245	12,923	3,261	514	2,611	1,285	33,662
<u>Nonresidential (per KSF or per hotel room)</u>										
Commercial	469	12,514	-	-	3,241	2,236	965	-	498	19,923
Office	563	5,026	-	-	3,241	2,236	965	-	597	12,628
Industrial	469	3,272	-	-	2,240	1,584	592	-	498	8,655
Auto Dealership	188	8,837	-	-	3,241	2,236	965	-	199	15,666
Hotel	56	2,024	-	-	1,054	746	311	-	60	4,251

Existing Development Impact Fees

Land Use	General Public Facilities	Traffic Facilities	Library Facilities	Parks	Sewer	Water	Storm Drainage	CRC	Public Safety Facilities	Total
<u>Residential (DU)</u>										
Single Family	\$ 551	\$ 2,006	\$ 2,126	\$ 5,790	\$ 15,269	\$ 3,902	\$ 4,142	\$ 3,943	\$ 953	\$ 38,682
Multi-Family (>1,200SF)	530	1,244	2,048	5,579	12,923	3,520	2,154	3,460	919	32,377
Multi-Family (<1,200SF)	365	1,244	1,402	3,820	12,923	3,520	2,154	2,611	633	28,672
<u>Nonresidential (per KSF or per hotel room)</u>										
Commercial	56	7,442	-	-	3,241	508	2,071	-	159	13,476
Office	66	2,989	-	-	3,241	508	2,071	-	192	9,067
Industrial	65	1,946	-	-	2,240	423	1,256	-	160	6,090
Auto Dealership	22	5,256	-	-	3,241	508	2,589	-	58	11,673
Hotel	14	1,204	-	-	1,054	166	1,372	-	26	3,835

Change in Development Impact Fee Amounts

Land Use	General Public Facilities	Traffic Facilities	Library Facilities	Parks	Sewer	Water	Storm Drainage	CRC	Public Safety Facilities	Total
<u>Residential (DU)</u>										
Single Family	\$ 1,282	\$ 1,367	\$ (173)	\$ 8,171	\$ -	\$ 5,416	\$ (2,585)	\$ -	\$ 988	\$ 14,466
Multi-Family (>1,200SF)	1,091	847	(321)	6,763	-	766	(1,049)	-	797	8,894
Multi-Family (<1,200SF)	849	72	(109)	5,425	-	(259)	(1,640)	-	652	4,990
<u>Nonresidential (per KSF or per hotel room)</u>										
Commercial	413	5,072	-	-	-	1,728	(1,106)	-	339	6,447
Office	497	2,037	-	-	-	1,728	(1,106)	-	405	3,561
Industrial	404	1,326	-	-	-	1,161	(664)	-	338	2,565
Auto Dealership	166	3,581	-	-	-	1,728	(1,624)	-	141	3,993
Hotel	42	820	-	-	-	580	(1,061)	-	34	416

Proposed Development Impact Fees versus Existing Fees Comparison

Proposed Development Impact Fees

Land Use	General Public Facilities	Traffic Facilities	Library Facilities	Parks	Sewer	Water	Storm Drainage	CRC	Public Safety Facilities	Total
<u>Residential (DU)</u>										
Single Family	\$ 551	\$ 3,373	\$ 1,953	\$ 5,790	\$ 15,269	\$ 9,318	\$ 1,557	\$ 3,943	\$ 1,941	\$ 43,695
Multi-Family (>1,200SF)	530	2,091	1,727	5,579	12,923	4,286	1,105	3,460	1,716	33,417
Multi-Family (<1,200SF)	365	1,316	1,293	3,820	12,923	3,261	514	2,611	1,285	27,388
<u>Nonresidential (per KSF or per hotel room)</u>										
Commercial	56	12,514	-	-	3,241	2,236	965	-	498	19,510
Office	66	5,026	-	-	3,241	2,236	965	-	597	12,131
Industrial	65	3,272	-	-	2,240	1,584	592	-	498	8,251
Auto Dealership	22	8,837	-	-	3,241	2,236	965	-	199	15,500
Hotel	14	2,024	-	-	1,054	746	311	-	60	4,209

Existing Development Impact Fees

Land Use	General Public Facilities	Traffic Facilities	Library Facilities	Parks	Sewer	Water	Storm Drainage	CRC	Public Safety Facilities	Total
<u>Residential (DU)</u>										
Single Family	\$ 551	\$ 2,006	\$ 2,126	\$ 5,790	\$ 15,269	\$ 3,902	\$ 4,142	\$ 3,943	\$ 953	\$ 38,682
Multi-Family (>1,200SF)	530	1,244	2,048	5,579	12,923	3,520	2,154	3,460	919	32,377
Multi-Family (<1,200SF)	365	1,244	1,402	3,820	12,923	3,520	2,154	2,611	633	28,672
<u>Nonresidential (per KSF or per hotel room)</u>										
Commercial	56	7,442	-	-	3,241	508	2,071	-	159	13,476
Office	66	2,989	-	-	3,241	508	2,071	-	192	9,067
Industrial	65	1,946	-	-	2,240	423	1,256	-	160	6,090
Auto Dealership	22	5,256	-	-	3,241	508	2,589	-	58	11,673
Hotel	14	1,204	-	-	1,054	166	1,372	-	26	3,835

Change in Development Impact Fee Amounts

Land Use	General Public Facilities	Traffic Facilities	Library Facilities	Parks	Sewer	Water	Storm Drainage	CRC	Public Safety Facilities	Total
<u>Residential (DU)</u>										
Single Family	\$ -	\$ 1,367	\$ (173)	\$ -	\$ -	\$ 5,416	\$ (2,585)	\$ -	\$ 988	\$ 5,013
Multi-Family (>1,200SF)	-	847	(321)	-	-	766	(1,049)	-	797	1,040
Multi-Family (<1,200SF)	-	72	(109)	-	-	(259)	(1,640)	-	652	(1,284)
<u>Nonresidential (per KSF or per hotel room)</u>										
Commercial	-	5,072	-	-	-	1,728	(1,106)	-	339	6,034
Office	-	2,037	-	-	-	1,728	(1,106)	-	405	3,064
Industrial	-	1,326	-	-	-	1,161	(664)	-	338	2,161
Auto Dealership	-	3,581	-	-	-	1,728	(1,624)	-	141	3,827
Hotel	-	820	-	-	-	580	(1,061)	-	34	374



March 27, 2019

Mayor Constantine and City Councilmembers
City of Morgan Hill
VIA EMAIL

RE: Council Meeting April 3, 2019: Development Impact Fees

Dear Mayor Constantine and Councilmembers,

BIA Bay Area (BIA), representing hundreds of home builders throughout the Bay Area, respectfully submits the following comments regarding City of Morgan Hill (City) development impact fee increases that are before you for action on the April 3, 2019 agenda. BIA appreciates that the City Council has directed Staff to recommend residential impact fees for traffic and parks lower than the maximum legally justifiable levels because the City will not be able to build and maintain the corresponding facilities. Nevertheless, we oppose the recommended residential development impact fee increases as unjustifiably high and they are a factor in driving higher housing costs in Morgan Hill and Santa Clara County.

BIA remains very concerned by the spiraling cost of development and construction, including impact fees assessed by government. Affordable housing requirements, park fees, traffic fees, facility fees, sewer and water fees, school fees, etc., etc., all add tens of thousands of dollars to the cost to build a new home, pricing thousands of California families out of the market each day. Rising impact fees must be administered more judiciously.

The Turner Center for Housing Innovation at UC Berkeley has concluded in its March 2018 report, "It All Adds Up: The Cost of Housing Development Fees in Seven California Cities", individual fees add up and substantially increase the cost of building housing. Findings from this report show that development impact fees have significant implications for the cost and delivery of new housing in California. For example, Turner Center research found that total fees can amount to anywhere from 6 percent to 18 percent of the median price of a new home depending on location.

BIA also strongly recommends that the City assess whether any new or increased fee would individually or cumulatively represent a constraint to new housing and whether that action could trigger HCD action on the City's adopted housing element under AB 72. Here is a brief explanation of AB 72 from the HCD website:

"AB 72 grants HCD authority to review any action or failure to act by a local government that it determines is inconsistent with an adopted housing element or housing element law. This includes failure to implement program actions included in the housing element. HCD may revoke housing element compliance if the local government's actions do not comply with state law.

In addition, HCD may notify the California Office of the Attorney General that the local jurisdiction is in violation of state law for non-compliance with housing element law, the Housing Accountability Act, "no net loss" law, density bonus law or anti-discrimination law."

Other BIA concerns regarding the development impact fee increases include:

- Fee assessment and payment requirements – The City should confirm that fees are set for all residential projects at time of application with payment due at building permit for single family homes or due at certificate of occupancy for multifamily projects;
- Total fee load – The total fee load before and after adoption of the development impact fee, including BMR inclusionary or linkage fees, should be clearly communicated. The staff report and supporting document omit important parts of this information;
- Feasibility Study – A feasibility study should analyze all development product types before recommending fee levels;

While BIA acknowledges the City Council's direction to reduce the 2019 development impact fee increase for traffic and parks below the maximum justifiable levels, we feel it is vital to point out that impact fees create serious impediments to addressing the housing affordability crisis the region is facing. BIA Bay Area looks forward to working with the City of Morgan Hill on development issues.

Thank you for your attention to these concerns.

Yours truly,

Dennis Martin
BIA Bay Area

KRISTINA D. LAWSON
 PARTNER
 DIRECT DIAL (925) 746-8474
 DIRECT FAX (925) 746-8490
 E-MAIL klawson@hansonbridgett.com



April 2, 2019

VIA ELECTRONIC MAIL

irma.torrez@morganhill.ca.gov
rich.constantine@morganhill.ca.gov
larry.carr@morganhill.ca.gov

yvonne.martinezbeltran@morganhill.ca.gov
rene.spring@morganhill.ca.gov
john.mckay@morganhill.ca.gov

Honorable Mayor Constantine and Members
 of the City Council
 City of Morgan Hill
 17575 Peak Avenue
 Morgan Hill, CA 95037

Re: Request for Postponement; April 3, 2019 City Council Agenda Item No. 13: Resolution
 Updating the City's Select Development Impact Fees

Dear Honorable Mayor Constantine and City Councilmembers:

This office represents a broad coalition of public and private home builders as well as local land owners. On behalf of our client, we have reviewed the Staff Report prepared for Agenda Item No. 13 for the City Council's April 3, 2019 meeting, to (1) adopt of the Development Impact Fee Update Study prepared by Willdan Financial Services and dated January 31, 2019 ("Nexus Study") and (2) adopt a resolution "updating the City's select Development Impact Fees." We have also preliminarily reviewed the Nexus Study.

To be clear, and what the Staff Report fails to simply state, the proposed fee "update" to "select" Development Impact Fees proposed for adoption are in fact, substantial fee increases that include for single family dwellings, increases for public facilities from \$552 to \$3638, for water from \$3,902 to \$8,914, and for parks from \$5,790 to \$7,201 (the originally proposed increase based on the Nexus Study was to \$14,402). Traffic impact fees will increase from \$2,006 to \$3,107.

Also omitted from the Staff Report and Nexus Study is a direct comparison of the total proposed fee amounts and maximum justified fee amounts, against the current fees, thereby minimizing the effect of the proposed actions. Significantly, the Nexus Study purports to justify maximum increases of even more, reflecting an increase above current fees by 38% for single family dwelling units and 28% for multi-family dwelling units. The total maximum residential fee justified by the Nexus Study is \$53,405 for a single family dwelling unit, \$41,551 for a multi-family dwelling unit, and \$35,313 for a senior/downtown/accessory unit.

We write to respectfully request that you postpone this item until such time as this council, all affected stakeholders and members of the public have had a meaningful opportunity to closely

Hanson Bridgett LLP

425 Market Street, 26th Floor, San Francisco, CA 94105 hansonbridgett.com

Attachment: Attachment 6: Hanson Bridgett LLP (2481 : Updating Development Impact Fees)

examine the legal adequacy of the justification for the fee increases provided by the Nexus Study and as necessary, require additional data and analysis. In light of the current housing crisis, it is vital that the City also evaluate the long-term effect the proposed fee increases will have on the feasibility of developing any new housing as envisioned under the General Plan, and on the ever-increasing costs of existing housing. When combined with the recent increase in Below Market Rate requirements, which now require 15% (up from 8%) of residential projects to be affordable units, and the increase in the In-Lieu Housing Fee from \$12.92 to \$19.70 per habitable square foot of residential building area of market-rate housing (also ignored in the Staff Report), the proposed development impact fee increases will have a devastating impact on the ability to develop any new housing whatsoever.

As summarized below, it is clear from even a preliminary review of the Nexus Study that it does not adequately establish and evidence an equitable relationship between the services and facilities to be funded by the proposed fees and the impacts resulting from future development, and therefore, does not satisfy the requirements of the Mitigation Fee Act, Government Code Section 61000 *et seq.*

The legal requirements for the enactment of development impact fees are set forth in the Mitigation Fee Act and were established by the Legislature specifically “in response to concerns among developers that local agencies were imposing development fees for purposes unrelated to development projects.” (*Barratt American, Inc. v. City of Rancho Cucamonga* (2005) 37 Cal.4th 685, 691.) To increase development impact fee amounts, the Mitigation Fee Act requires the City to satisfy all of the following requirements: (1) Identify the purpose of the fee; (2) Identify the use to which the fee is to be put. If the use is financing public facilities, the facilities shall be identified; (3) Determine how there is a reasonable relationship between the fee's use and the type of development project on which the fee is imposed; and (4) Determine how there is a reasonable relationship between the need for the public facility and the type of development project on which the fee is imposed.

First, the Nexus Study lacks basic information to support the requisite need for the proposed fees. More specifically, the Nexus Study does not adequately identify the new facilities and facility improvements to be funded from the fee increases, and demonstrate that such facilities and improvements will be required as a result of new development. For example, the parks fee analysis does not specifically identify the 40.40 acres of parkland to be acquired improved to justify the fee. In addition, the planned facilities listed in Table 3.3 of the Nexus Study are described as those planned through the 2035 planning horizon but the Nexus Study fails to establish that the additional facilities and improvements are required to accommodate future growth. It appears to assume, without any support, that existing facilities have no additional capacity to accommodate growth.

At a minimum, the Nexus Study must be supplemented and revised to identify the current and projected level of service for each public facility and how the additional facilities or improvements will be needed to accommodate future growth. This should be done by quantifying the projected burden that new development will place on the City's infrastructure, and allocating the costs of providing the needed public services between the existing and new populations

Second, it is not clear that the Nexus Study utilizes accurate growth projections to serve as the basis of the City's anticipated future public facilities and infrastructure needs. The Nexus Study appears to rely on imprecise data to derive population and land use assumptions. Without

Honorable Mayor Constantine and Members of the City Council
April 2, 2019
Page 3

additional supporting information, and evidence of consistency with the City's existing plans, the City's speculative determinations regarding future growth cannot support the required finding of the anticipated need created by new development. The drastic increases purportedly justified by the Nexus Study, warrant a closer examination of the assumptions relating to residential development densities, land uses, and populations.

As a practical matter, while the Nexus Study is generally based on the projected development to 2035 under the General Plan, the effect of the fee increase will essentially render those projections unachievable—particularly when combined with the recently increased BMR requirements—and exacerbate existing impediments to housing development, contrary to every statewide and regional policy and mandate on housing.

Finally, we note that due to the lack of outside sources to fund the operation and maintenance of the new parks, the park impact fee as initially proposed was reduced by half. The Nexus Study indicates that non-fee funding is also needed for Public Facilities and yet no corresponding reduction appears to be proposed for the proposed Public Facilities fee. Once adopted, the Nexus Study presumably will provide the basis for further increases up to the maximum amounts established therein and yet it is not clear when, how and on what basis the City may adopt further increases.

Accordingly, we urge the council to postpone its consideration of the proposed increase in development impact fees to allow additional time to ensure the legal adequacy of the Nexus Study.

We appreciate your time and consideration, and look forward to providing detailed comments once we have had an opportunity to fully evaluate the Nexus Study.

Very truly yours,



Kristina D. Lawson

KDL:rsc



MEMORANDUM

Date: September 4, 2019

To: Mayor Constantine and Council Members

From: Dat Nguyen, Finance Director

Reviewed by: Christina Turner, City Manager

Subject: Response to Kristina Lawson letter

This memorandum is in response to the letter from Kristina D. Lawson of the law office Hanson Bridgett LLP dated April 2, 2019, concerning the proposed increases in select development impact fees. The letter raises two concerns with one involving the technical aspects of the Mitigation Fee Act, and the other about the potential impact to affordable housing development from the proposed impact fees increases. The issue involving the technical aspects of the Act has been addressed separately by the City's impact fee study consultant, and is attached hereto as Exhibit A. The below analysis demonstrates that the proposed increases in select development impact fees will not impact affordable housing development in Morgan Hill.

The proposed increases in select development impact fees are significant in both dollar and percentage terms. However, when factoring in the elimination of Residential Development Control System (RDSCS) contributions for affordable housing projects, the affordable housing projects would see a significant decrease in the combined contribution amount. Under the old Measure C, all housing projects, regardless of affordability, would need to compete in the RDSCS process. In this RDSCS process, development allotments are competitively awarded based upon projects' public benefit contribution.

Under the Housing Accountability Act, as applied under the new Measure S, affordable housing projects are no longer required to compete in the RDSCS process. Using the most recent affordable housing projects, Crossing at Monterey by UHC, a 39-unit project, and Belle Salici – Monterey Road by EAH, a 19-unit project as examples, the developers from these projects had to commit \$493,350 for the Crossing at Monterey (\$12,650 per unit) and \$282,150 for the Belle Salici – Monterey Road (\$14,850 per unit) in RDSCS contributions to sufficiently score and be awarded with requested allotments. These RDSCS fiscal contributions from the above two affordable housing projects do not include the committed purchase of Transferable Development Credits (TDC) which amounted to \$143,832 for Crossing at Monterey project, and \$70,072 for Belle Salici – Monterey Road project. TDC's were created by the City Council many years ago to help implement the City's hillside and open space preservation activities.

Assuming the committed purchase of TDC's remains, when removing the RDSCS contributions,

these two recent affordable housing projects would experience savings in combined fees of \$543,387 for the 39-unit Crossing at Monterey project, and \$343,209 for the 19-unit Belle Salici – Monterey Road project. Just comparing existing and proposed impact fees, both of these affordable housing projects would pay a lower total impact fee based on the proposed impact fees schedule.

The Development Impact Fee Update Study would eliminate the land use type of Senior, Downtown, and Accessory Dwelling Unit (ADU) and reclassify the Multi-family into Multi-family units with more than 1,200 square feet of living space and the Multi-family units less than 1,200 square feet. That would make the 19-unit Belle Salici – Monterey Road project, which was assessed at the Multi-family category in the existing fee schedule, into a lower fee category of Multi-family less than 1,200 square feet. In addition, the 39-unit Crossing at Monterey project that was assessed at the Senior/Downtown/ADU category in the existing fee schedule would see the assessment decreased in the staff recommended impact fees schedule.

