CITY OF MORGAN HILL

Regular Meeting Agenda

Planning Commission

LIAM DOWNEY	-	*CHAIR*
PAUL LAKE	-	*VICE-CHAIR*
MOHAMMAD HABIB	-	*PLANNING COMMISSIONER*
JAMES WILSON	-	*PLANNING COMMISSIONER*
DAVID LOVATO	-	*PLANNING COMMISSIONER*
JOSEPH MUELLER	-	*PLANNING COMMISSIONER*
WAYNE TANDA	-	*PLANNING COMMISSIONER*

Tuesday, July 8, 2025
7:00 PM

Council Chamber Building
17555 Peak Avenue, Morgan Hill, CA 95037

MEETING PARTICIPATION

Morgan Hill Planning Commission meetings are held in person. The community can participate by attending in person, joining via Zoom (video/teleconference). The meetings are also live-streamed on the City's website, Facebook page, and Channel 17.

Those wishing to participate in the meetings remotely must register in advance at https://bit.ly/PlanningCommissionMtg. Additionally, Zoom participants must be running the latest version or will be required to update to the latest version before being able to join the meeting remotely.

Remote participation is also available by calling (669) 900-9128 and entering webinar id: 862 0324 6251#. Dial *9 to raise your hand, and be called upon to speak for up to 3 minutes. Dial *6 to unmute.

As a courtesy, and technology permitting, for members who attend online, the City cannot guarantee that the public's access to online technology will be uninterrupted, and technical difficulties may occur from time to time. Unless required by the Ralph M. Brown Act, the meeting will continue despite technical difficulties for participants using the online option.

PUBLIC COMMENT

Public comment may be offered verbally at the meeting or in writing before the meeting.

Those attending remotely may only offer public comment for items on the agenda in any of these three categories:

- Consent Calendar
- Other Business
- Public Hearings

Public comment will be heard from those attending in person first with the submission of a speaker card. Once that is complete, we will move to those on Zoom that have their hand raised. Following public comment from Zoom, we will close the public comment period for that item.

Remote public comment for items not on the agenda will not be accepted.

Written public comment may be submitted to the Planning Office:

- In person at the Planning Commission Meeting;
- Via email to pcpubliccomment@morganhill.ca.gov; or
- Hand delivered or mailed to the Planning Division at 17575 Peak Avenue, Morgan Hill, CA 95037

Please email your comments to the Planning Office no later than 3:00 p.m. on Monday (the day before the Planning Commission meeting) so that your comments can be submitted to the members of the Planning Commission with sufficient time to review them. You may continue to provide written comments up to noon on Tuesday (the day of the meeting), although Planning Commissioners may not have sufficient time to review them before the meeting. Public comments submitted to the Planning Division after noon (12:00 p.m.) the day of the meeting will be provided to the Planning Commission as time allows.

Written comments WILL NOT be read aloud during the Planning Commission Meeting. Please note that written comments are posted on the City's website. It is recommended that you do not include any personal information that you do not want to be posted on the web. Please be advised that communications directed to the Planning Commission are public records and are subject to disclosure pursuant to the California Public Records Act and Brown Act unless exempt from disclosure under the applicable law. Communications will NOT be edited for redactions and will be printed/posted as submitted.

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 Planning Office at (408) 310-4709 or by email at planning@morganhill.ca.gov. Requests must be made as early as possible and at least two full business days before the start of the meeting.

CALL TO ORDER

ROLL CALL ATTENDANCE

DECLARATION Of POSTING
Pursuant to Government Code Section 54954.2

PLEDGE OF ALLEGIANCE

PUBLIC COMMENT
Members of the public are entitled to address the Planning Commission concerning any item within the Morgan Hill Planning Commission's subject matter jurisdiction. Public comments are limited to no more than three minutes. Except for certain specific exceptions, the Commission 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)

ORDERS OF THE DAY

MINUTES APPROVAL

1. JUNE 10, 2025 MEETING MINUTES
Recommendation:

1. Accept Meeting Minutes.

2. JUNE 25, 2025, MEETING MINUTES
Recommendation:

1. Accept Meeting Minutes.

OTHER BUSINESS

3. CONTINUED OTHER BUSINESS: SELECTION OF PLANNING COMMISSION CHAIRPERSON AND VICE CHAIR
Recommendation:

1. Planning Commission to select a Chairperson and Vice Chair.

PUBLIC HEARINGS

4. ZA2024-0001/EA2024-0009: DEWITT-WEST HILLS CHURCH: DEWITT – WEST HILLS CHURCH: REQUEST FOR A PLANNED DEVELOPMENT WITH MASTER PLAN OF A 5.75-ACRE PARCEL FOR THE REMODEL AND