The table below shows the total existing combined fees of the two recent affordable housing projects compared to total proposed fees.

Existing Fee Scenario	Crossing at Monterey	Belle Salici - Monterey Road
Measure C - RDCS contributions	\$ 493,350	\$ 282,150
Impact Fees at 2019 Amount	614,172	605,789
Total	\$ 1,107,522	\$ 887,939
Proposed Fee Scenario		
Measure S - RDCS contributions	\$ -	\$ -
Proposed Impact Fees	564,135	544,910
Total	\$ 564,135	\$ 544,910
Impact Fees Savings	\$ 50,037	\$ 60,879
Combined Fees Savings	\$ 543,387	\$ 343,029

As we continue to ensure sustainable growth, Morgan Hill will continue its proud tradition of supporting affordable housing development. The aforementioned analysis of the two most recent affordable housing projects illustrates the proposed increases in select development impact fees would not impede affordable housing development in Morgan Hill. Morgan Hill has a rich legacy of supporting affordable housing development as the City is building more affordable housing per capita than other communities and has the largest per capita affordable housing ownership program in the State.



Memorandum

TO: Dat Nguyen, City of Morgan Hill

FROM: James Edison and Carlos Villarreal, Willdan Financial Services

DATE: April 10, 2019

SUBJECT: Willdan Responses to April 2, 2019 Letter

The following are our responses to the Hanson Bridgett's April 2 letter Re: Request for Postponement; April 3, 2019 City Council Agenda Item No. 13: Resolution Updating the City's Select Development Impact Fees. The responses below address the technical concerns regarding Willdan's Development Impact Fee Update Study prepared by Willdan Financial Services and dated January 31, 2019 ("Nexus Study").

Note that some of the concerns raised regard the policy decisions that the City Council must make and have no bearing on the technical validity of the Nexus Study. For example, the percentage increase of the maximum justified impact fees compared to the existing fees or the total fee burden considering other fees that the City charges do not factor into the nexus analysis, and this memorandum does not comment on these concerns.

The letter raises three technical concerns with the Nexus Study, summarized below. This memorandum addresses each concern.

"First, the Nexus Study does not adequately identify the new facilities and facility improvements to be funded from the fee increases and demonstrate that such facilities and improvements will be required as a result of new development."

Willdan disagrees with this assertion. The Nexus Study identifies facilities to be funded by the impact fees in Tables 3.3, 4.3, 4.4, 5.3, 6.6, 7.3 and 8.3 of the report. Facilities included in these tables were identified by City master planning efforts and City staff expertise and are required to serve the City's projected 2035 General Plan service population.

Facilities need is based on a facility standard that represents the demand generated by new development for those facilities. For each facility category, demand is measured by a single facility standard that can be applied across land use types to ensure a reasonable relationship to the type of development. For most facility categories service population standards are calculated based upon the number of residents associated with residential development and the number of workers associated with non-residential development. To calculate a single, per capita standard, one worker is weighted less than one resident based on an analysis of the relative use demand between residential and non-residential development.

The standards used to identify the facilities to serve growth are also used to determine if planned facilities will partially serve the existing service population by correcting existing deficiencies. This approach ensures that new development will only be responsible for its fair share of planned facilities, and that the fees will not unfairly burden new development with the cost of facilities associated with serving the existing service population.

Facility standards for traffic facilities are allocated based on trip generation. Facility standards for parks are based on acres of park per 1,000 residents. Facility standards for water facilities are based on the flow generated by each unit of development. Facility standards for storm drainage facilities are based on the amount of impervious surface created by each unit of development. For other fee categories allocations are based on service population (residents and a fraction of employees).

The Mitigation Fee Act requires, in summary, that nexus study demonstrate “how there is a reasonable relationship between the need for the public facility and the type of development project on which the fee is imposed.” The methodologies described above, and detailed in the Nexus Study, are consistent with this, with standard practice in the industry, and with case law interpreting this requirement.

“Second, it is not clear that the Nexus Study utilizes accurate growth projections to serve as the basis of the City’s anticipated future public facilities and infrastructure needs. The Nexus Study appears to rely on imprecise data to derive population and land use assumptions. Without additional supporting information, and evidence of consistency with the City’s existing plans, the City’s speculative determinations regarding future growth cannot support the required finding of the anticipated need created by new development. The drastic increases purportedly justified by the Nexus Study, warrant a closer examination of the assumptions relating to residential development densities, land uses, and populations.”

Willdan disagrees with this assertion. The growth projections used in the Nexus Study are based on the City’s General Plan EIR and the constraints of the City’s voter-approved Residential Development Control System (RDCS). Willdan reviewed the growth projections extensively with the City’s planning department and the growth projections are in line with the existing City documents and policies.

Table 2.1 from the Nexus Study shows the estimated number of residents, dwelling units, employees, and building square feet in Morgan Hill, both in 2018 and in 2035. Existing residents and dwelling units are based on California Department of Finance (DOF) data. These estimates exclude “group quarters” resident populations, since they do not contribute to demand for facilities. Estimates of residents in 2035 also exclude group quarters residents and is based on Municipal Code Section 18.78.040 - Population Limit of the voter-approved Residential Development Control System (RDCS), which established a maximum population of 58,200.

Base year dwelling unit estimates for single family units are based on DOF data. Senior/ downtown/accessory dwelling unit estimates are consistent with data from the City’s 2015 Traffic Impact Fee study. Multifamily base year units estimated as the difference between total units, single family units from DOF and senior/downtown/ADU units from 2015 Traffic Impact Fee study. Total dwelling units in 2035 are calculated by dividing 2035 residents by the current density of 3.145 residents per household and assuming a 4.687% vacancy rate, consistent with current DOF estimates.

Base year employees are estimated based on data provided by the US Census’ American Community Survey and exclude local government employees. Future employees are estimated based on data from the Association of Bay Area Governments (ABAG) used in the Morgan Hill General Plan. Estimates of base year and planning horizon building square feet come from the Morgan Hill 2035 Final EIR.

Furthermore, there is an inherent balance in the impact fee program in that if less development occurs than projected, less fees will be paid and fewer facilities needed/constructed. Conversely, if more development occurs than projected the City will collect additional fees but will also need to construct additional facilities to mitigate the impact on City services.

“Finally, we note that due to the lack of outside sources to fund the operation and maintenance of the new parks, the park impact fee as initially proposed was reduced by half. The Nexus Study indicates that non-fee funding is also needed for Public Facilities and yet no corresponding reduction appears to be proposed for the proposed Public Facilities fee. Once adopted, the Nexus Study presumably will provide the basis for further increases up to the maximum amounts established therein and yet it is not clear when, how and on what basis the City may adopt further increases”

This comment conflates two very different concepts, capital costs and O&M (operations and maintenance) costs. In the case of parks, the City is considering the policy decision to charge a lower fee for parks because it does not plan to build (and therefore maintain) all the public parks that would be necessary to maintain the current facility standard. This is the City's prerogative and has no bearing the maximum justified fee or on how it approaches other facilities and fee categories.

In the case of public facilities, the fee is based on the existing service standard and the City plans to fully fund all required facilities and maintenance. The policy decision under consideration by the City regarding parks is irrelevant to the establishment of the maximum justified fee for public facilities. The City will meet the requirements of the Mitigation Fee Act so long as the fee revenue collected is used to fund new or expanded facilities to serve new development.

Future fee increases are not the subject of the Nexus Study, it calculates the current maximum justified fee based on the most reasonable current information. The City can increase the fee in the future at any time by making the necessary findings.

Regarding further updates, the Mitigation Fee Act requires a comprehensive update of an impact fee program every five years. The City Council must take the update into account in establishing subsequent fees. It may not charge more than the identified maximum justified fee but can charge a lower fee, or leave a lower fee in place, at its discretion.



Development Impact Fee Update



Background

1. GP 2035 adopted 2016

2. Master Plans

- Public Safety adopted 2017
- Utilities adopted 2017
- Bikeways, Trails, Parks, and Recreation adopted 2017
- Storm Drainage adopted 2018

Last Update

1. Traffic and Recreation in 2015

- Recreation not being updated at this time

2. Fire in 2013

3. General Facilities, Park, Police, Library, and Storm Drainage in 2010

4. Utilities 2007

- Wastewater not being updated at this time

What are impact fees?

- One-time fees charged to new development, usually at building permit
 - Not an ongoing fee charged to residents or business owners
- May be used to fund facilities needed to serve new development
 - Not for operations and maintenance costs
 - Not for the share of facilities serving existing development



Conducting an Impact Fee Nexus Study

Mitigation Fee Act Findings (Govt. Code §66001)

- Key findings
 - Need: Development $\approx$ Need for facilities
 - Benefit: Development $\approx$ Use of revenue
 - Rough proportionality: Fee amount $\approx$ development's share of facility costs
- Other findings
 - Purpose of fee
 - Use of fee revenue

Impact Fees – Basic Methodology

1. Estimate existing development and future growth
2. Identify facility standards
3. Determine new facility needs and costs
4. Allocate share to accommodate growth
5. Identify alternative funding needs
6. Calculate fee by allocating costs per unit of new development

City of Morgan Hill Growth Projections

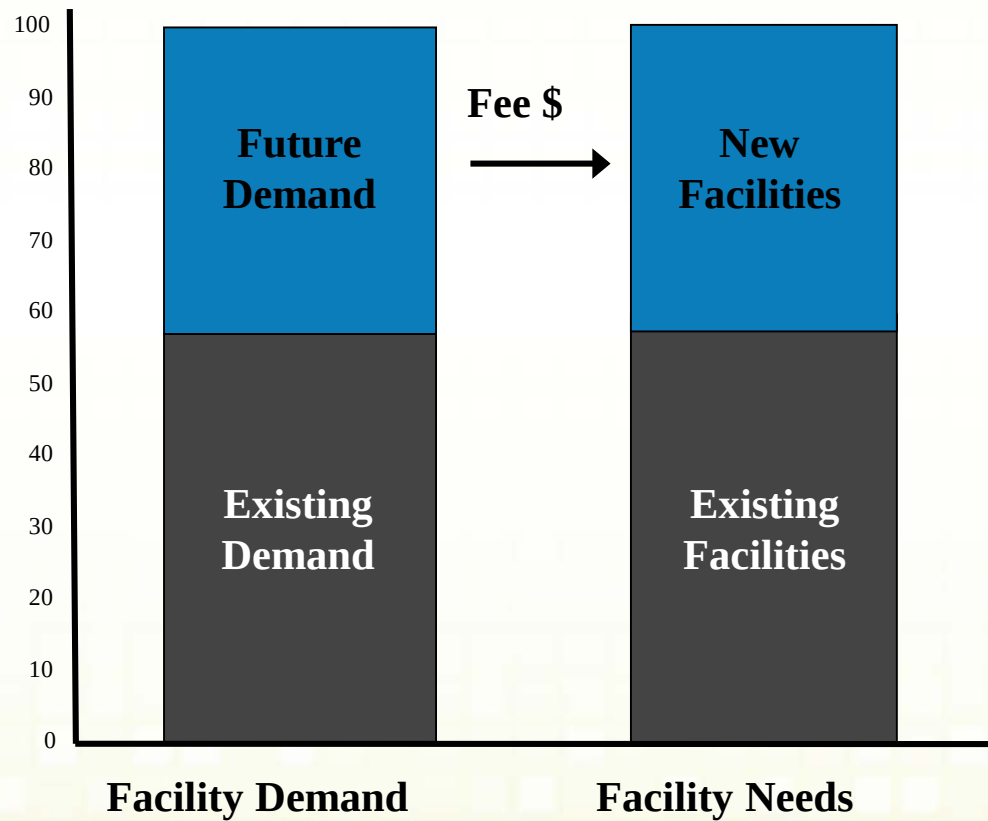
City of Morgan Hill Growth Projections

	2019	2035	Increase
Residents	45,360	57,814	12,454
Dwelling Units	15,105	19,252	4,147
Employment	16,446	21,520	5,074
Hotel Rooms	919	1,134	215

Sources: California Department of Finance (DOF) Table E-5, 2019; U.S. Census Bureau, LEHD Origin-Destination Employment Statistics (2002-2015) accessed at <https://onthemap.ces.census.gov>; City of Morgan Hill General Plan 2035 EIR; Willdan Financial Services.

Allocating Cost of New Facilities: *Existing Inventory*

10.i



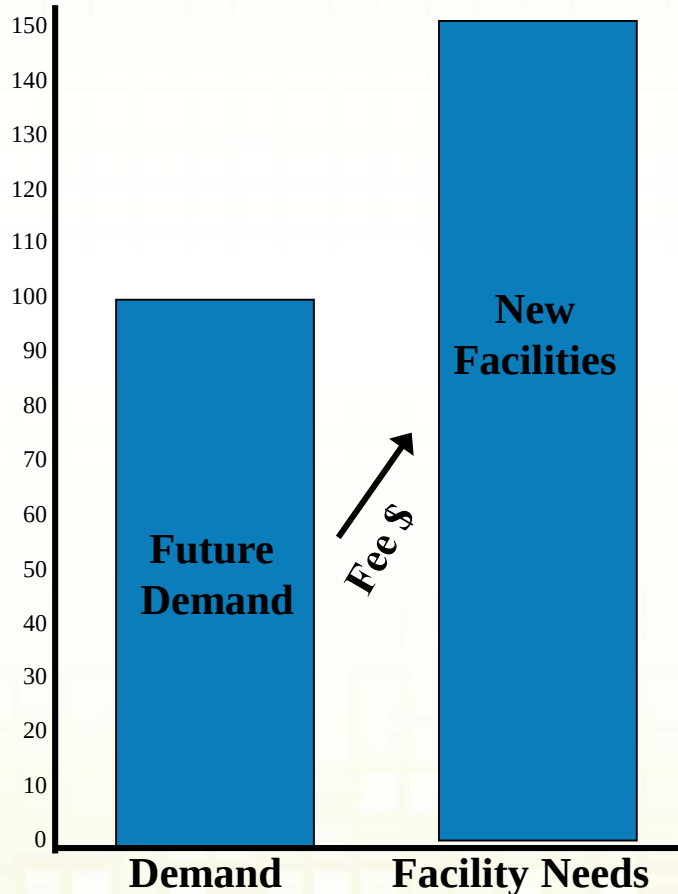
Attachment: Presentation (2481 : Updating Development Impact Fees)

Allocating Cost of New Facilities:

Planned Facilities Method

10.i

Planned Facilities Method



- Use engineering models to demonstrate need for facilities to serve growth
- Usually applicable for traffic & utility fees
- May also have deficiencies that must be funded by alternative revenues

City of Morgan Hill Impact Fee Categories

Existing Standard:

- General Public Facilities
- Library Facilities
- Public Safety Facilities

Not Being Updated:

- Sewer Facilities
- Community Recreation Centers

Planned Facilities Standard:

- Traffic Facilities
- Water
- Storm Drainage
- Parks

Impact Fee Revenue Projection

Impact Fee Revenue Projection

Fee Category	Total Project Cost	Development Fee Revenue	Additional Funding Required
General Public Facilities	\$ 18,000,000	\$ 8,362,130	\$ 9,637,870
Traffic Facilities	56,323,974	34,354,764	21,969,210
Library Facilities	5,580,000	7,895,800	-
Parks	56,429,000	56,429,000	-
Sewer	81,617,139	59,259,594	22,357,545
Water	46,689,058	33,396,751	13,292,307
Storm Drainage ¹	12,042,945	8,080,922	-
Public Safety Facilities	10,450,001	8,854,020	1,595,981
	<u>\$ 287,132,117</u>	<u>\$ 216,632,981</u>	<u>\$ 68,852,912</u>

¹ Existing fund balances fund the difference between total project cost and projected impact fee revenue.

February 20, 2019 – Council Direction

1. Reduce total Priority Bikeways projects – lower traffic impact fee
2. Reduce new parks to be built – lower park impact fee
3. No phase in increases – effective July 1, 2019

March 21, 2019 – Public Meeting Discussion

- Phase in increases
- ADU density

Changes to the Latest Update Study

- Adjusted costs for inflation to June 2019
- Added Public Safety Facilities
- Adjusted overall dwelling units
- Changed residential category of Multi-Family to Greater or Lesser Than 1,200 SF
- Added more text throughout to better describe project costs

New Recommendation

- Remove Park and General Public Facilities Impact Fees

Maximum Justified Impact Fee Schedule

Maximum Justified Development Impact Fees

Land Use	General Public Facilities	Traffic Facilities	Library Facilities	Parks	Sewer	Water	Storm Drainage	CRC	Public Safety Facilities	Total
<u>Residential (DU)</u>										
Single Family	\$ 1,833	\$ 3,373	\$ 1,953	\$ 13,961	\$ 15,269	\$ 9,318	\$ 1,557	\$ 3,943	\$ 1,941	\$ 53,148
Multi-Family (>1,200SF)	1,621	2,091	1,727	12,342	12,923	4,286	1,105	3,460	1,716	41,271
Multi-Family (<1,200SF)	1,214	1,316	1,293	9,245	12,923	3,261	514	2,611	1,285	33,662
<u>Nonresidential (per KSF or per hotel room)</u>										
Commercial	469	12,514	-	-	3,241	2,236	965	-	498	19,923
Office	563	5,026	-	-	3,241	2,236	965	-	597	12,628
Industrial	469	3,272	-	-	2,240	1,584	592	-	498	8,655
Auto Dealership	188	8,837	-	-	3,241	2,236	965	-	199	15,666
Hotel	56	2,024	-	-	1,054	746	311	-	60	4,251

Total Proposed Fee Comparison

Land Use	Current Fee	Per Update Study			Proposed		
		Maximum Justified Fee	Amount Change from Current Fee	% Change from Current Fee	Proposed Fee	Amount Change from Current Fee	% Change from Current Fee
<i>Residential (per dwelling unit)</i>							
Single Family	\$ 38,682	\$ 53,148	\$ 14,466	37%	\$ 43,695	\$ 5,013	13%
Multi-Family (>1,200SF)	32,377	41,271	8,894	27%	33,417	1,040	3%
Multi-Family (<1,200SF)	28,672	33,662	4,990	17%	27,388	(1,284)	-4%
<i>Nonresidential (per KSF or per hotel room)</i>							
Commercial	\$ 13,476	\$ 19,923	\$ 6,446	48%	\$ 19,510	\$ 6,033	45%
Office	9,067	12,628	3,561	39%	12,131	3,064	34%
Industrial	6,090	8,655	2,564	42%	8,251	2,160	35%
Auto Dealership	11,673	15,666	3,993	34%	15,500	3,827	33%
Hotel	3,835	4,251	415	11%	4,209	373	10%

Impact Fee Comparison

Single Family Dwelling Unit - Impact Fee Comparison

Fee Category	Morgan Hill			Gilroy	San Jose	
	Existing	Study	Proposed		Low	High
General Public Facilities	\$ 552	\$ 1,833	\$ 551	\$ 20,498	\$ -	\$ -
Sewer	15,269	15,269	15,269	12,501	1,227	1,227
Storm Drainage	4,142	1,557	1,557	71	270	270
Street Tree	-	-	-	174	-	-
Traffic	2,006	3,373	3,373	11,561	-	-
Water	3,902	9,318	9,318	4,294	-	-
Police	817	-	-	-	-	-
Fire Protection	127	-	-	-	-	-
Public Safety Facilities		1,941	1,941			
Library	2,126	1,953	1,953	-	-	-
Parks	5,790	13,961	5,790	-	11,200	58,800
CRC	3,943	3,943	3,943	-	-	-
Total	\$ 38,674	\$ 53,148	\$ 43,695	\$ 49,099	\$ 12,697	\$ 60,297

Tonight's Recommendation

1. Adopt Final Update Study prepared by Willdan
2. Open Public Hearing and Receive Public Comments
3. Close Public Hearing
4. Adopt Resolution Approving of Updated Development Impact Fees

Questions and Answers



August 26, 2019

Morgan Hill City Council

Re: Development Impact Fee Update Study: Final Draft
City Council Meeting September 4, 2019

Dear Mayor Constantine and Councilmembers,

We are objecting to the Development Fee Impact per
“Final Draft” July 9, 2019 conclusions and analyses.

As a background, we have been homebuilders and
developers in our community for over 35 years; and, as
licensed contractors we are very familiar with construction
costs. We have taken the time to breakdown the “Planned
Library Facilities Expansion” of 5000 square feet.

As you may remember the Sunsweet site was
consider as a downtown location for our Library; prior to its
final location near City Hall. We hired both a San
Francisco architect and a San Jose General Contractor,
who each had designed and/or constructed libraries within
our greater South Bay Area, in our presentation to the
City.

This past week we reached out to A licensed contractors to confirm present day construction cost for a library addition of 5000 square feet to be \$1,500,000 (\$300/square foot). If you add needed subs: Architect, Structural Engineer, Soils engineer, overhead etc. we believe that realistically a 5000 square foot addition to the existing library total costs would be less than \$1,750,000; significantly less than the \$4,500,000 in the report.

We would ask that the City do a more careful analysis of cost projections in all phases of Willdan report and review the entire Development Impact Fee update and cost analysis.

Thank you.

A handwritten signature in black ink, appearing to read "Roche Garcia". The signature is fluid and cursive, with a long horizontal stroke at the end.

Roche Garcia

Glenrock Builders, Inc.

KRISTINA D. LAWSON
PARTNER
DIRECT DIAL (925) 746-8474
DIRECT FAX (925) 746-8490
E-MAIL klawson@hansonbridgett.com



Item # 14

AGENDA DATE: 09/04/19
SUPPLEMENT # 1

September 3, 2019

VIA ELECTRONIC MAIL

irma.torrez@morganhill.ca.gov
rich.constantine@morganhill.ca.gov
larry.carr@morganhill.ca.gov

yvonne.martinezbeltran@morganhill.ca.gov
rene.spring@morganhill.ca.gov
john.mckay@morganhill.ca.gov

Honorable Mayor Constantine and Members
of the City Council
City of Morgan Hill
17575 Peak Avenue
Morgan Hill, CA 95037

**Re: Request for Continuance; September 4, 2019 City Council Agenda Item No. 14:
Resolution Adjusting Select Development Impact Fees**

Dear Honorable Mayor Constantine and City Councilmembers:

This office represents a coalition of public and private home builders, and local land owners, in Morgan Hill. On behalf of our client, we have reviewed the materials relating to the City's proposed development impact fee increase prepared for the City Council's September 4, 2019 meeting, which was continued from April 3, 2019.

Based on our review of the staff report prepared for your meeting on September 4, 2019 ("Staff Report"), we understand that the City has undertaken additional review and that the current proposal reflects a reduction to the originally proposed increase. However, the methodology remains unclear. Despite the substantial concerns raised by affected stakeholders prior to the City's continuance of this item in April, the City has proceeded without providing any meaningful opportunity for stakeholders to fully assess the adequacy of the justification for the fees, and the impacts of the proposed fees on the future of housing development in the City.

Through its actions, the City has effectively denied our client its basic request for an opportunity to evaluate the legally required documentation to support the proposed fee increase. As one example, the Staff Report and related documents, including documents prepared well in advance of the hearing date and responsive to several comments submitted by stakeholders in April, were released late Friday afternoon before a holiday weekend, leaving one business day before the hearing date.

1. Changes and Updates Following Continuance of Hearing

In part, the City has proceeded with the following: (1) the Nexus Study has been revised and updated as of July 9, 2019 ("Revised Nexus Study"), (2) a memorandum to the City Council

Hanson Bridgett LLP

425 Market Street, 26th Floor, San Francisco, CA 94105

hansonbridgett.com

Attachment: 14 Supplement 1 (2481 : Updating Development Impact Fees)

dated September 4, 2019, specifically addressing our April 2, 2019 letter, was prepared by Dat Nguyen, the Finance Director and reviewed by Christina Turner, the City Manager (Attachment 7 to the Staff Report), and (3) a memorandum to Dat Nguyen dated April 10, 2019, specifically addressing our April 2, 2019 comment letter, was prepared by Willdan Financial Services ("Willdan").

The current fees are \$38,682 for a single-family unit, \$32,377 for a multi-family unit greater than 1,200 square feet, and \$28,672 for a multi-family unit less than 1,200 square feet. The proposed total fee increase has been reduced (with the removal of park and general public facilities impact fees), from the initial proposal for \$53,405 for a single family dwelling unit to \$43,695, from \$41,551 for a multi-family dwelling unit to \$33,417 and from \$35,313 for a senior/downtown/accessory unit to \$28,672.

While we are encouraged by the City's efforts to more carefully consider the methodology in calculating the proposed increase as well as the implications of the proposed fees on the feasibility of housing development, the significant increase warrants close review. But the City's continued reluctance to release relevant information in a timely manner has prevented our client, its consultants, and others from providing critical feedback.

2. Requests for Information, Including Under the Public Records Act, and City's Non-Responsiveness

As you are aware, by letter dated April 2, 2019, a copy of which is attached, we expressed our initial concerns regarding the proposed fee increase and the adequacy of the Nexus Study. By separate letters, the Building Industry Association of the Bay Area expressed its concerns with the proposed fee increase, and Glenrock Builders, Inc. objected to the proposed fee increase. Each of the letters outlined specific concerns and requested that the City more fully assess whether any new or increased fee would individually or cumulatively represent a constraint to new housing and complete a more careful analysis of cost projections.

By letter dated August 20, 2019, in anticipation of the hearing scheduled for this week and having no update from the City, we submitted a request made pursuant to the Public Records Act, Government Code Sections 6250, *et seq.* (the "Act"), for records relating to the proposed fee, a copy of which is attached hereto. Section 6253(c) of the Act requires that within 10 days from receipt of a request, a city shall determine whether the request seeks copies of disclosable public records in its possession and shall "promptly notify the person making the request of the determination and the reasons therefor." In unusual circumstances, the time limit prescribed may be extended by written notice.

As of the morning of August 30, 2019, the tenth day following our request, we had received no response or acknowledgment whatsoever, notwithstanding that the City had in its possession the Revised Nexus Study dated July 2, 2019 as well as the April 10, 2019 memorandum prepared by Willdan to respond to our April 2, 2019 letter. We contacted both the City Clerk's Office and City Attorney's Office on August 30, 2019 and in response, the City Attorney provided the following response by email on **Friday at 2:34 pm**:

We will provide all non-privileged records responsive to your request within a reasonable period of time, as required by Government Code section 6253. However, your request includes,

without any limitation, all records (including correspondence and memoranda), related to the City's fee study as well as similar records related to each of our master plan documents.

Due to the breadth of your request and the volume of information that we need to collect and review for responsiveness and privilege, it will take time to compile all of the records you have requested. We can provide records on a rolling basis starting next week, but **we anticipate it will take several weeks to produce responsive electronic records**. It may take longer to produce hard-copy documents that are located in off-site storage.

Unless you request otherwise, we will begin by producing non-privileged correspondence regarding the fee study. In the meantime, if there are other specific documents that you would like to receive before the hearing on Wednesday, we would be happy to provide those separately.

For convenience, all of the City's infrastructure plans can be found here: <https://www.morgan-hill.ca.gov/1646/Infrastructure-Master-Plans>. We will also forward you a link to the agenda materials when they are made available **later today**.

(Emphasis added.) There are several issues raised by the City's response, which in part, does not conform to the requirements Act.

First, our request seeks documentation relating to the proposed fee increase, and given that the City is actively involved in this effort, relevant documentation should be readily available. Relatedly, to the extent that the Revised Nexus Study finalized in July (it is dated July 2, 2019) and responses to our comment letter prepared by Willdan in April and were in the City's possession (the memorandum prepared by Willdan is dated April 10, 2019), the City should have earlier responded to our records request with a status update, and/or provided us with copies of these documents before Friday afternoon. The City's lack of responsiveness and lack transparency on an issue that will significantly impact the future of housing in Morgan Hill is problematic.

Second, to the extent our request relates to records that are voluminous and perhaps not relevant to our inquiry, the City is required under the Act to assist in identifying records and information that are responsive to the request. Section 6253.1 states in pertinent part, "[w]hen a member of the public requests to...obtain a copy of a public record, the public agency, in order to assist the member of the public make a focused and effective request that reasonably describes an identifiable record or records, shall do all of the following, to the extent reasonable under the circumstances: (1) Assist the member of the public to identify records and information that are responsive to the request..."

3. Flawed Analysis in Responsive Memoranda

In our April 2, 2019 letter, we expressed our concern that in light of the current housing crisis, it is vital that the City also evaluate the long-term effect the proposed fee increases will have on

the feasibility of developing any new housing as envisioned under the General Plan, and on the ever-increasing costs of existing housing. As an initial matter, the memorandum prepared by the Finance Director in response to our letter completely ignores the impact of the increased fees on market-rate housing development.

In its focus on affordable housing projects, it purports to demonstrate that the proposed fee increases in will not impact affordable housing development in Morgan Hill. While acknowledging that the proposed increases are significant in both dollar and percentage, the memorandum explains that when factoring in the elimination of the City's Residential Development Control System (RDSCS) contributions for affordable housing projects, affordable housing projects would see a significant decrease in the combined contribution amount.

Moreover, the memorandum simply demonstrates that because affordable housing projects are no longer required to compete in the RDSCS process and, therefore, can be awarded an allotment without having to make a public benefit contribution, the proposed fees can potentially be lower than what would have been required under the RDSCS process. Even assuming for the sake of argument that the two affordable housing projects used as examples are representative of all affordable housing projects in the City, the lower fees that would be required under the proposed fees are a result of not having to provide a RDSCS contribution to obtain an allotment.

In order to adequately assess impacts on all housing development in the City, a similar analysis, based on a broader range of housing types, for both affordable and market-rate housing must be undertaken.

4. Revised Nexus Study Remains Inadequate

The memorandum prepared by Willdan dated April 10, 2019 in response to our letter accurately describes the basic legal requirement that a nexus study demonstrate how there is a reasonable relationship between the need for the public facility and the type of development project on which the fee is imposed. The study methodology described in the Revised Nexus Study and setting forth the following six steps to calculate the impact fees is also sound: (1) Estimate existing development and future growth; (2) Identify facility standards; (3) Determine facilities required to serve new development; (4) Determine the cost of facilities required to serve new development; (5) Calculate fee schedule; and (6) Identify alternative funding requirements.

However, accuracy in the underlying assumptions and projections is critical to justify the fee. The significant increase proposed suggests a reliance on flawed data that must be closely scrutinized by the City. Indeed, the calculation of fees is complex, and while Willdan asserts that its methodology is consistent with "standard practice in the industry, and with case law interpreting this requirement," case law decided as recently as May 15, 2019 demonstrates the complexity of a legally defensible study. (*Boatworks LLC v. City of Alameda* (2019) 35 Cal.App.5th 290.)

Significantly, in *Boatworks LLC*, the Court of Appeal struck down impact fees adopted by the City of Alameda based on a nexus study prepared by Willdan. In part, the Court held that the fees improperly passed through the purported cost of acquiring land for parks that the City already owned and that the City could not include future, unopened parks in the calculation of the baseline for determining the amount of parkland necessary to maintain existing service levels in the City when the City expressly intended to use the impact fees to pay for the

Honorable Mayor Constantine and Members of the City Council
September 3, 2019
Page 5

construction of those parks. The case underscores the importance of closely examining the information underlying a nexus study. Our client and others request the opportunity to do so, and request that the City demonstrate that it has done so prior to rendering its decision.

For example, the memorandum prepared by Willdan explains that the facilities information is based on City master planning efforts and City staff expertise and such facilities are required to serve the City's projected 2035 General Plan service population. We have requested information relating to master planning efforts in order to review it for consistency and the City has yet to provide copies of such documents.

As another example, the August 26, 2019 letter from Glenrock Builders, Inc. identifies a potentially significant deviation from the projected cost of building planned library facilities, which the Revised Nexus Study states in Table 5.3 will be \$4,500,000 for a 5,000 square foot expansion. Based on its recent, independent research, Glenrock Builders, Inc. found the projected cost is less than \$1,750,000. Glenrock requested an evaluation of estimated costs. Yet the Revised Nexus Study fails to address this apparent discrepancy and does not explain how the City determined the cost of required facilities.

We reiterate that the drastic increases purportedly justified by the Revised Nexus Study, warrant close examination. Based on the foregoing, and in light of the fact that relevant documents specifically requested by our office will not be made available for review for several weeks, we request that the item be continued.

We appreciate your time and consideration.

Very truly yours,



Kristina D. Lawson

KDL:rsc

Attachments

Attachment: 14 Supplement 1 (2481 : Updating Development Impact Fees)

Attachment 1

KRISTINA D. LAWSON
 PARTNER
 DIRECT DIAL (925) 746-8474
 DIRECT FAX (925) 746-8490
 E-MAIL klawson@hansonbridgett.com



April 2, 2019

VIA ELECTRONIC MAIL

irma.torrez@morganhill.ca.gov
rich.constantine@morganhill.ca.gov
larry.carr@morganhill.ca.gov

yvonne.martinezbeltran@morganhill.ca.gov
rene.spring@morganhill.ca.gov
john.mckay@morganhill.ca.gov

Honorable Mayor Constantine and Members
 of the City Council
 City of Morgan Hill
 17575 Peak Avenue
 Morgan Hill, CA 95037

Re: Request for Postponement; April 3, 2019 City Council Agenda Item No. 13: Resolution
 Updating the City's Select Development Impact Fees

Dear Honorable Mayor Constantine and City Councilmembers:

This office represents a broad coalition of public and private home builders as well as local land owners. On behalf of our client, we have reviewed the Staff Report prepared for Agenda Item No. 13 for the City Council's April 3, 2019 meeting, to (1) adopt of the Development Impact Fee Update Study prepared by Willdan Financial Services and dated January 31, 2019 ("Nexus Study") and (2) adopt a resolution "updating the City's select Development Impact Fees." We have also preliminarily reviewed the Nexus Study.

To be clear, and what the Staff Report fails to simply state, the proposed fee "update" to "select" Development Impact Fees proposed for adoption are in fact, substantial fee increases that include for single family dwellings, increases for public facilities from \$552 to \$3638, for water from \$3,902 to \$8,914, and for parks from \$5,790 to \$7,201 (the originally proposed increase based on the Nexus Study was to \$14,402). Traffic impact fees will increase from \$2,006 to \$3,107.

Also omitted from the Staff Report and Nexus Study is a direct comparison of the total proposed fee amounts and maximum justified fee amounts, against the current fees, thereby minimizing the effect of the proposed actions. Significantly, the Nexus Study purports to justify maximum increases of even more, reflecting an increase above current fees by 38% for single family dwelling units and 28% for multi-family dwelling units. The total maximum residential fee justified by the Nexus Study is \$53,405 for a single family dwelling unit, \$41,551 for a multi-family dwelling unit, and \$35,313 for a senior/downtown/accessory unit.

We write to respectfully request that you postpone this item until such time as this council, all affected stakeholders and members of the public have had a meaningful opportunity to closely

Hanson Bridgett LLP

425 Market Street, 26th Floor, San Francisco, CA 94105 hansonbridgett.com

Attachment: 14 Supplement 1 (2481 : Updating Development Impact Fees)

examine the legal adequacy of the justification for the fee increases provided by the Nexus Study and as necessary, require additional data and analysis. In light of the current housing crisis, it is vital that the City also evaluate the long-term effect the proposed fee increases will have on the feasibility of developing any new housing as envisioned under the General Plan, and on the ever-increasing costs of existing housing. When combined with the recent increase in Below Market Rate requirements, which now require 15% (up from 8%) of residential projects to be affordable units, and the increase in the In-Lieu Housing Fee from \$12.92 to \$19.70 per habitable square foot of residential building area of market-rate housing (also ignored in the Staff Report), the proposed development impact fee increases will have a devastating impact on the ability to develop any new housing whatsoever.

As summarized below, it is clear from even a preliminary review of the Nexus Study that it does not adequately establish and evidence an equitable relationship between the services and facilities to be funded by the proposed fees and the impacts resulting from future development, and therefore, does not satisfy the requirements of the Mitigation Fee Act, Government Code Section 61000 *et seq.*

The legal requirements for the enactment of development impact fees are set forth in the Mitigation Fee Act and were established by the Legislature specifically “in response to concerns among developers that local agencies were imposing development fees for purposes unrelated to development projects.” (*Barratt American, Inc. v. City of Rancho Cucamonga* (2005) 37 Cal.4th 685, 691.) To increase development impact fee amounts, the Mitigation Fee Act requires the City to satisfy all of the following requirements: (1) Identify the purpose of the fee; (2) Identify the use to which the fee is to be put. If the use is financing public facilities, the facilities shall be identified; (3) Determine how there is a reasonable relationship between the fee's use and the type of development project on which the fee is imposed; and (4) Determine how there is a reasonable relationship between the need for the public facility and the type of development project on which the fee is imposed.

First, the Nexus Study lacks basic information to support the requisite need for the proposed fees. More specifically, the Nexus Study does not adequately identify the new facilities and facility improvements to be funded from the fee increases, and demonstrate that such facilities and improvements will be required as a result of new development. For example, the parks fee analysis does not specifically identify the 40.40 acres of parkland to be acquired improved to justify the fee. In addition, the planned facilities listed in Table 3.3 of the Nexus Study are described as those planned through the 2035 planning horizon but the Nexus Study fails to establish that the additional facilities and improvements are required to accommodate future growth. It appears to assume, without any support, that existing facilities have no additional capacity to accommodate growth.