EXPANSION OF AN EXISTING RELIGIOUS FACILITY. THE PLAN INCLUDES DEMOLITION OF THE TEMPORARY CLASSROOM FACILITIES AND THE CONSTRUCTION OF PERMANENT CLASSROOM FACILITIES, AND THE REMODEL AND EXPANSION OF THE EXISTING SANCTUARY WITH ASSOCIATED SITE IMPROVEMENTS.

Recommendation:

1. Open/Close the public hearing; and
2. Continue the item to August 12, 2025 Planning Commission Hearing.

5. SD2024-0009/SR2024-0019/EA2024-0014: DIANA – VALLEY OAK; REQUEST FOR A VESTING TENTATIVE MAP TO ALLOW FOR THE DIVISION OF 19 LOTS AND A DESIGN PERMIT APPLICATION TO CONSTRUCT 93 ATTACHED RESIDENTIAL UNITS ON AN APPROXIMATE 5-ACRE PARCEL LOCATED AT THE NORTHEAST CORNER OF BUTTERFIELD BLVD. AND DIANA AVE.

Recommendation:

1. Open/close the public hearing;
2. Adopt a Resolution approving a Design Permit for the development of 93 townhome-style units; and
3. Adopt a Resolution approving a Vesting Tentative Map to create 19 lots on an approximate 5-acre site.

LEGAL BRIEFING

DIRECTOR'S REPORT/ANNOUNCEMENTS

ADJOURNMENT

NOTICE

Any documents produced by the City and distributed to the majority of the Planning Commission less than 72 hours prior to an open meeting, will be made available for public inspection at the front 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 Planning Commission 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 Planning Commission 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 Planning Commission, but it is very helpful. When you are called, proceed to the podium and the Chair will recognize you. If you wish to address the Planning Commission 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 Planning Commission.

Persons interested in proposing an item for the Planning Commission agenda should contact a member of the Commission who may plan an item on the agenda for a future Commission meeting. Should your comments require Planning's action, your request may be placed on the next appropriate agenda. Planning Commission 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 Commission at, or prior to the Public Hearing on these matters.

The time within which judicial review must be sought of the action by the Commission, 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 Commission 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.

CITY OF MORGAN HILL

Meeting Minutes

Planning Commission

LIAM DOWNEY - CHAIR
PAUL LAKE - VICE-CHAIR
MOHAMMAD HABIB - PLANNING COMMISSIONER
DAVID LAVATO - PLANNING COMMISSIONER
JAMES WILSON - PLANNING COMMISSIONER
JOSEPH MUELLER - PLANNING COMMISSIONER
WAYNE TANDA - PLANNING COMMISSIONER

Tuesday, June 10, 2025
7:00 PM

Council Chambers
17555 Peak Avenue, Morgan Hill, CA 95037

CALL TO ORDER

Chair Downey called the meeting to order at 7:02 p.m.

ROLL CALL ATTENDANCE

Minutes Clerk Luna called the attendance at 7:02 p.m.

PRESENT	Liam Downey, Mohammad Habib, James Wilson, Joseph Mueller, Wayne Tanda, David Lovato
EXCUSED	Paul Lake

DECLARATION Of POSTING

Minutes Clerk Luna declared the posting of the agenda at 7:02 p.m.

PLEDGE OF ALLEGIANCE

Planning Commissioner Habib led the Pledge of Allegiance at 7:02 p.m.

PUBLIC COMMENT

Chair Downey introduced the new Planning Commissioner, David Lovato, at 7:02 p.m.

Chair Downey opened the Public Comment Period at 7:04 p.m. Hearing no requests to speak, the Public Comment Period was closed.

ORDERS OF THE DAY

There were no changes made.

PUBLIC HEARINGS

None

OTHER BUSINESS

1. **Public Art Master Plan Workshop**

   Recommendation:
   This workshop is to inform and discuss City efforts to shape the future of public art in the City with a Public Art Master Plan. The plan will guide the future of public art installations, ensuring that art reflects the unique character and honors our past, present and future.