At a minimum, the Nexus Study must be supplemented and revised to identify the current and projected level of service for each public facility and how the additional facilities or improvements will be needed to accommodate future growth. This should be done by quantifying the projected burden that new development will place on the City's infrastructure, and allocating the costs of providing the needed public services between the existing and new populations

Second, it is not clear that the Nexus Study utilizes accurate growth projections to serve as the basis of the City's anticipated future public facilities and infrastructure needs. The Nexus Study appears to rely on imprecise data to derive population and land use assumptions. Without

Honorable Mayor Constantine and Members of the City Council
April 2, 2019
Page 3

additional supporting information, and evidence of consistency with the City's existing plans, the City's speculative determinations regarding future growth cannot support the required finding of the anticipated need created by new development. The drastic increases purportedly justified by the Nexus Study, warrant a closer examination of the assumptions relating to residential development densities, land uses, and populations.

As a practical matter, while the Nexus Study is generally based on the projected development to 2035 under the General Plan, the effect of the fee increase will essentially render those projections unachievable—particularly when combined with the recently increased BMR requirements—and exacerbate existing impediments to housing development, contrary to every statewide and regional policy and mandate on housing.

Finally, we note that due to the lack of outside sources to fund the operation and maintenance of the new parks, the park impact fee as initially proposed was reduced by half. The Nexus Study indicates that non-fee funding is also needed for Public Facilities and yet no corresponding reduction appears to be proposed for the proposed Public Facilities fee. Once adopted, the Nexus Study presumably will provide the basis for further increases up to the maximum amounts established therein and yet it is not clear when, how and on what basis the City may adopt further increases.

Accordingly, we urge the council to postpone its consideration of the proposed increase in development impact fees to allow additional time to ensure the legal adequacy of the Nexus Study.

We appreciate your time and consideration, and look forward to providing detailed comments once we have had an opportunity to fully evaluate the Nexus Study.

Very truly yours,



Kristina D. Lawson

KDL:rsc

Attachment: 14 Supplement 1 (2481 : Updating Development Impact Fees)

Attachment 2

ROBIA S. CRISP
 SENIOR COUNSEL
 DIRECT DIAL (415) 995-5806
 DIRECT FAX (415) 995-3455
 E-MAIL rcrisp@hansonbridgett.com



August 20, 2019

VIA EMAIL AND U.S. MAIL

Michelle Bigelow, MMC, CPMC
 Records Manager
 Morgan Hill City Clerk's Office
 17575 Peak Avenue
 Morgan Hill, CA 95037

Re: Public Records Act Request

Dear Ms. Bigelow:

Pursuant to the California Public Records Act, Government Code Sections 6250 *et seq.*, we hereby request copies of the following records and writings relating to the proposed update to the City's Development Impact Fees to the extent they are within the possession, custody or control of the City of Morgan Hill ("City"):

1. Any and all correspondence, memoranda, email communications, and other writings prepared, owned, used, referenced or retained by the City relating to the Development Impact Fee Update Study prepared by Willdan Financial Services and dated January 31, 2019 (the "Nexus Study").
2. To the extent not included in Item No. 1 above, any and all correspondence, memoranda, email communications, and other writings prepared, owned, used, referenced or retained by the City identifying the new facilities and facility improvements to be funded from the fee increases, including the most recent and final versions of (a) the City's Public Safety Master Plan, (b) Utility Master Plan documents, (c) Bikeways, Trails, Parks, and Recreation Master Plan and (d) Storm Drainage Master Plan.
3. To the extent not included in Item Nos. 1-2 above, any and all correspondence, memoranda, email communications, and other writings prepared, owned, used, referenced or retained by the City relating to the planning and cost estimate for a third fire station.

For purposes of this request, references to the City include the City Council, Planning Commission, all City departments, elected or appointed officials, staff, employees, contractors, consultants, and agents.

In addition, "writings" is defined in Section 6252(g) of the Public Records Act as "any handwriting, typewriting, printing, photostating, photographing, photocopying, transmitting by electronic mail or facsimile, and every other means of recording upon any tangible thing any form of communication or representation, including letters, words, pictures, sounds, or symbols,

August 20, 2019
Page 2

or combinations thereof, and any record thereby created, regardless of the manner in which the record has been stored.”

If you require clarification of this request or have any questions about the nature or scope of this request or whether particular records and information in the department's possession are responsive to this request, we request your assistance to identify records and information that are responsive to this request per Government Code section 6253.1(a).

If you do not agree that the documents sought in this letter are required to be produced as public records pursuant to Government Code section 6250 et seq., please identify the applicable exclusion or exception to the Public Records Act that you believe applies to this request.

Our preference is to receive copies of the records electronically by e-mail or on a CD. However, if electronic copies are not available on a ready and cost-efficient basis, paper copies are hereby requested. We agree to pay the City at a rate of 10 cents per page for the direct costs of duplication pursuant to Government Code section 6253(b).

We look forward to receiving your response within the 10-day period required by Section 6253(c) of the Public Records Act.

Should you have any questions or comments, please do not hesitate to contact me. Thank you in advance for your assistance.

Very truly yours,



Robia S. Crisp

RSC

cc: Kristina Lawson, Esq.

Attachment: 14 Supplement 1 (2481 : Updating Development Impact Fees)

KRISTINA D. LAWSON
PARTNER
DIRECT DIAL (925) 746-8474
DIRECT FAX (925) 746-8490
E-MAIL klawson@hansonbridgett.com



Item # 14

AGENDA DATE: 09/04/19
SUPPLEMENT # 2

September 4, 2019

VIA ELECTRONIC MAIL

irma.torrez@morganhill.ca.gov
rich.constantine@morganhill.ca.gov
larry.carr@morganhill.ca.gov

yvonne.martinezbeltran@morganhill.ca.gov
rene.spring@morganhill.ca.gov
john.mckay@morganhill.ca.gov

Honorable Mayor Constantine
and Members of the City Council
City of Morgan Hill
17575 Peak Avenue
Morgan Hill, CA 95037

**Re: Request for Continuance; September 4, 2019 City Council Agenda Item No. 14:
Resolution Adjusting Select Development Impact Fees**

Dear Honorable Mayor Constantine and City Councilmembers:

We are writing to follow up on our letter submitted to you yesterday afternoon, to reiterate the need for a continuance of Item No. 14 for the proposed increase in development impact fees which appears on the agenda for your meeting this evening. The Finance Director describes the proposed fee increase as "significant in both dollar and percentage terms" in his memorandum to the City Council dated today, and stakeholders resoundingly agree that the proposed increase will significantly affect the feasibility of creating new housing in the City.

Yet, at 11:49 am today, roughly seven hours before the scheduled hearing for an increase in impact fees, we received an email from City staff transmitting a first set of documents purportedly responsive to our August 20, 2019 request for records relating to the proposed fee increase. The documents appear to include hundreds of pages which cannot reasonably be reviewed and analyzed in the mere hours that remain before tonight's meeting. Frustratingly, all of these documents were in the City's possession and could easily have been provided last week in response to our formal records request, or even earlier in response to our numerous informal communications with City staff regarding the scheduling of this matter for City Council review.

Where outstanding questions remain regarding the adequacy of the Revised Nexus Study, the City Council should not rubber stamp the proposal over community and stakeholder concerns. We urge the City Council to continue this item until such time as the City, stakeholders and other members of the public have the information necessary to fully evaluate the justification for the fee increase and its potentially devastating long-term impacts on housing development.

Hanson Bridgett LLP

425 Market Street, 26th Floor, San Francisco, CA 94105 hansonbridgett.com

Attachment: 14 Supplement 2 (2481 : Updating Development Impact Fees)

Honorable Mayor Constantine and Members of the City Council
September 4, 2019
Page 2

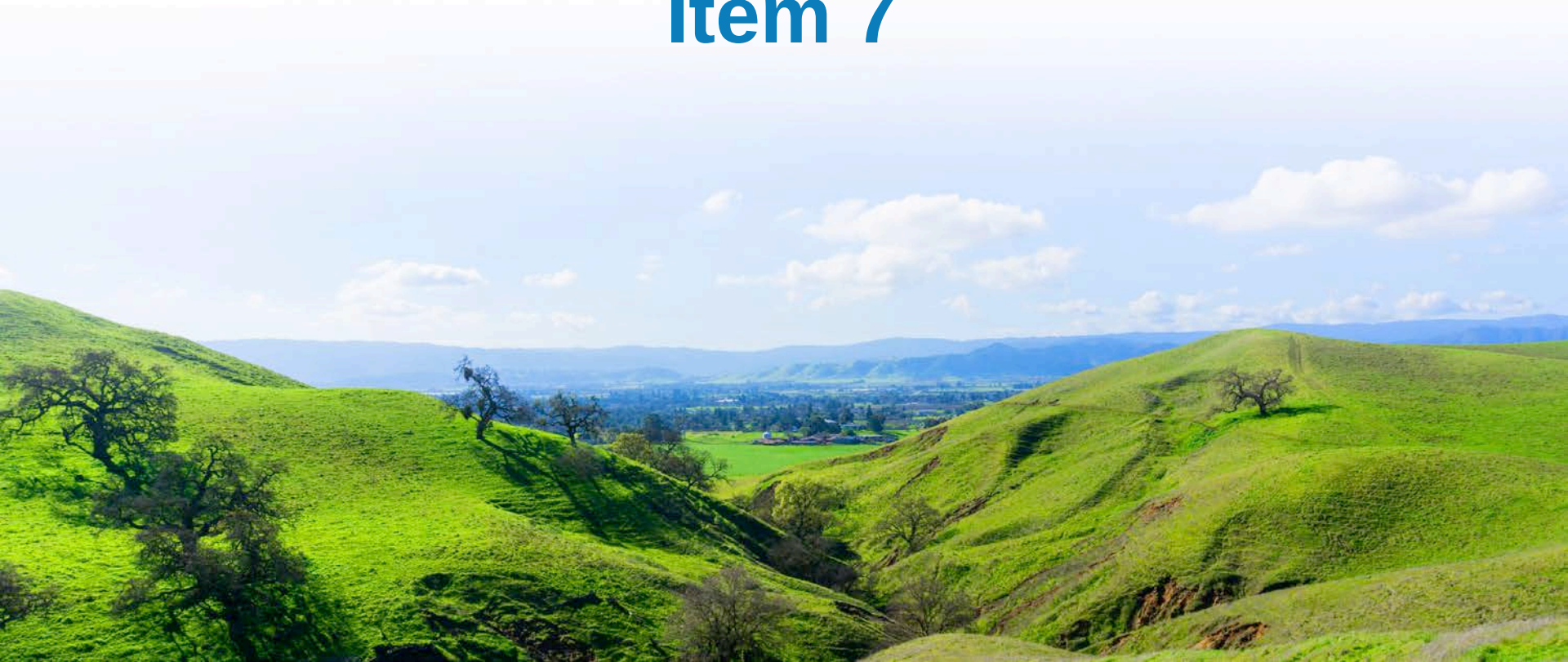
We appreciate your time and consideration.

Very truly yours,



Kristina D. Lawson

Ordinance Requiring New Buildings to be All-Electric Item 7



WHY



- Climate Crisis is real
- Electricity delivered by SVCE is now decarbonized...making natural gas emissions account for about one-third of all local greenhouse gas emissions
- Greatest opportunities for improvements are present at the time of initial construction

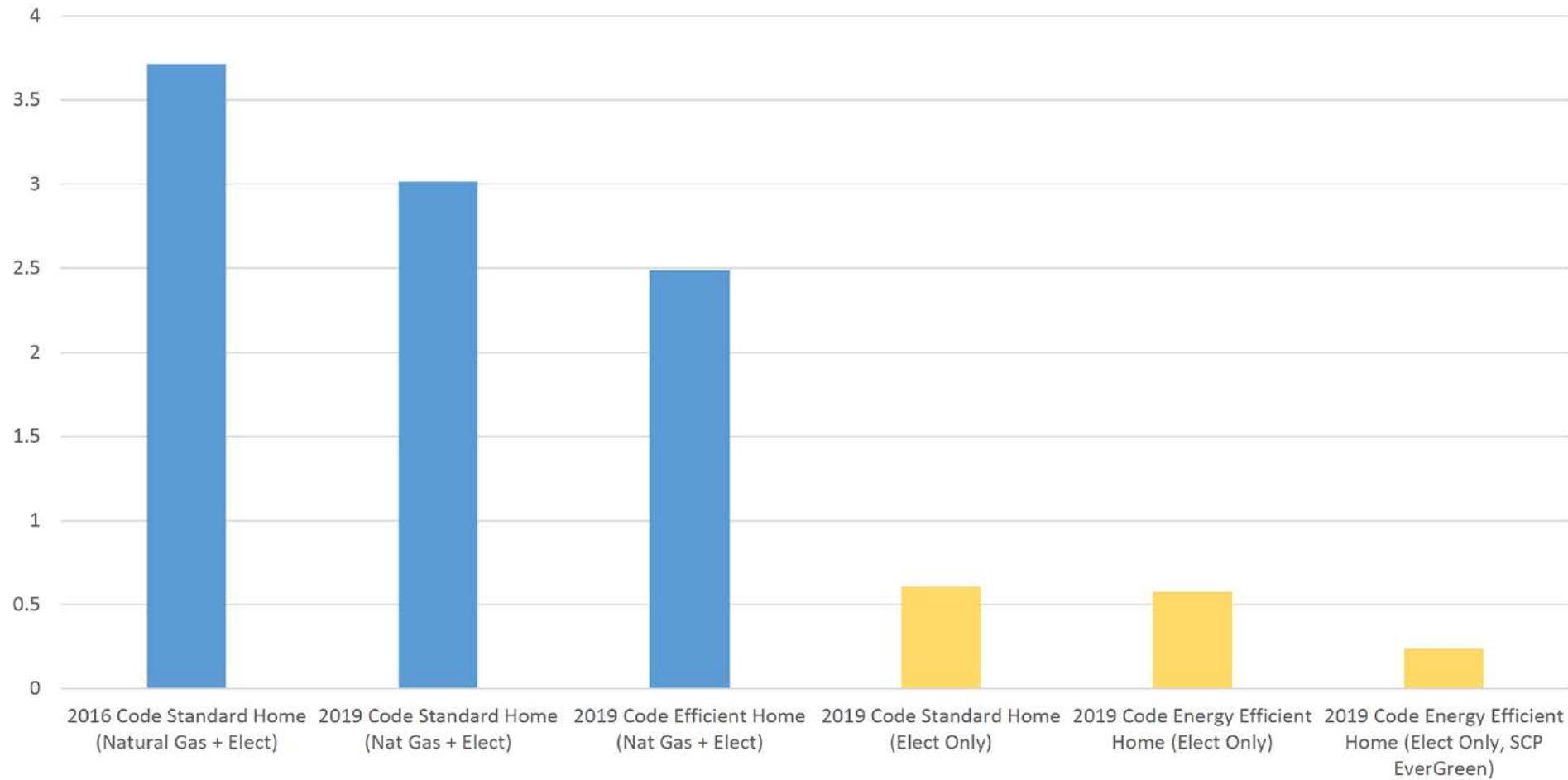
ADVANTAGES OF ELECTRIFICATION



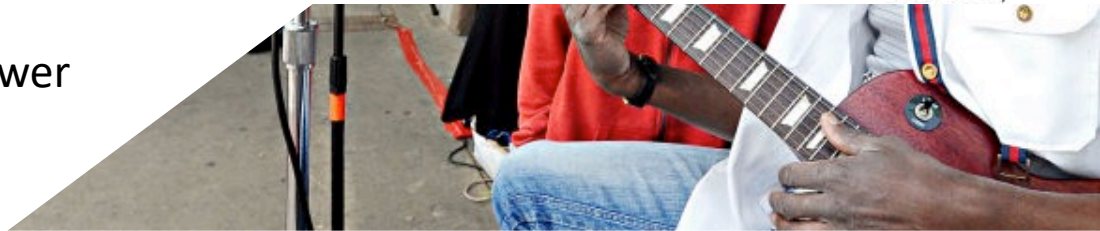
- Cleaner and Greener
- Reduced cost of construction
- Potential for property owners to produce their own energy
- Better indoor air quality
- Elimination of gas leaks and fires



Yearly Per Home Emissions (MT CO2e)



Slide provided by Sonoma Clean Power



Costs of Building All Electric Homes Versus Homes with Gas



Required Measure	Average Cost versus Gas Appliance
Heating/Cooling (Heat Pump)	\$221 in cost savings
Water Heating (Heat Pump Water Heater)	\$0 in cost savings
Dryer (Electric)	\$0 in cost savings
Cooking (Induction)	\$0 in cost savings
Electric Service Upgrade	\$600 in additional costs
Gas Infrastructure	\$6,550 in cost savings
Total Costs	\$6,171 in cost savings



Slide provided by Sonoma Clean Power
Source: California Energy Codes and Standards
Cost-effectiveness Study - Low-Rise Residential



Proposed Ordinance



- All New Buildings All-Electric except if:
 - Building Permit applied for before March 1, 2020
 - No Energy Code model for that building type
 - If Council determines natural gas use is in the public interest



What About Outages?

- Nearly all modern gas appliances don't work without electricity
- Current "outage season" is a temporary situation until PG&E hardens their transmission and distribution lines + adds switching capabilities buildings being built today will be present for decades after "public safety power shutoff" has left our vernacular
- Natural gas supplies can be interrupted too
- Many residents are building their own "outage-resilient" electrical systems....something that cannot be done with gas



What About Costs?

- Ordinance only allows enforcement when a “cost effective” path has been identified by the CEC.....this has been done for most building types
- “Cost Effective” means the economic benefits will outweigh the costs over the life of the building
- Cost Effective studies conducted with outdated equipment as required by Federal law – real buildings will perform even better



What About Costs?

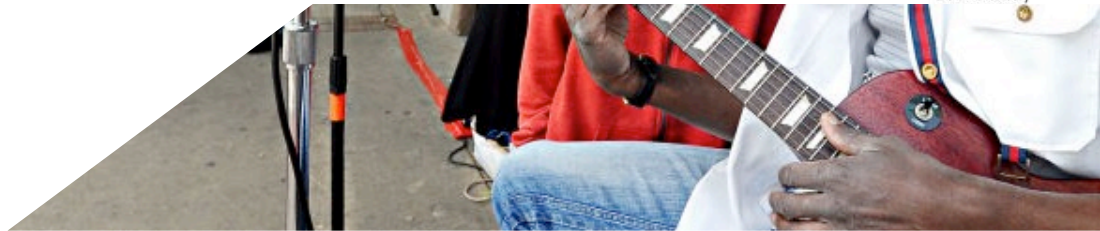
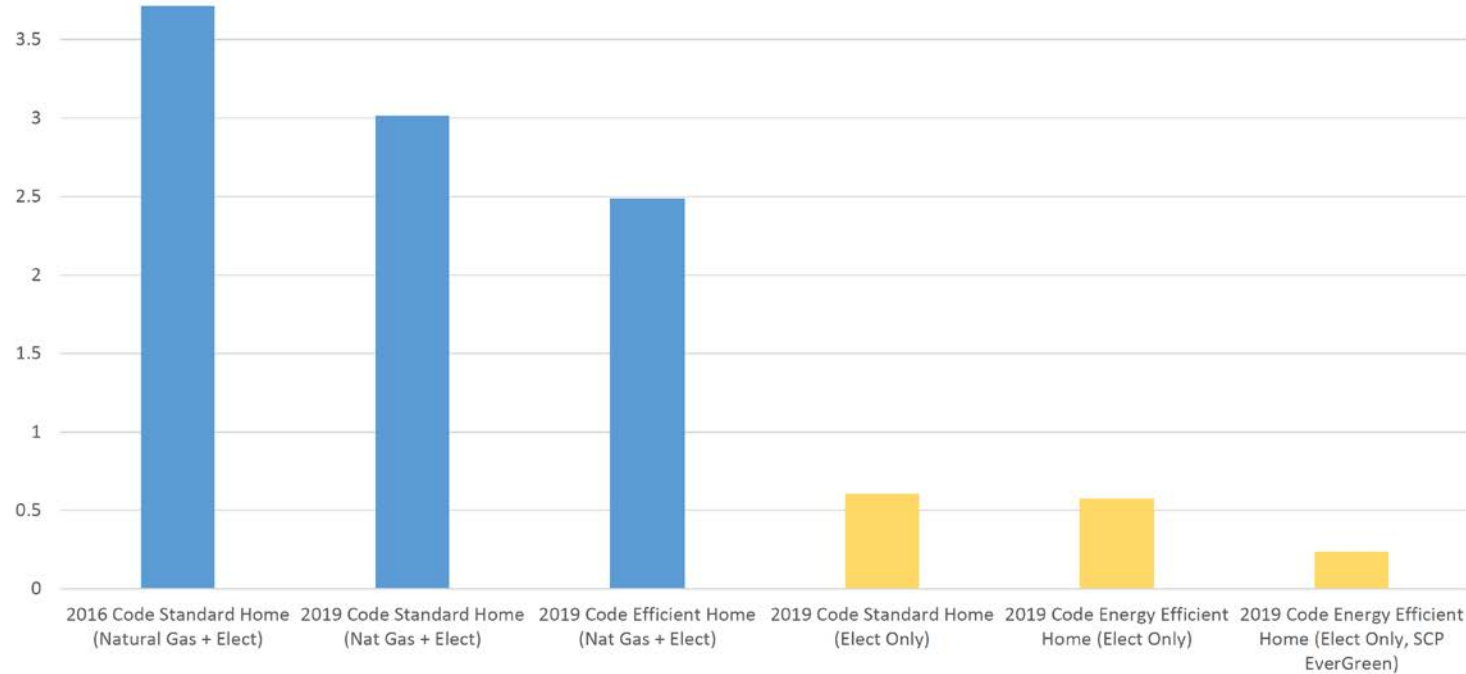
- If a developer is concerned about buyers not purchasing a home because of high electrical bills, investing construction cost savings into solar panels can zero out the entire bill
- Cost of health care for respiratory problems (asthma) caused by gas combustion is another cost not typically accounted for – low income children are the most highly impacted



Climate Crisis is Real



The City may not have the resources to lead in many environmental areas, but we can lead in this area by adopting exemplary policies that other cities throughout the world can follow





CITY OF MORGAN HILL

Item # 07

AGENDA DATE: 10/23/19
SUPPLEMENT # 1

From: [Michelle Bigelow](#)
To: [Anthony Eulo](#); [Christina Turner](#); [Chris Ghione](#)
Cc: [Angie Gonzalez](#)
Subject: Supplement - FW: In Support of Building Electrification Reach Code
Date: Tuesday, October 22, 2019 9:58:11 AM
Attachments: [190821 Cost effectiveness of all electric buildings.pptx](#)

Hi team,

Please find both the email below and the attachments as supplements to item 7.

Michelle Bigelow, MMC, CPMC
Council Services and Records Manager/Deputy City Clerk

City of Morgan Hill
City Clerk's Office
17575 Peak Avenue, Morgan Hill, CA 95037

D: 408.310.4678 **O:** 408.779.7259
michelle.bigelow@morganhill.ca.gov
morganhill.ca.gov | [facebook](#) | [twitter](#)

From: Scott Shell <Scott.Shell@ehdd.com>
Sent: Tuesday, October 22, 2019 9:35 AM
To: Michelle Bigelow <Michelle.Bigelow@morganhill.ca.gov>
Subject: In Support of Building Electrification Reach Code

Dear City Council Members

I am writing in support of your proposed ordinance prohibiting gas in new construction.

Our 65 person architectural firm has been designing all-electric buildings since 2001 and we can attest that it is affordable, reliable, and a robust solution for our clients. Please see the attached slide deck showing examples from our firm and many others. We are recommended it to all of our clients to avoid having an outdated technology that will require an expensive retrofit in the years ahead. Our largest client is the University of California which now prohibits gas for heating or hot water on all new buildings on all ten of their campuses for all building types including academic, student housing, office, labs, etc.

I support your requirement for electrification as I believe a slightly higher efficiency for a mixed fuel building *will not be a strong incentive*.

The City of Menlo Park cited this same reason in their staff report on why they are requiring all-electric:

"Sonoma Clean Power offered significant rebates to electrify the rebuild of homes after the 2017 wildfires. Permit applicants could choose between higher energy efficiency standards for a \$7,500 rebate or all-electric standard for a \$12,500 rebate. In addition to the all-electric rebate, a homeowner would save on upfront construction costs by not installing natural gas infrastructure. As

a result of the rebate program, only one-third of permit applicants or homeowners choose the all-electric home. It showed that incentive type regulations based on cost savings fall short on achieving the desired outcome.”

Regarding cooking, in multifamily buildings it is already standard practice to have electric stoves and customer acceptance has been high. Once people try induction stoves, they like it.

Hands-On Changes Hearts-and-Minds!



Sincerely,
Scott Shell

Scott Shell FAIA, LEED® AP BD+C, CPHC®
Principal

Pier 1 The Embarcadero, Bay 2
San Francisco, CA 94111
[+1 415-214-7277](tel:+14152147277)



WARNING: This message is from an external user. Confidential information such as social security numbers, credit card numbers, bank routing numbers, gift card numbers, wire transfer information and other personally identifiable information should not be transmitted to this user. For question, please contact the Morgan Hill IT Department by opening a new helpdesk request online or call 408-909-0055.

The Cost Effectiveness of Building Electrification

Comments from Bay Area Architects & Engineers

August 21, 2019

Scott Shell, FAIA, Principal

ehdd.





Casa Adelante, 2060 Folsom, San Francisco



Maceo May Veterans Apartments, Treasure Island



Balboa Upper Yard Family Apts, San Francisco

Malcolm Harris, Principal

MITHŪN

We have a number of all-electric multifamily housing projects. I'm a huge, huge fan of this change to all-electric multifamily housing. It is better in every way, a great simplification of the system. Less expensive, higher performance, less maintenance, more sustainable.

It is a major cost saving move that pays for a lot of other upgrades.

At Maceo May we saw big savings from eliminating gas fired hydronic heating, the gas connection, and the solar thermal required by T24.

The savings paid for continuous exterior insulation, energy recovery ventilators (eliminating Z-ducts), electric resistance heat, and PVs. With these upgrades we are beating Title 24 by 20%, getting more Green Points, and lower GHGs on a grid that's getting cleaner.

The occupants get better indoor air quality benefits from the energy recovery ventilators.



Hunters Point Shipyard Block 52, San Francisco



Hunters Point Shipyard Block 54, San Francisco



681 Florida, San Francisco

Malcolm Harris, Principal

MITHUN

Overall the system is just much simpler—there is just one energy system—electrical, rather than two.

The gas fired boiler & hydronic systems are very problematic at every step from design to construction to maintenance. During construction there are often leaks. Commissioning is a constant challenge, and there are lots of tenant complaints in first few months. Operations is challenging as maintenance staff are not equipped to operate the digital BMS system.

Casa Adelante 127 residential Units, 9 stories, under construction. Developers: TNDC/CCDC, Architect: Mithun & YA Studio.

Maceo May 105 residential units, in permitting. Chinatown Community Development Center, Swords to Plowshares.

Balboa Upper Yard Family Apts 120 residential units, in design development. Developer Mission Housing Development & Related California.

Hunters Point Shipyard Block 52 136 residential units total, Design Development. Developer McCormack, Baron, Salazar.

Hunters Point Shipyard Block 54 136 residential units total, Design Development. Developer McCormack, Baron, Salazar.

681 Florida 136 residential units total, In Design Development. Developers: TNDC & MEDA



Santana Row Lot 11



UC Davis Webster Hall Replacement



American Geophysical Union

Hormoz Janssens, Principal



Almost all our projects are all-electric, I have only been using gas systems where required by the client.

Electric is almost always less expensive or cost neutral. Very rarely is it more expensive. Often it is our value engineering option.

Most project types work just fine. We are doing a 500,000 sf all electric office for Microsoft, with major cost savings using heat pumps vs a central plant.

We do lots of detailed cost analysis with developers to find the most cost-effective solution. For example, at Bay Meadows our all electric design for 1 million sf of development was significantly less expensive than a traditional rooftop package unit + boiler + reheat system.



UC Santa Cruz Student Housing West



270 Brannan, San Francisco



Chatam University Dining Commons

Hormoz Janssens, Principal

INTERFACE ENGINEERING

The space requirements are smaller for all-electric, instead of having two to three separate systems for space heating, cooling, and hot water, we can do it with a single heat pump system, that space can be used for other things or the building made smaller for more savings.

Maintenance is less than most conventional systems because you have just one system. Maintenance is just like an air-conditioning system, it's the same thing in reverse, and you eliminate the boiler.

A huge benefit for heat pumps is reducing water use. Using an air source heat pump for cooling rather than a cooling tower has large water savings.

We've done several all electric commercial food service projects that have been very successful. The Chef's quite skeptical at the beginning, but now say they will never go back to cooking on gas.



UC Santa Cruz Student Housing West



UC Irvine Student Housing West, Developer ACC



UC Riverside Dundee Residence Hall, Developer ACC

David Phillips, Associate Vice President for Energy & Sustainability UC Office of the President



The University of California has committed to carbon neutrality by 2025. We are prioritizing all-electric new buildings (required starting June 2019), and then electrifying existing buildings & systems over time.

Our studies show that all electric mechanical equipment capital costs are comparable for academic & lab buildings, and the costs are lower for residential buildings. Twenty year life cycle costs are comparable for Academic and labs buildings, and lower for residential buildings.

UC has many all-electric housing projects, office buildings, and laboratories now in place and many more in design.

UC's carbon neutrality strategies are pragmatic: don't allow growth to increase carbon emissions; and then transition *existing* buildings and systems off fossil fuels over time.

Decarbonizing Your Campus thru Electrification, SCUP 2019



Exploratorium, San Francisco



Packard Foundation, Los Altos



Marin Country Day School, Corte Madera

Scott Shell, Principal



We have completed a dozen or so all electric buildings. 10-15 years ago it was not common in California, and we saw some cost premium on those early projects.

In the last 5-7 years all-electric has become much more common on our projects which are primarily commercial and educational. It is now generally cost neutral or less expensive. There are more manufacturers providing equipment, and the subcontractors are more familiar with installing it.

Last year we had an all-electric project go to bid and the total cost came back higher than expected. In an attempt to reduce cost, we asked the mechanical contractors to price a standard gas heating system instead. They came back with no cost savings between gas and all electric, so the client decided to stay with the preferred all-electric option.



Mark Day School, San Rafael



Boulder Commons



Lick Wilmerding High School, San Francisco

Scott Shell, Principal



When the University of California, one of our largest clients, decided to prohibit gas in new projects that really got our attention. It now seems irresponsible to recommend gas to our clients who may then have to retrofit them before that equipment reaches the end of its life in order to meet their carbon goals or local mandates to decarbonize. We don't want to be saddling our clients with stranded assets.

Last year I interviewed seven leading mechanical engineers that we work with asking if the building industry is ready to go all electric. They agreed that the vast majority of buildings can go all-electric, and the cost is competitive with a few exceptions.

Most of our all electric projects also include PVs, it is LESS expensive for our clients to get their electricity from PV than from their utility. With a power purchase agreement there is no out of pocket cost. Some clients decided to fund the PVs themselves since it provides a favorable financial return. Ten years ago solar was seen as an expensive solution for projects with big budgets. It is amazing to see how quickly that has flipped.



Cascade Apartments, Seattle



4700 Brooklyn Ave NE, Seattle

Shawn Oram, Principal



Ecotope has completed 26 central heat pump water heating projects since 2008, mostly 100-500 unit projects. Partial list:

Mid Rise | 50-400 dwelling units

- Stream - 134 units - (2) 10T Colmac Air-Source HP in below-grade parking
- Sunset Electric - 92 units - Colmac in below-grade parking
- Stackhouse - 120 units - Colmac in underground parking deck
- Augusta Apartments - 224 units - Colmac in below-grade parking
- Batik Apartments - 195 units - Colmac in underground parking deck
- Yesler 3 - 227 - Colmac in underground parking deck
- Jackson Apartments - 526 units - Colmac in underground parking deck
- Colina Apartments - 131 units, Sanden - Decentralized
- The Vale Apartments - 134 units - Versati 2, Multi-Pass
- Waterfront Place - 137/135 units - Versati 2, Multi-Pass
- Hopeworks - 67 units, Sanden CO2 Stacks

High Rise | 200-450 dwelling units

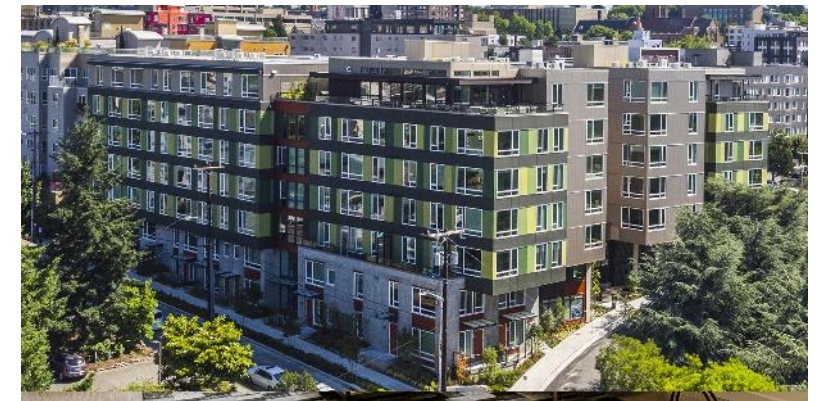
- 4700 Brooklyn - 284 units - Colmac with VRF Temp Maintenance
- Cascade - 430 units - Colmac with VRF Temp Maintenance
- 1200 45th - 245 units - In Design



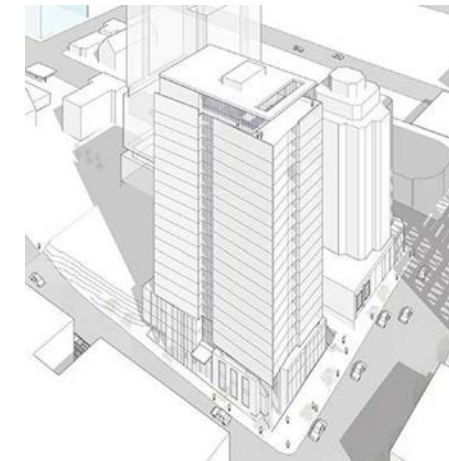
Batik Apartments, Seattle



Jackson Apartments, Seattle



August Apartments, Seattle



1200 NE 45th, Seattle



Coliseum Place, Oakland



Altamira Family Apartments, Sonoma

Peter Waller, Principal



We have several current all-electric multi-family projects. In our experience it has been indispensable to have a knowledgeable energy/Title 24 consultant on the team to help guide both analysis and design.

It is critical to share information about best practices and lessons learned. By sharing best practices we can reduce mistakes.

We work with both non-profit and for-profit housing developers that own and operate lots of buildings. It is important to make sure everyone is aware of the potential challenges that come with new technology.

The life span of the current generation of heat pump water heaters may be less than the traditional gas fired boilers, depending on operating conditions. We expect the life span will increase as the market becomes deeper and more sophisticated, but we try to be open about this reality with our clients. With that in mind provide access for maintenance and future replacement down the road.



Quetzal Gardens, San Jose



Valley Glen, Dixon



Plaza Point, Arcata

Sean Armstrong, Redwood Energy

Redwood Energy

Foremost Zero Net Energy Specialists in Multifamily Housing

All-electric construction consistently reduces construction costs and ongoing utility bills.

It saves between \$2,500 and \$5,000 per residence for the developer to not plumb gas. When infrastructure and appliance costs are added up, a recent study done by Rocky Mountain Institute found a median increased cost of \$8,800 more per house for gas infrastructure, piping, purchasing appliances and venting

Only education is preventing developers from profiting from the technological innovations available in the all-electric domain.

Developers have been choosing all electric construction because it cost less to build and that trend has been going on for 24 years now.

New construction is easy technically and financially and because the construction cost savings justify going all-electric.



Cloverdale, Corporation for Better Housing



Colonial House Apartments, Oxnard



Atascadero, Corporation for Better Housing

Sean Armstrong, Redwood Energy

Redwood Energy

Foremost Zero Net Energy Specialists in Multifamily Housing

New construction is easy technically and financially and because the construction cost savings justify going all-electric.

Because an all-electric building can achieve higher mechanical system efficiency than a gas burning building, it is lower cost for developers building all-electric to comply with the Title 24 Energy Code. We documented this in our report A Zero Emissions All-Electric Multi-family Construction Guide, see the graphic on page 7.

<https://fossilfreebuildings.org/ElectricMFGuide.pdf>



152 N. 3rd, San Jose



The Tidelands Housing, San Francisco

Peter Rumsey, Principal



There are great examples of all electric buildings for virtually every building type that are cost effective. It is very easy for our firm to design these systems, we are very familiar with them.

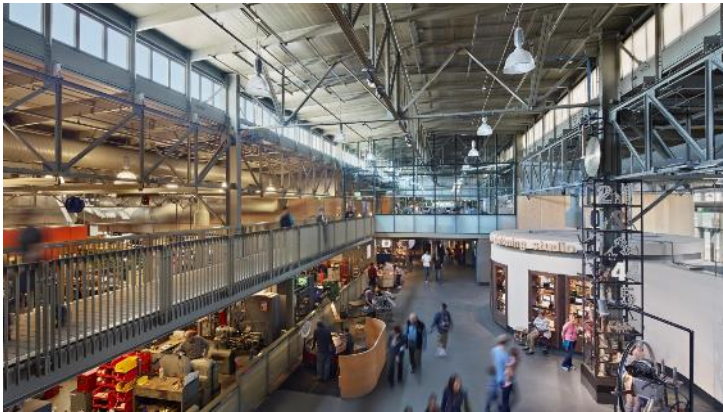
For Multifamily projects we are seeing a lot of developers use electric heating with high levels of insulation in apartments that don't need cooling.