   Public Art Master Plan webpage: https://www.morganhill.ca.gov/2627/Public-Art-Master-Plan

   Assistant City Manager for Development Services, Edith Ramirez, gave a presentation at 7:04 p.m.

   The Planning Commission asked questions of staff at 7:20 p.m. Development Services Director Jennifer Carman, Assistant City Manager for Development Services Edith Ramirez, Housing Manager John Lang, and Assistant City Attorney Cynthia Hasson, addressed the Planning Commissioners' questions.

   The Planning Commissioners and Staff participated in a survey that was provided to the Community.

   No action taken. The Planning Commissioner reviewed, discussed, and provided feedback to staff.

DIRECTOR'S REPORT/ANNOUNCEMENTS

Development Services Director Jennifer Carman made an announcement at 8:36 p.m. Principal Planner Adam Paszkowski made an announcement 8:37 p.m.

ADJOURNMENT

There being no further business to discuss, Chair Downey adjourned the meeting at 8:41 p.m.

MINUTES PREPARED BY:
Jenna Luna, Minutes Clerk

CITY OF MORGAN HILL

Meeting Minutes

Planning Commission

LIAM DOWNEY - CHAIR
PAUL LAKE - VICE-CHAIR
MOHAMMAD HABIB - PLANNING COMMISSIONER
DAVID LAVATO - PLANNING COMMISSIONER
JAMES WILSON - PLANNING COMMISSIONER
JOSEPH MUELLER - PLANNING COMMISSIONER
WAYNE TANDA - PLANNING COMMISSIONER

Tuesday, June 24, 2025
7:00 PM

Council Chambers
17555 Peak Avenue, Morgan Hill, CA 95037

CALL TO ORDER

Chair Downey called the Planning Commission meeting to order at 7:00 p.m.

ROLL CALL ATTENDANCE

Minutes Clerk Luna called the roll.

PRESENT	Liam Downey, Paul Lake, James Wilson, Joseph Mueller, Wayne Tanda
EXCUSED	Mohammad Habib, David Lovato

DECLARATION Of POSTING

Minutes Clerk Luna declared to the posting of the agenda at 7:00 p.m.

PLEDGE OF ALLEGIANCE

Planning Commissioner Tanda led the Pledge of Allegiance at 7:01 p.m.

PUBLIC COMMENT

Chair Downey opened the Public Comment Period at 7:01 p.m. Hearing no requests to speak, the Public Comment was closed.

ORDERS OF THE DAY

There were no changes made.

MINUTES APPROVAL

1. MAY 13, 2025 MEETING MINUTES

Recommendation:

1. Accept Meeting Minutes

MOTION:
Accept the May 13, 2025, Meeting Minutes.

RESULT:	Passed
MOVER:	Planning Commissioner Mueller
SECONDER:	Planning Commissioner Wilson
AYES:	Chair Downey, Vice Chair Lake, Planning Commissioner Wilson, Planning Commissioner Mueller
NAYS:	None
ABSTAIN:	Planning Commissioner Wayne Tanda
ABSENT:	Planning Commissioner Habib, Planning Commissioner Lovato

PUBLIC HEARINGS

None

OTHER BUSINESS

2. SELECTION OF PLANNING COMMISSION CHAIRPERSON AND VICE CHAIR

Recommendation:
Planning Commission to select a Chairperson and Vice Chair

Principal Planner Adam Paszkowski presented the report at 7:04 p.m.

MOTION:
Continue the item to the July 8 Planning Commission meeting.

RESULT:	Passed
MOVER:	Planning Commissioner Mueller
SECONDER:	Planning Commissioner Lake
AYES:	Chair Downey, Vice Chair Lake, Planning Commissioner Wilson, Planning Commissioner Mueller, Planning Commissioner Tanda
NAYS:	None
ABSTAIN:	None
ABSENT:	Planning Commissioner Habib, Planning Commissioner Lovato

3. WORKSHOP: CONDIT ROAD ZONING AMENDMENTS - AUTO PARK PLANNED UNIT DEVELOPMENT (PUD) AND CONDIT PUD

Recommendation:
Review and provide feedback on the proposed zoning amendments and advise on staff's recommended changes.

Economic Development Coordinator Brittney Sherman gave the staff presentation at 7:08 p.m. Economic Development Director Matt Mahood addressed the Planning Commissions questions at 7:25 p.m. Planner Rich Buikema addressed the Planning Commission at 7:31 p.m.

Chair Downey opened the Public Comment period at 7:43 p.m. The following people addressed the Planning Commission:

- John Kerley
- Dough Muirhead

Chair Downey re-opened the Public Comment period at 8:27 p.m. The following individuals addressed the Planning Commission:

- Victoria San Nicolas
- Doug Muirhead

Hearing no further requests to speak, the Public Comment period was closed.

Assistant City Manager to Community Development Edith Rameriz addressed the Planning Commission at 8:34 p.m.

No Motion was taken. The Planning Commission reviewed and provided feedback on the proposed zoning amendments.

DIRECTOR'S REPORT/ANNOUNCEMENTS

Development Services Director Jennifer Carman made an announcement at 8:38 p.m.
Principal Planner Adam Paszkowski made an announcement at 8:39 p.m.

ADJOURNMENT

There being no further business, Chair Downey adjourned the meeting at 8:40 p.m.

MINUTES PREPARED BY:
Jenna Luna, Minutes Clerk

CITY OF MORGAN HILL

Memorandum

Date: June 24, 2025

To: Chair and Planning Commission

From: Jennifer Carman, Development Services Director

Subject: Selection of Planning Commission Chairperson and Vice Chair

Pursuant to City Council Policy CP-96-02, the Planning Commission must select a Chairperson and Vice Chair to serve one-year terms. City Council Policy CP-18-04 allows for the term of the Chairperson and Vice Chair to be extended for one year if there is a need to extend the term due to special circumstances. The term of service for these offices shall be one year, beginning at the first meeting in July of each year. No Planning Commissioner shall serve more than two consecutive full terms as Chairperson.

City Council Policy CP-96-02 provides that the member serving the longest on the Commission without having previously served as Chairperson within the prior 4 years will serve as the Chairperson. The member second in seniority who has not yet served during the previous four years as Chairperson will serve as Vice Chair. The policy further states that if the member serving as Vice Chair is on the Commission at the time the next Chairperson is selected, he or she will become Chairperson the following year. Prior to serving as Chairperson, a member must have been on the Commission at least one year.

Commission Member	Date of Appointment
Joseph Mueller	January 28, 1989
Wayne Tanda	April 25, 2007
Liam Downey	August 5, 2015
Mohammad Habib	May 3, 2017
Paul Lake	March 2, 2022
James Wilson	August 3, 2022
David Lovato	June 1, 2025

Planning Commission Chair (prior 4 years)	
2021/22	Malisha Kumar
2022/23	Joseph Mueller
2023/24	Wayne Tanda
2024/2025	Liam Downey

Commissioner will be eligible to serve another term as Chairperson and Vice Chair provided at least four years have transpired since having previously served as Chairperson or Vice Chair. The period may be reduced by one-year increments if no other Commissioner is eligible or declines the position.

Based on City Council policy, unless the Commission chooses to extend the term of Commissioner Downey, Commissioner Lake should be selected to serve as Chairperson being the most senior member of the Commission not having served in the prior years, and the member who served as Vice Chair last year. Commissioner Habib would serve as Vice Chair being the next in seniority who has not yet served during the previous four years. The Chairperson and Vice Chair terms are for one-year, until July 1, 2026.

CITY OF MORGAN HILL
CITY COUNCIL POLICIES AND PROCEDURES

CP 96-02

SUBJECT: **POLICY REGARDING TERM AND SELECTION OF CHAIR AND VICE CHAIR OF CITY BOARDS AND COMMISSIONS**

DATE: **APRIL 17, 1996**

REVISION DATE: **DECEMBER 15, 1999, REVIEWED JUNE 27, 2007; AMENDED APRIL 16, 2008**

ORIGINATING DEPT: **CITY CLERK**

In order to provide an efficient method for the selection of Chair and Vice-Chair from the members of the Boards and Commissions, it shall be the policy of the City Council of Morgan Hill to have these officers serve a one (1) year term beginning the first regular meeting date when the Boards and Commissions reorganize; following City Council appointments. A rotation system shall be followed in the selection of the Chair and Vice-Chair. The member who has served the longest on the Board or Commission without serving as Chair during the previous four (4) years shall be selected for the position of Chair. The member second in seniority who has not yet served during the previous four (4) years as Chair shall become Vice-Chair. If the member selected as Vice-Chair is on the Board or Commission at the time the next Chair is selected he/she shall become Chair.