All electric air-cooled VRF heat pumps are very common on multifamily projects up to ten stories where cooling is needed; this is very cost effective.

Developers are using VRF systems on small to medium sized commercial buildings. Production home builders have been using central heat pump heating and cooling units for many years. And we are seeing a surge in the use of larger heat pumps for generating hot water systems. Central hot water systems can have a cost premium, but it is very small as a percentage of the building cost.



Pier 70, Building 12



The Exploratorium, San Francisco

Peter Rumsey, Principal



Large 20 story multifamily high-rise require a water source heat pump and that equipment still has a cost premium.

Cooking remains a hard sell in many cases, a lot of people are very skeptical of giving up gas. Technically this isn't a problem, the experts at the Food Service Technology Center in San Ramon say an electric fryer provides better and more even heat than gas. Induction ranges are excellent.

The market for all electric buildings and heat pumps has been making significant inroads in California, and this had gotten the attention of manufacturers. General Contractors and mechanical subcontractors are getting more familiar with this approach as well.

Title 24 used to discourage electric heating of all types and is now more neutral on the issue. I understand that future versions of title 24 are going to be more encouraging of some types of electric heating.



Alexander Valley Medical Center



Goldman School of Public Policy + Housing



SMUD Office & Operations Building, Sacramento

Ted Tiffany, Principal



We have designed quite a few all electric buildings. The Goldman School of Public Policy is as designed all-electric and construction cost compared favorably to gas. This also allowed for individually metered apartments so tenants paid their own utility bills.

The UCOP did a robust cost analysis of various building types and in almost all cases it found lower life cycle costs with all-electric buildings. It is important to manage TOU rates. First cost savings are partly dependent on if you can eliminate the gas service, which in most cases you can; if you do this generally makes the construction cost less than mixed fuel buildings.

[https://www.ucop.edu/sustainability/ files/Carbon%20Neutral%20New%20Building%20Cost%20Study%20FinalReport.pdf](https://www.ucop.edu/sustainability/files/Carbon%20Neutral%20New%20Building%20Cost%20Study%20FinalReport.pdf)



Albany High School



Silver Oak Winery



Sonoma Clean Power

Ted Tiffany, Principal



For most building types and sizes, there is no technical reason preventing the industry from shifting to all-electric buildings.

Laboratories and Hospitals can be more of a challenge as all electric due to the high outside air loads, demands for sterilization, and high hot water loads. They are possible, but more challenging.



J. Craig Venter Institute Lab, San Diego



SFO Consolidated Admin Facility



Integrated Genomics Lab, LBNL

Eric Solrain, Principal



Integral currently has dozens of all-electric buildings recently complete, in construction, and in design. There has been a big sea change in recent years towards all-electric. Around 50% of our work is currently electric.

There is lot of momentum in Multi-family Residential and in Commercial projects moving to electric systems.

Comparing the construction cost of all-electric to gas depends on what you are comparing it to. If comparing to a high-performance design such as LEED Gold then all-electric is cheaper. If comparing to moderate performance building then all-electric is cost neutral. If comparing to the most basic design, there may be a small cost premium.

There are some significant code changes in California energy code in 2019 that will make all electric even more cost competitive, especially for multifamily.



435 Indio, Sunnyvale



415 Mathilda, Sunnyvale



380 N. Pastoria, Mountain View

Eric Solrain, Principal



All electric has several big advantages:

- Electric equipment takes up significantly less space and that space can be used for other things. At 1700 Webster the gas option filled the roof with equipment, while the heat pump option had much less equipment so they were able to put a nice deck and pool on the roof.
- Getting gas service to the equipment, and a flue out through the building can be challenging problems and cost money. Getting make-up air to gas boilers can be challenging.
- For large multi-family projects heat-pump dryers avoid all the problems associate with venting.
- There have been good advances in heat pump choices in recent years. Aermec and Climacool make excellent equipment, that can heat and cool simultaneously with robust controls.
- There are huge climate benefits to shifting from gas to electric. London is completely redoing it's 10 year old decarbonization plan which was drafted when they had a dirty electric grid. Their grid is much cleaner now so they are quickly revising the plan to promote electrification.



Edwina Benner, Sunnyvale



Stoddard Housing, Napa



Casa Adelante, San Francisco

Nick Young



In multifamily buildings with individual heating and hot water systems for each unit it's a no-brainer to go all-electric, from a cost, modeling, technology, and code compliance perspective. **All-electric should be the standard design for these projects.**

For Multifamily buildings with central domestic hot water there are also excellent options using electric heat pumps. We are seeing these projects go with Sanden, Colmac, and Nyle heat pumps.

A significant challenge is that Title 24 doesn't have a modeling pathway for central hot water systems. The CEC is working on fixing this, targeting the 2019 code cycle.

Our all-electric multi-family projects include: Edwina Benner Plaza in Sunnyvale, 2437 Eagle Ave in Alameda, St Paul's Commons in Walnut Creek, Stoddard Housing in Napa, Casa Adelante in San Francisco, and Maceo May in San Francisco.

Item # 07

AGENDA DATE: 10/23/19
SUPPLEMENT # 2

From: [Michelle Bigelow](#)
To: [Anthony Eulo](#); [Christina Turner](#); [Chris Ghione](#)
Cc: [Angie Gonzalez](#)
Subject: Supplement FW: Reach codes
Date: Tuesday, October 22, 2019 10:04:03 AM
Attachments: [Outlook-1498261934.png](#)
[Future proofing communities 3.pptx](#)

Hi team,

Please find attached a second supplement for item 7.

Michelle Bigelow, MMC, CPMC

Council Services and Records Manager/Deputy City Clerk

City of Morgan Hill

City Clerk's Office

17575 Peak Avenue, Morgan Hill, CA 95037

D: 408.310.4678 **O:** 408.779.7259

michelle.bigelow@morganhill.ca.gov

morganhill.ca.gov | [facebook](#) | [twitter](#)

From: Mark Wialbut <mark@automationandentertainment.com>

Sent: Monday, October 21, 2019 9:02 PM

To: Michelle Bigelow <Michelle.Bigelow@morganhill.ca.gov>

Cc: Paul Wilkinson <paul@automationandentertainment.com>

Subject: Reach codes

Dear Ms. Bigelow,

I am writing you in the hope that you can pass this information along to city council members.

the attached presentation details the folly of eliminating Natural Gas as an energy source in future buildings. I've done the math and detailed the costs to the environment and consumer.

Thank you for your time and consideration. Please feel free to contact me if you have any questions or concerns.

Sincerely,
Mark Wialbut

Automation & Entertainment, Inc.

Smart Home Technologists



Mark Wialbut | Automation and Entertainment Inc. | www.automationandentertainment.com

408.891.6148 (cell) mark@automationandentertainment.com (email)

Please consider the environment before printing this message

This email is intended only for the use of the party to which it is addressed and may contain information that is privileged, confidential, or protected by law. If you are not the intended recipient you are hereby notified that any dissemination, copying or distribution of this email or its contents is strictly prohibited.

WARNING: This message is from an external user. Confidential information such as social security numbers, credit card numbers, bank routing numbers, gift card numbers, wire transfer information and other personally identifiable information should not be transmitted to this user. For question, please contact the Morgan Hill IT Department by opening a new helpdesk request online or call 408-909-0055.

“Reach Codes”

The Good

The Bad

The possibilities

CURRENT REALITIES VS FUTURE POSSIBILITIES

Grid Power Facts

- ▶ **Solar panels installed on residential roofs without battery storage and sophisticated controls do not operate when PG&E's power is down**
 - ▶ automatically disconnected by code for safety
- ▶ **Natural Gas is several times more economical to use for heating than Electricity**
 - ▶ Negating NG would triple residential heating bills
- ▶ **Shifting the residential heating load from Natural Gas to the Public electric grid would increase that load's carbon footprint almost 3X**

Reach Codes

- ▶ **Proposed Reach codes intent is to prepare for an all electric future**
 - ▶ **The Good**
 - ▶ Electric wiring is cheaper than gas piping
 - ▶ **The Bad**
 - ▶ All electric = substantial increase in cost to operate households
 - ▶ California's new building codes already mandate better efficiency
 - ▶ **The Ugly**
 - ▶ Total reliance on an already overtaxed Public Grid
 - ▶ Need for more large fossil fueled power plants to handle increased load

What can we do today?

- Energy Efficiency: Make the most of the power we generate
 - This is the number one thing we can do to help lower our Carbon Footprint
- Prepare for the future
 - Develop building codes that encourage energy efficiency and a decentralized power grid.
- Use Natural Gas as a bridge to a renewable energy future
 - NG is the most efficient, economical and least polluting fossil fuel source
 - Every BTU not used in the home must come from the electrical grid

What can we do today?

- **Promote the Decentralization of our electric grid**
 - Make power where we use it and use it wisely
 - Develop Micro-grids with distributed power generation sources
 - Solar PV – residential and community installations
 - micro-cogeneration systems
 - Micro-Cogeneration plants are the most efficient use of NG
 - Grid power is inefficient: ~39% efficient
 - Locally deployed Cogen power is more efficient: ~88%
 - Incentives to encourage Energy storage systems that make it possible to utilize the sun's power day or night
 - Incentives to install the highest efficiency appliances

Localized, community based power is more efficient and resilient than energy delivered by a centralized power grid.

Economics of Natural Gas vs Electricity

Do the math: Cost of NG vs Electricity at PG&E's max Tier 1 Gas allowance

1kWh = 3412 BTU's

1 Therm = 100,000 BTU's

Gas

PG&E's Tier 1 allowance = 0.59 Therms / day

30 days per month = 17.7 Therms x \$1.27/Therm = \$22.48

Electric

PG&E's Tier 1 rate good for 9.9kWh/day, 30 days per month x 9.9kWh/day = 297kWh/month

PG&E's Tier 1 rate: \$0.224 delivery charge + PCE's "generation charges" @ \$0.084 = ~\$0.308/kWh

PG&E's Tier 2 rate = \$0.282/kWh + \$0.84/kWh (PCE generation charges) = \$0.366/kWh

PG&E's Tier 3 rate = \$0.493/kWh = \$0.577/kWh

Converting heating to electricity at Tier 1 NG use = 17.7 Therms now need to be converted to kWh

17.7 Therms = 1,770,000BTU's / 3412 (BTU's/kWh) = 518.8kWh = (297x\$0.308)+(221.8x\$0.366)=\$172.36

Cost of NG = \$22.48 vs Cost of Electricity for same heat value = \$172.36

Economics of Natural Gas vs Electricity

Example using household that only uses 1188kWh/month (max allowance T1 + T2)

The Cost of Heat

Electric vs Fuels - Comparison Result

Electric:

Electric rate (per kilowatt-hour) = 0.351
Cost of heat (per 100,000 BTU) = 10.29

Fuel:

NG cost @ Tier 1 rate
Natural gas cost per decatherm = 12.20
Burner efficiency factor = 96%
Cost of heat (per 100,000 BTU) = 1.27

Electricity
Costs 8.1 X
NG in this
example

Example using large household that uses 3500kWh/month (uses more than tier 1 & 2 allow)

The Cost of Heat

Electric vs Fuels - Comparison Result

Electric:

Electric rate (per kilowatt-hour) = 0.500
Cost of heat (per 100,000 BTU) = 14.66

Fuel:

NG cost @ use above Tier 1 rate
Natural gas cost per decatherm = 18.00
Burner efficiency factor = 90%
Cost of heat (per 100,000 BTU) = 2.00

Electricity
Costs 7.3 X
NG in this
example

Electric rates used include PG&E delivery and Peninsula Clean Energy Generation charges

Economics of Natural Gas vs Electricity

How many of people are willing to pay a utility bill that is 3X+ what they are paying today?

Cost of NG = \$22.48 vs Cost of Electricity for same heat value = \$172.36

The cost of heating a home with electricity is several times more expensive

That's at Tier 1 gas rate and Tier 1&2 Electric rates most homes exceed these Tiers in peak usage seasons

A high efficiency heat pump with a COP* of 3, electricity is still 2.6X more expensive to operate

*COP = Coefficient of Performance. A COP of 3 = for every KW in the heat pump triples the work performed by the electrical energy input

Electricity vs Gas Safety

Peninsula Clean Energy will argue that electricity is safer than gas.

This may be generally true, but most house fires are caused by cooking fires. These are not caused by gas or electricity they are mostly caused by negligence.

Consider homes that are forced to use electric heat rather than NG furnaces:

The homeowner discovers that their utility bill is a whopping 3X more than anticipated so they deploy electric space heaters throughout the home in an attempt to lower heating costs.

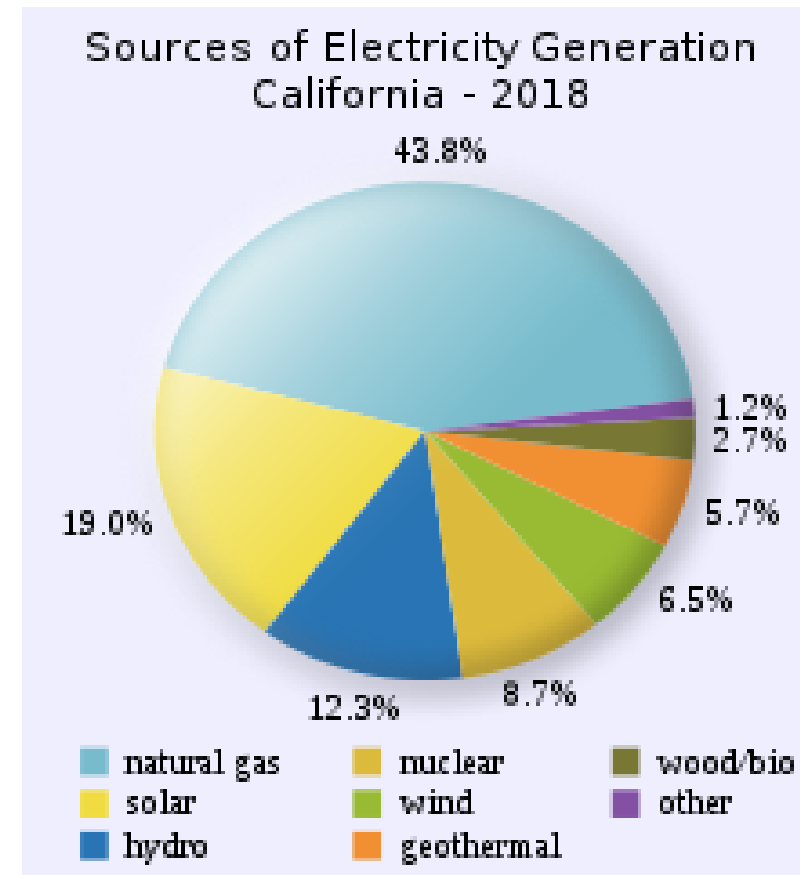
Now what's safer? A modern gas furnace with all the built in safety features or several electric space heaters distributed throughout the house?



Where does California's power come from?*

- ▶ Natural Gas
- ▶ Solar
- ▶ Hydro
- ▶ Nuclear
- ▶ Wind
- ▶ Geothermal
- ▶ Wood / Biogas
- ▶ other

*https://en.wikipedia.org/wiki/Energy_in_California



Natural Gas powers California

- ▶ ~44% of California's electricity is produced using Natural Gas
- ▶ Typical efficiency of a utility scale Combined Cycle Gas Turbine* generator = 43.7%
 - ▶ Overall efficiency of CCGT supplied utility power ~ 39%
 - ▶ Line losses reduce efficiency by ~ 5%
- ▶ For every Therm of Natural Gas a utility scale power plant uses we actually receive only 39% of the energy used to generate that power.
 - ▶ That translates to: for every BTU of NG not used in the home the utility must burn ~3 BTU's to deliver the same energy to the home.

**How can burning ~3X more NG help lower our
Carbon footprint and fossil fuel dependency?**

* Combined Cycle Gas Turbines are the most efficient power plants

Renewable power in California

- ▶ Solar 19% (27.3 TWh)
- ▶ Hydro 12.3% (26.3 TWh)
- ▶ Wind 6.5% (14 TWh)
- ▶ Geothermal 5.7% (11.8 TWh)
- ▶ Wood/Bio 2.7% (5.9 TWh)

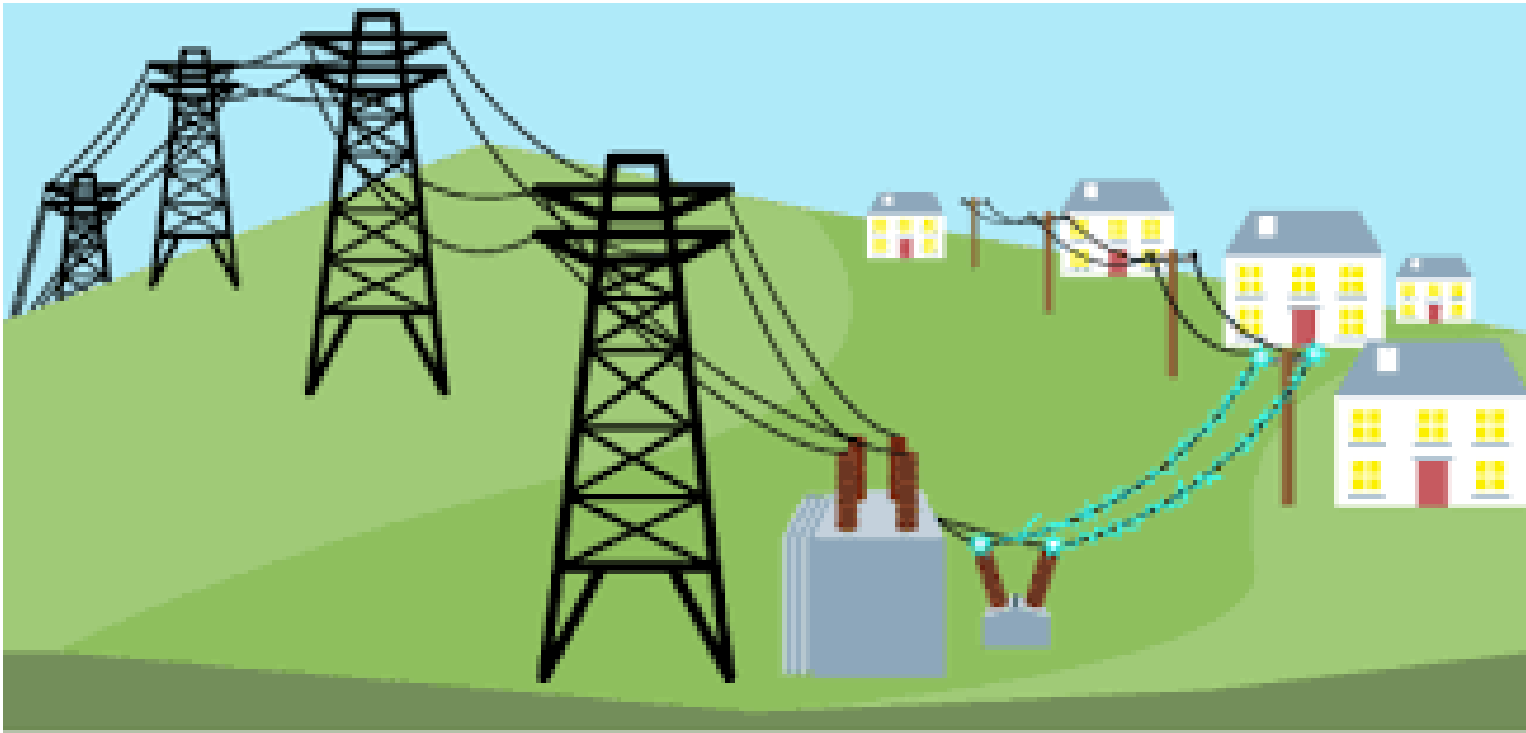
**2018 Total power derived from
renewable sources in California ~47%***

TWh – TerraWatt hours = 1 trillion (10^{12}) watt hours
A typical American uses ~7,500 kWh/year of electricity**

*https://en.wikipedia.org/wiki/Energy_in_California

**https://www.ucsusa.org/clean_energy/our-energy-choices/how-is-electricity-measured.html

PG&E and our public grid



You get what you get, like it or not.

Public Utilities = Centralized power generation



What could possibly go wrong?



BANKRUPTCY



Why continue to use Natural Gas in new construction?

- ▶ For every BTU of heat removed from the NG grid it must be added to the electrical grid (actually 2-3X due to the inefficiency of grid supplied power)
- ▶ The average US household energy consumption is 2kW/hour*
 - ▶ 75% is considered space heating and hot water load*
 - ▶ Typical electricity loads are constant where heating is seasonal
 - ▶ 49% of all residential heating applications are NG*
 - ▶ Peak loads are within a 2-3 month window (winter in cold climates/summer in warm climates)*
 - ▶ Banning NG would increase the demand on the electric grid by ~37% (at a 1 to 1 BTU ratio)
 - ▶ Heating costs per BTU for electricity vs NG are typically at a 4:1 ratio

* <https://www.energy.gov/energysaver/heat-and-cool/home-heating-systems>

Planning for the future

- ▶ **Building codes should prepare our community for the future not ignore reality**
 - ▶ Prepare new buildings for the “all electric future”
 - ▶ Solar PV on every home
 - ▶ Residential electric wiring that accommodates future needs
 - ▶ Safe and easy installation of EV charging, electric HVAC systems, cook tops, water heaters, Battery energy storage systems and micro-grid connection
 - ▶ Building and community codes that promote “smart” neighborhood development
 - ▶ Clear the way to develop community Micro-grids
 - ▶ Incentives that promote energy efficiency
 - ▶ Use of the highest efficiency with the lowest cost of operation appliances
 - ▶ NG appliances are still the most efficient and economical to operate

Decentralized Power Generation = Energy Security

How do we bridge the gap?

Today's centralized fossil
fuel based power
generation



Decentralized all
renewable future



Developing “Smart” Neighborhoods

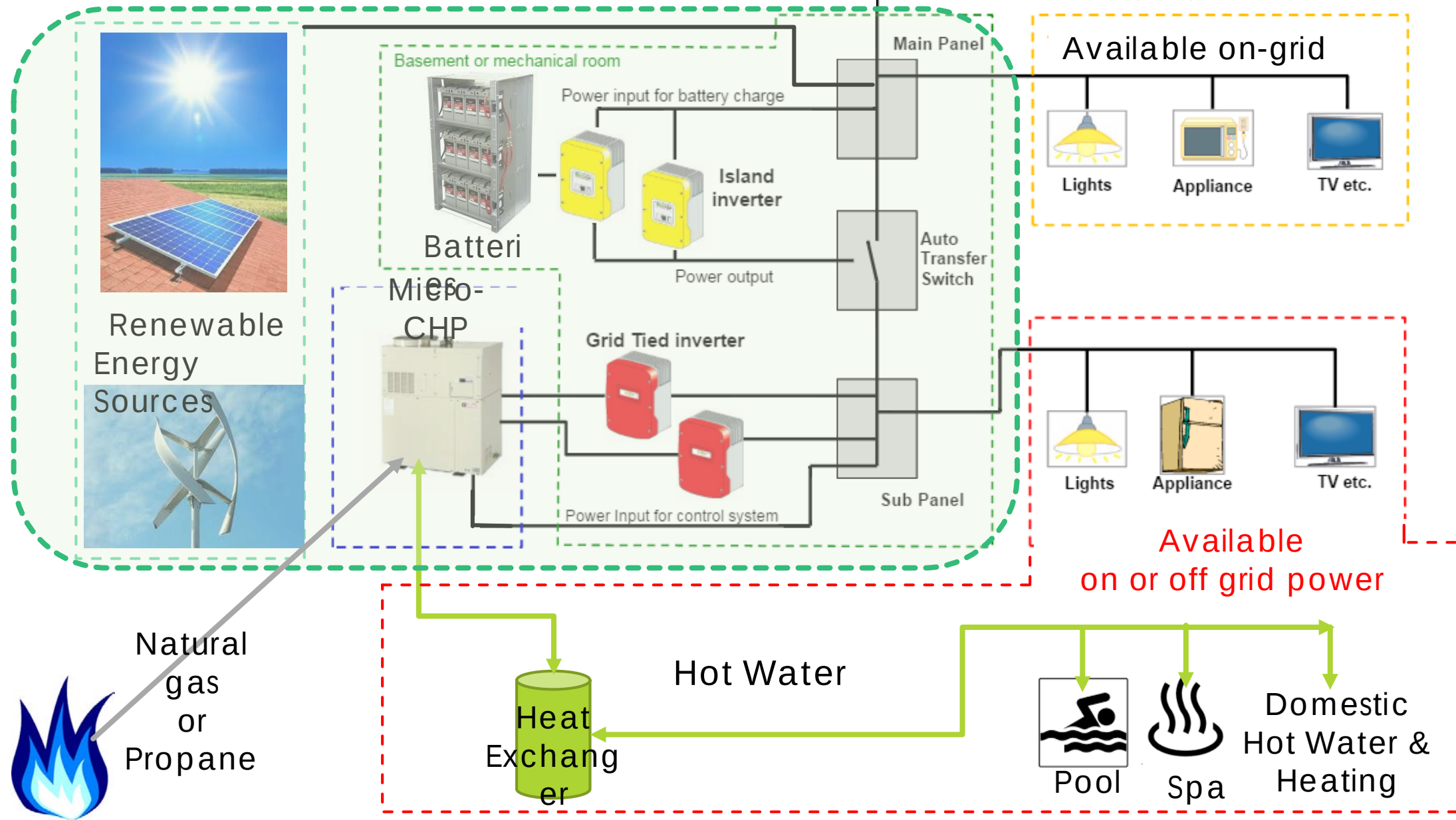
A Smart Neighborhood brings together new-construction homes and a public grid connected micro-grid that allows the entire neighborhood to “island” from PG&E’s traditional electric grid.

A neighborhood micro-grid can include a solar array, wind turbines, battery energy storage, a micro-cogeneration system and is connected to and interactive with the public grid.

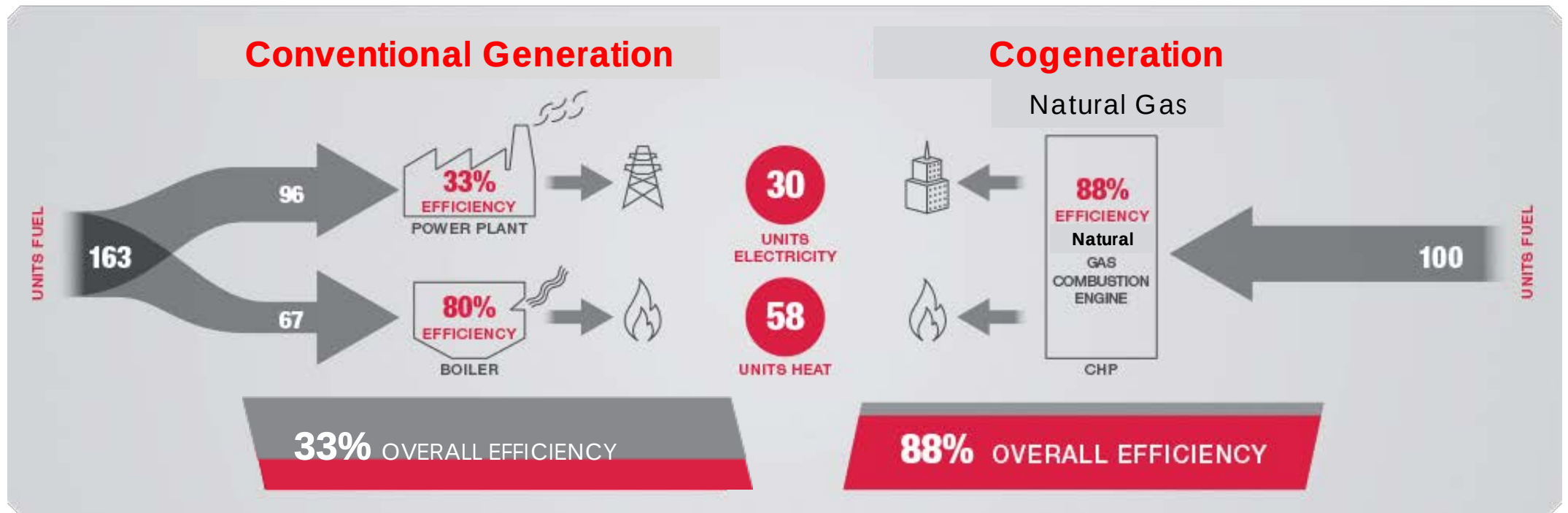
“Islanding” means that the micro-grid can operate independently of the public grid when necessary or more economical to do so.



Community/Residential Micro-grid Overview



Cogeneration



Cogeneration is 2.5X more efficient than conventional generation

Why Micro-cogeneration*?

▶ **Micro-cogeneration systems are “GREEN”**

- ▶ Powered by clean burning Natural Gas
- ▶ Produces both electricity and hot water to supply all domestic uses (DHW, Pools, HVAC)
- ▶ 2.6X more efficient than utility power (33% vs 88%)
- ▶ Reduce household Carbon footprint > 50%
- ▶ 10KW system is equivalent to taking 7 cars off the road vs public grid power

▶ **Cost savings are substantial**

- ▶ ~ \$0.05/KWh (includes cost of regular preventative maintenance) vs Utility's rates
- ▶ No PG&E “delivery” charges (wheeling fees) for kWh produced within the micro-grid

*Micro-Cogeneration systems range from 5KW to 50KW (7.5HP – 75HP)

Residential or community Micro-grids = Energy Security

▶ High Reliability

- ▶ 10,000 hour service intervals

▶ Energy Independence

- ▶ Connected to but no longer at the mercy of the utility's electric rates or power problems
- ▶ Critical power remains uninterrupted even when the public grid goes down

▶ Distributed power generation = greater resiliency

- ▶ No longer relying on a single power provider
- ▶ Power is generated where it is used
- ▶ Power on demand

Conclusion

To negate Natural Gas as a viable residential energy source would put an enormous burden on an already overtaxed public power grid.

The resulting environmental impact would be huge due to the need to build many more grid scale power plants that are far less efficient than locally burned NG.

Continuing to use Natural Gas in our homes and developing Smart residential and/or neighborhood micro-grids can help us get this vaunted “all-electric future” while being more efficient and resilient.

If we are going to plan for an all-electric future we need to make sure we can get there.



Robert S. Kenney
Vice President
State and Regulatory Affairs

P. O. Box 77000
San Francisco, CA 94177-00001
Mail Code B23A
(415) 973-2500
Robert.Kenney@pge.com

Item # 07

AGENDA DATE: 10/23/19
SUPPLEMENT # 3

October 22, 2019

VIA EMAIL TO: Michelle Bigelow, Council and Records Manager/Deputy City Clerk
Michelle.Bigelow@morganhill.ca.gov

Mayor Richard Constantine & City Council
City of Morgan Hill
17575 Peak Avenue
Morgan Hill, CA 95037

Dear Mayor Constantine & City Council:

Pacific Gas and Electric Company (PG&E) is proud to provide electric and natural gas service to the City of Morgan Hill. And we are committed to helping customers and the community achieve their energy goals. As part of this commitment, PG&E welcomes the opportunity to support the City of Morgan Hill's efforts to promote efficient, all-electric new construction, when it is cost-effective.

PG&E strongly supports California's climate and clean air goals. We recognize that achieving these goals requires a range of approaches and tools, including increasing the use of energy-efficient electric appliances in buildings when cost-effective. PG&E welcomes the opportunity to avoid investments in new gas assets that might later prove underutilized as local governments and the state work together to realize long-term decarbonization objectives. With all this in mind, PG&E supports local government policies that promote all-electric new construction when cost effective.

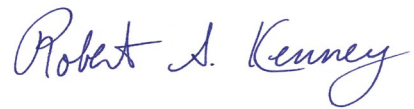
Beyond new construction, PG&E believes a multi-faceted approach is needed to cost-effectively achieve California's broader economy-wide long-term GHG reduction objectives, including both electrification and decarbonizing the gas system with renewable natural gas and hydrogen. As California's decarbonization policies evolve, PG&E will continue to ensure the safe and reliable operation of the electric and gas systems to continue supporting the customers that depend on us.

PG&E appreciates the partnership with the City of Morgan Hill during its policy development process, which allows us to prepare for the future and continue providing the best service possible to customers. PG&E continuously forecasts load in its service territory and implements upgrades to the distribution grid to meet the demand. PG&E fully expects to meet the needs that all-electric buildings will require. PG&E remains ready to engage with our customers, local government, businesses, and community members to meet their needs safely, reliably, affordably, and with clean energy.

PG&E looks forward to continuing to work with the City of Morgan Hill to accomplish its policy goals.

Thank you, and have a safe day.

Sincerely,



Robert S. Kenney
Vice President

cc: Anthony Eulo, Environmental Services [Anthony.Eulo@morganhill.ca.gov]
Aimee Bailey, Ph.D., Director of Decarbonization and Grid Innovation,
Silicon Valley Clean Energy [aimee.bailey@svcleanenergy.org]
Anna Brooks, Sr. Manager, Public Affairs, PG&E [anna.brooks@pge.com]
Darin Cline, Sr. Manager, Government Relations, PG&E [Darin.Cline@pge.com]



The Campaign for Fossil Free Buildings in Silicon Valley

350 Silicon Valley, Acterra, Carbon Free Silicon Valley, Carbon Free Palo Alto, Carbon Free Mountain View, Citizens' Climate Lobby San Mateo County, Citizens Environmental Council of Burlingame, Clean Coalition, Climate Reality Santa Clara County, Coltura, Fossil Free Mid-Peninsula, Menlo Spark, Menlo Together, Mothers Out Front South Bay, Pacifica Climate Committee, Peninsula Interfaith Climate Action, Project Green Home, SIDCO Homes, Sierra Club Loma Prieta Chapter, Sustainable San Mateo County, Sustainable Silicon Valley, Sunnyvale Cool, Silicon Valley Youth Climate Action, and Silicon Valley Youth Climate Strike.

22 October 2019

Mayor Rich Constantine

Mayor Pro Tem Rene Spring

Council Member Yvonne Martinez-Beltran

Council Member Larry Carr

Council Member John McKay

Morgan Hill Council Chamber

17555 Peak Avenue

Morgan Hill, CA 95037

Via email: rich.constantine@morganhill.ca.gov, larry.carr@morganhill.ca.gov,
yvonne.martinezbeltran@morganhill.ca.gov, rene.spring@morganhill.ca.gov,
john.mckay@morganhill.ca.gov

RE: **STRONG SUPPORT** for the proposed prohibition of natural gas infrastructure in new buildings (The ordinance adding Chapter 15.63 to the Morgan Hill Municipal Code)

Dear Mayor Constantine, Mayor Pro Tem Spring, and Council Members Martinez-Beltran, Carr, and McKay:

On behalf of the Campaign for Fossil Free Buildings in Silicon Valley ("FFBSV"), we strongly support Morgan Hill's proposed ordinance prohibiting natural gas infrastructure in new buildings. Avoiding the use of fossil fuels, like gas in new construction is the most significant climate action that Morgan Hill can take this year. The resulting reduction in natural gas use will also have the added benefit of improving the community's health and safety, and reducing the cost of new homes and buildings. This ordinance makes Morgan Hill a leader in protecting the environment and the community, and smartly recognizes that it's not a matter of if, but when,

natural gas is no longer used in ANY building in any community. You are to be commended for your bold action that will catalyze many other cities to take similar action.

We also want to call out Program Administrator Eulo's comment in response to concerns: "Sometimes the challenge with relying on market solutions is that we have an imperfect market. Without a carbon tax or other method to capture the external cost of pollution, the true costs of burning natural gas aren't being realized by the producers or consumers of the gas." When all cities realize that the externalities of fossil fuels, including natural gas, are spread among our entire community--and disproportionately impact our most vulnerable populations and our children's future--then we will successfully reverse the tide of climate change.

Sincerely,

IdaRose Sylvester, Fossil Free Buildings Silicon Valley Campaign
Gladwyn d'Souza, Loma Prieta Chapter, Sierra Club
Linda Hutchins-Knowles, Mothers Out Front South Bay
Carol Cross, Co-Convenor, Fossil Free Mid-Peninsula
Diane Bailey, Menlo Spark
James Tuleya, Chairperson, Carbon Free Silicon Valley
Bret Andersen, Carbon Free Palo Alto
Barbara Fukumoto, Sunnyvale Cool

Cc:

City Manager City, Manager Christina Turner, christina.turner@morganhill.ca.gov
City Clerk Irma Torrez, irma.torrez@morganhill.ca.gov
Program Administrator, Anthony Eulo, Anthony.Eulo@morganhill.ca.gov



Item 9: **MORGAN HILL GILROY SUSTAINABLE WATER SUPPLY PLANNING**



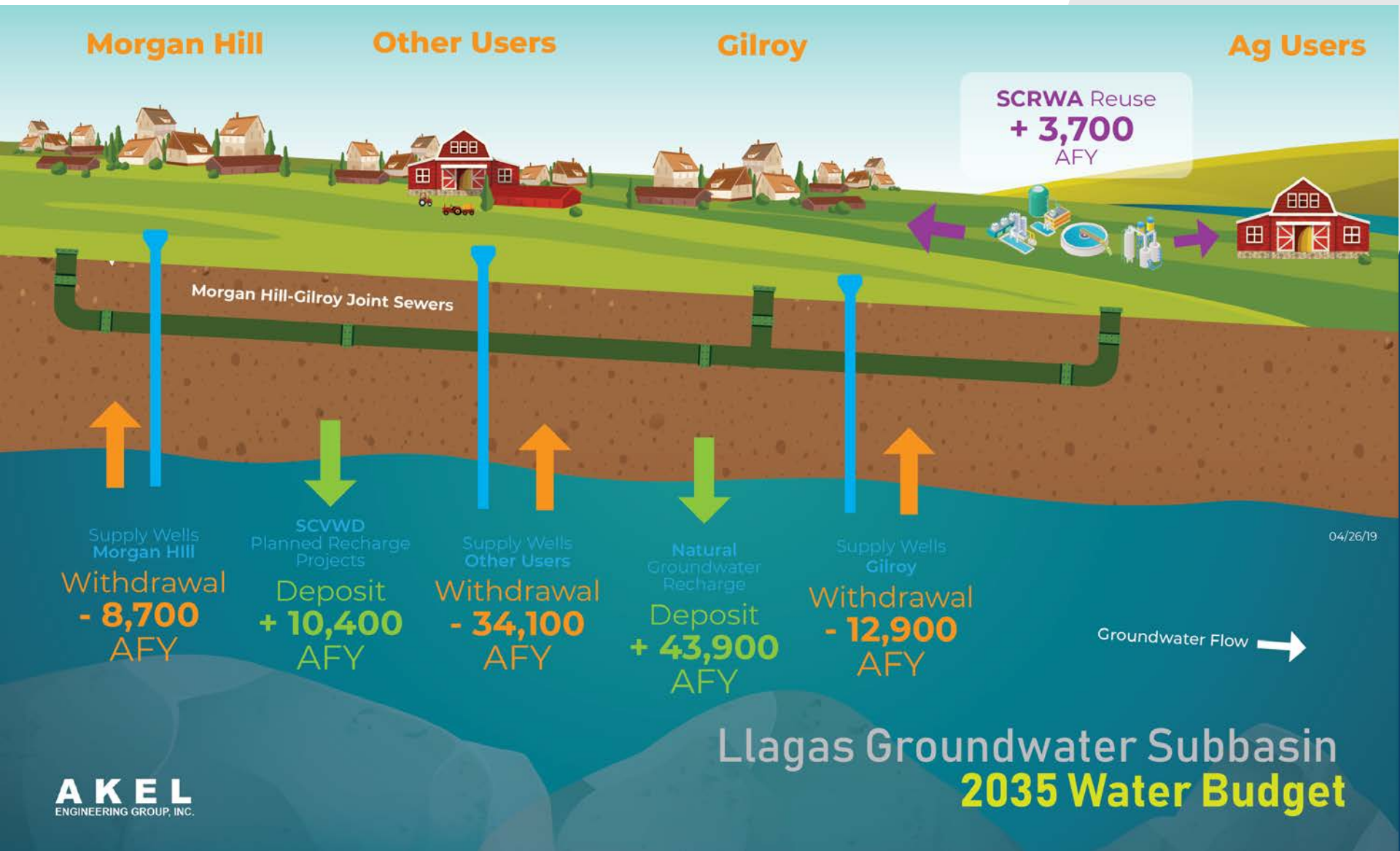
Background



Roles

- **Valley Water**
 - Groundwater Management Agency
- **Cities of Morgan Hill and Gilroy**
 - Water Suppliers
 - Partners in the South County Regional Wastewater Facility (SCRWA)
 - Share the Llagas Groundwater Subbasin

Background



Background

Water Supply Planning Documents

- Valley Water
 - Water Supply Master Plan
 - County-wide Water Reuse Master Plan
 - Zone of Benefit Study
- Joint Plans
 - South County Recycle Water Master Plan
- City
 - Urban Water Management Plans
 - Water System Master Plan

Purpose



Report Purpose

- Provide Background on Water Supply Planning Efforts for the Cities
- Support elected officials and staff when providing input on Valley Water's water supply planning
- Discuss and explore the role of the Cities in regional water supply planning

Policy Assumptions



- If imported water were unavailable for an extended period, groundwater aquifers would likely decline.
- The City water supply is an isolated single source system, with no potential connections to other systems or other infrastructure to improve resiliency.
- The City of Morgan Hill is extremely vulnerable, being at the “top of the hill” for both of the aquifers it draws water from, and therefore is much more vulnerable during severe drought events.
- The Llagas Subbasin does not have formal allocation limits, and no corresponding water supply agreements exist between the cities and VW, thus the status of the supplies is difficult to determine.

Policy Assumptions

- The respective municipal water systems have benefitted from the managed recharge programs implemented by VW.
- The amount and reliability of imported water supplies is likely to diminish in the future due to climate change, biological restrictions that limit pumping in the Delta, and physical disruptions, (e.g., levee failures), to the Delta infrastructure.

Policy Assumptions



- Climate change is real and future droughts may be longer and more severe.
- State and Federal policies may likely lead to reductions in the amount of imported water that is available in the future.
- Valley Water's supply responsibilities are weighted to the metropolitan areas in Northern Santa Clara County. The elected representation for South County is limited to one of seven board members.

Policy Assumptions



Morgan Hill Specific Assumptions

- Recent housing legislation intended to increase housing production may increase water demand significantly locally, regionally and across the State resulting in an increase in water demand.
- The City can continue to construct infrastructure to deliver water in its role as a water retailer.

Projects and Programs



Potential Projects & Programs Reviewed

- Water Supply Master Plan
- County-wide Water Reuse Master Plan
- Other significant projects and programs that have been previously discussed

Criteria Used for the Evaluation

- Increased yield to Llagas Subbasin 20%
- Increased yield to the Coyote Valley Subbasin 5%
- Cost per acre foot 15%
- Location of benefit 20%
- Cost within Cities 20%
- Implementation and Regulatory 5%
- Resiliency 15%

Projects and Programs



Top Scoring

- Rank 1: Agricultural and Other Users Offset.
- Rank 2/3 Tie: Butterfield Channel Recharge
- Rank 2/3 Tie: South Bay Water Recycling Indirect Potable Reuse to Butterfield Channel
- Rank 4: South County Water Treatment Plant*
*This project scores well with the provision that a substantial increase in yield is possible. Should deliveries be increased, there is significant potential to rest groundwater wells within the cities.
- Rank 5: South Bay Water Recycling Non-potable Reuse to Morgan Hill*
*This project scores well in terms of benefits to the groundwater aquifers and resiliency, however, this project will be very costly to implement.

Next Steps



Possible Next Steps Based on Council Direction

- Explore joint role in regional water supply planning
- Define a minimum level of service for water supply
- Define risk levels for water supply
- Identify reasonable recycled water investments benefitting both Morgan Hill and Gilroy
- Develop water supply agreements with Valley Water
- Future partnerships with the Water District
- SCRWA
- Joint Water Resources Committee
- Other Opportunities

Next Steps

Upcoming Discussion

- October 2019
Present to City Councils
- November 2019
Staff Level Conversations
- December 2019
South County Joint Water Resource Committee
Presentation and Discussion
- TBD 2020
Future Joint Council and Board Meetings

Questions?





Regular Meeting Agenda

City Council

Rich Constantine - Mayor
Rene Spring - Mayor Pro Tem
Yvonne Martinez Beltran - Council Member
Larry Carr - Council Member
John McKay - Council Member

Wednesday, October 23, 2019 7:00 p.m.

Council Chamber
17555 Peak Avenue, Morgan Hill, CA 95037

The City Council has adopted a policy that regular meetings shall not continue beyond 11:00 p.m. unless extended by a majority of the City Council.

CALL TO ORDER

Mayor Constantine

ROLL CALL ATTENDANCE

Deputy City Clerk Michelle Bigelow

DECLARATION OF POSTING AGENDA

Per Government Code Section 54954.2
Deputy City Clerk Bigelow

SILENT INVOCATION

PLEDGE OF ALLEGIANCE

PRESENTATIONS

YAC PRESENTATION - ASSET #31 HEALTHY LIFESTYLE

PROCLAMATIONS

Proclaiming the Month of November 2019 as Philanthropy Month
Pamala Meador

RECOGNITIONS

Recognizing those who were instrumental in establishing the relationship with our Sister City, Ameca in Mexico

Rotary Morgan Hill
Morgan Hill Sister Cities
John Kelley
Peter Anderson
David and Lesley Allen

Recognizing the AAUW Young Women Leaders for Organizing the Climate Change Rally in conjunction with the Global Climate Strike

Makayla Phea
Ria Deshpande
Diya Kandra
Gelasia Tiwans
Grace Taira

Q
Molly Waddington
Amiriah Alexander
Hassti Tirgardoorn
Lili Jaquet

CITY COUNCIL REPORTS

Council Member Spring

CITY MANAGER'S REPORT

City Manager Christina Turner

CITY ATTORNEY'S REPORT

City Attorney Donald Larkin

OTHER REPORTS

PUBLIC COMMENT

Members of the public are entitled to address the City Council concerning any item within the Morgan Hill City Council's subject matter jurisdiction. Public comments are limited to no more than three minutes. Except for certain specific exceptions, the City Council is prohibited from discussing or taking action on any item not appearing on the posted agenda. (See additional noticing at the end of this agenda)

ADOPTION OF AGENDA

CONSENT CALENDAR

Items appearing on the Consent Calendar are considered routine and may be approved by one motion. Pursuant to City Council Policies and Procedures (CP 97-01), any member of the Council or public may request to have an item removed from the Consent Calendar for comment and action.

Time Estimate for Consent Calendar: 1 - 10 Minutes

1. ADOPT RESOLUTION TERMINATING LOCAL EMERGENCY

Recommendation:

Adopt Resolution terminating the local emergency proclaimed on October 8, 2019 and ratified on October 9, 2019.

2. ACCEPT NEW COMMUNITY GARDEN INSTALLATION PROJECT

Recommendation:

1. Accept as complete the New Community Garden Installation Project in the final amount of \$178,671;
2. Authorize the Public Services Director to sign the attached Notice of Completion; and
3. Direct the City Clerk to file said Notice of Completion with the County Recorder's Office.

3. ACCEPT AUGUST 2019 FINANCIAL AND INVESTMENT REPORT

Recommendation:

Accept and file report.

4. APPROVE PURCHASE OF TWO 150 KILOWATT GENERATORS

Recommendation:

1. Approve the purchase of two replacement 150kW trailer-mounted diesel generators from Leete Generators, and authorize the City Manager to approve the purchase order in the amount of \$169,552;
2. Adopt resolution amending the adopted 2019-20 Fiscal Year Budget appropriating \$84,776 from the Water Operations Fund (650); and
3. Declare generator W02017 to be surplus for disposal in accordance with the City Municipal Code.

5. APPROVE FIRST AMENDMENT TO GIS SERVICES AGREEMENT WITH GEOGRAPHIC TECHNOLOGIES GROUP, INC.

Recommendation:

1. Approve First Amendment to the Agreement with Geographic Technologies Group, Inc. for an additional \$78,500 to implement the GIS tasks identified in the GIS Strategic Plan, for a total not to exceed amount of \$137,500; and
2. Authorize the City Manager to execute and administer the amended agreement.

6. ADOPT ORDINANCE OF THE CITY OF MORGAN HILL AMENDING CHAPTER 17.28 ("LAND DEDICATIONS AND RESERVATIONS") IN TITLE 17 ("SUBDIVISIONS") OF THE MORGAN HILL MUNICIPAL CODE TO UPDATE PARK DEDICATION REQUIREMENTS

Recommendation:

Waive the reading, adopt Ordinance No. 2305, New Series, and declare that said title, which appears on the agenda, shall be determined to have been read by title and further reading waived.

OTHER BUSINESS

7. INTRODUCE ORDINANCE ADDING CHAPTER 15.63 (PROHIBITION OF NATURAL GAS INFRASTRUCTURE IN NEW BUILDINGS) TO THE MORGAN HILL MUNICIPAL CODE REDUCING CLIMATE IMPACTS BY REQUIRING NEW BUILDINGS TO BE ALL-ELECTRIC

Recommendation:

1. Waive the first and second reading of the ordinance; and
2. Introduce ordinance.

Estimated Time: 30 Minutes

8. INTRODUCE AN ORDINANCE OF THE CITY OF MORGAN HILL AMENDING TITLE 15 (BUILDING AND CONSTRUCTION) TO ADOPT BY REFERENCE, THE 2019 CALIFORNIA STATE BUILDING STANDARDS CODE KNOWN AND DESIGNATED AS CALIFORNIA CODE OF REGULATIONS, TITLE 24 AND THE 2018 INTERNATIONAL PROPERTY MAINTENANCE CODE; AND TO AMEND, DELETE AND ADD CERTAIN OTHER BUILDING AND CONSTRUCTION STANDARDS

Recommendation:

1. Waive the first and second reading of the Ordinance; and
2. Introduce ordinance.

Estimated Time: 10 Minutes

9. RECEIVE REPORT REGARDING MORGAN HILL AND GILROY SUSTAINABLE WATER MANAGEMENT PLANNING

Recommendation:

1. Receive the technical memorandum on sustainable water management planning; and
2. Provide policy direction.

Estimated Time: 30 Minutes

PUBLIC HEARING

10. ADOPT RESOLUTION UPDATING THE CITY'S SELECT DEVELOPMENT IMPACT FEES

Recommendation:

1. Open/close the public hearing;
2. Adopt Final Draft of Development Impact Fee Update Study prepared by Willdan Financial Services; and
3. Adopt resolution updating the City's select Development Impact Fees.

Estimated Time: 30 Minutes

FUTURE COUNCIL INITIATED AGENDA ITEMS

Note: in accordance with Government Code Section 54954.2(a), there shall be no discussion, debate and/or action taken on any request other than providing direction to staff to place the matter of business on a future agenda.

ADJOURNMENT

NOTICE

Any documents produced by the City and distributed to the majority of the City Council less than 72 hours prior to an open meeting, will be made available for public inspection at the City Clerk's Counter at City Hall located at 17575 Peak Avenue, Morgan Hill, CA, 95037 and at the Morgan Hill Public Library located at 660 West Main Avenue, Morgan Hill, California, 95037 during normal business hours. (Pursuant to Government Code 54957.5)

PUBLIC COMMENT

Members of the Public are entitled to directly address the City Council concerning any item that is described in the notice of this meeting, before or during consideration of that item. If you wish to address the Council on any issue that is on this agenda, please complete a speaker request card located in the foyer of the Council Chambers and deliver it to the Minutes Clerk prior to discussion of the item. You are not required to give your name on the speaker card in order to speak to the Council, but it is very helpful. When you are called, proceed to the podium and the Mayor will recognize you. If you wish to address the City Council on any other item of interest to the public, you may do so during the public comment portion of the meeting following the same procedure described above. Please limit your comments to three (3) minutes or less.

Please submit written correspondence to the Minutes Clerk, who will distribute correspondence to the City Council.

Persons interested in proposing an item for the City Council agenda should contact a member of the City Council who may plan an item on the agenda for a future City Council meeting. Should your comments require Council action, your request may be placed on the next appropriate agenda. Council discussion or action may not be taken until your item appears on an agenda. This procedure is in compliance with the California Public Meeting Law (Brown Act) Government Code §54950.

City Council Policies and Procedures (CP 03-01) outlines the procedure for the conduct of public hearings. Notice is given, pursuant to Government Code Section 65009, that any challenge of Public Hearing Agenda items in court, may be limited to raising only those issues raised by you or on your behalf at the Public Hearing described in this notice, or in written correspondence delivered to the City Council at, or prior to the Public Hearing on these matters.

The time within which judicial review must be sought of the action by the City Council, which acted upon any matter appearing on this agenda is governed by the provisions of Section 1094.6 of the California Code of Civil Procedure.

For a copy of City Council Policies and Procedures CP 97-01, please contact the City Clerk's office (408) 779-7259, (408) 779-3117 (fax) or by email cityclerk@morganhill.ca.gov.

AMERICANS WITH DISABILITIES ACT (ADA)

In compliance with the Americans with Disabilities Act, if you are a disabled person and you need a disability-related modification or accommodation to participate in this meeting, please contact the City Clerk's Office at (408)779-7259, (408)779-3117 (fax) or by email cityclerk@morganhill.ca.gov. Requests must be made as early as possible and at least two-full business days before the start of the meeting.

SUSTAINABLE MORGAN HILL



VISION

To sustain a safe, inclusive, socially responsible, environmentally conscious, and economically sound community

Choose Morgan Hill

The City of Morgan Hill is the best community for people to live, work, visit, and operate their businesses.

City Council Ongoing Priorities

- Enhancing Public Safety
- Protecting the Environment
- Maintaining Fiscal Responsibility
- Supporting our Youth, Seniors, and Entire Community
- Fostering a Positive Organizational Culture
- Preserving and Cultivating Public Trust
- Preserving our Community History
- Enhancing Diversity and Inclusiveness
- Advancing Regional Initiatives

2019-2020 Strategic Priorities

- Agricultural Preservation
- Cannabis Policy
- Community Engagement and Messaging
- Economic Development
- Financial Stewardship
- High Speed Rail
- Homelessness
- Housing
- Infrastructure
- Telecommunications
- Traffic/Transportation





October Developmental Asset #31 Healthy Lifestyle

Parents tell their children it is important to have good health habits and an understanding of healthy sexuality.

How can YOUTH inspire others to be healthy?

Ways to Interact

- Participating in sports and other outdoor activities.
- Making smart food choices.
- Don't fall for peer pressure, stay drug free. W.A.V.E

Benefits

- A long life to fulfill dreams.
- Helps to be the best you.
- Feeling content



Why be Healthy?

- Having a more energetic mentality
- Being more mentally and physically stable
- Taking pride in yourself
- Maintain high self-esteem
- Purpose in society





October Complementary Asset #39 Sense of Purpose

Young person reports that
“my life has a purpose”.

Tips for YOUTH to find their purpose

- Participate in after school clubs.
- Participate in discussion circles.
- Be socially active.
- Explore new activities



Benefits:

- There will be more inspiring people.
- Develop growth mindset
- Discover what you're good at

Tips for Adults to Guide Teens To Find Purpose in Life

- Nurturing Teen Strengths
- Have High Expectations
- Model Overcoming Limitations
- Try New Things
- Cultivate Character Strengths

“Finding purpose in life is not a single event for teens, it is a process”.

**How has it served you to be
healthy as an adult?**

**Did you find your purpose
in life already?**