Prior to selection as Chair, a Board or Commission member must serve a minimum of twelve (12) months on the Board or Commission. Each member's seniority shall begin upon the effective date of that member=s appointment to the Board or Commission. If two (2) or more members have equal seniority, the Board or Commission shall make the selection. In the event a member otherwise eligible for selection declines the position, the member next in seniority shall be selected. A Board or Commission member will be eligible to serve another term as Chair and Vice Chair provided at least four (4) years have transpired since having previously served as Chair or Vice Chair respectively. Such period may be reduced by one year increments if no other Board or Commission member is eligible to serve due to a recent appointment or because a member otherwise eligible for selection declines the position. If two or more members are eligible to serve another term as Chair, the member who has served the longest on the Board or Commission since having previously served as Chair shall be first in seniority to serve another term as Chair and Vice Chair.

This policy shall remain in effect until modified by the City Council.

APPROVED: _____
STEVE TATE, MAYOR

CITY OF MORGAN HILL
CITY COUNCIL POLICIES AND PROCEDURES

CP-18-04

SUBJECT:	**Rules for the Conduct of Planning Commission Meetings**
EFFECTIVE DATE:	**July 18, 2018**
ORIGINATING DEPARTMENT:	**Community Development Department**

SECTION 1. SCOPE

1.1 These rules shall establish the procedures for the conduct of all meetings of the Planning Commission of the City of Morgan Hill. The purpose of these rules is to provide procedures consistent with the Ralph M. Brown Act, establish procedures which will be convenient for the public, be fair to all Commissioners and contribute to the orderly conduct of City business.

SECTION 2. MEETINGS

2.1 Open to Public. All meetings of the Planning Commission, whether regular or special, shall be open to the public, unless a closed session is scheduled as authorized by law.

2.2 Regular Meetings. The Planning Commission shall conduct its regular meetings at the time and place established by ordinance or resolution if specified in the ordinance. Regular meetings shall not continue beyond 11:00 p.m. unless extended by a majority vote of the Planning Commission pursuant to Section 5.2 of this policy.

2.3 Special Meetings. A special meeting may be called at any time by the Community Development Director or by four Commissioners. Written notice of any such meeting must specify the purpose of the meeting. Notice of the meeting must be made in accordance with the law.

2.4 Quorum. Four (4) Commissioners shall constitute a quorum and shall be sufficient to transact business. If less than four Commissioners appear at a regular meeting, the Chair, Vice Chair in the absence of the Chair, any Commissioner, or in the absence of all Commissioners, the Minutes Clerk, shall adjourn the meeting to a stated day and hour.

2.5 Adjourned Meetings. The Planning Commission may adjourn any regular, adjourned regular, special, or adjourned special meeting to a time and place specified in the order of adjournment and permitted by law.

2.6 Attendance. Any commissioner who will be absent from a meeting shall communicate to the Chair and to the Community Development Director in advance of the meeting the date(s) of the meeting(s) that will be missed.

SECTION 3. POSTING NOTICE AND AGENDA

3.1 Posting of Notice and Agenda. For every regular or special meeting, the Minutes Clerk or other authorized person, shall post a notice of the meeting, specifying the time and place at which the meeting will be held, and an agenda containing a brief description of all items of business to be discussed at the meeting. This notice and agenda may be combined in a single document.

3.2 Location of Posting. The notice and agenda shall be posted on the City's website and in a place to which the public has unrestricted access during at least normal business hours and where the notice and agenda are not likely to be removed or obscured by other posted materials.

3.3 Posting for Regular Meetings. For any regular meeting of the Planning Commission, the notice and agenda shall be posted no later than seventy-two (72) hours prior to the time set for the meeting.

3.4 Posting for Special Meetings. For any special meeting of the Planning Commission, the notice and agenda shall be posted no later than twenty-four (24) hours prior to the time set for the meeting.

SECTION 4. AGENDA CONTENTS

4.1 Description of Matters. All items of business to be discussed at a meeting of the Planning Commission shall be briefly described on the agenda. The description of the item and the proposed action to be considered should be set forth as clearly as practical so that members of the public will know the nature of the action under review and consideration.

4.2 Availability of the Agenda to the Public. The agenda for any regular or special meeting shall be made available to the general public as soon as is practical after delivery to the Commissioners.

4.3 Limitation to Act on Only Items on the Agenda. No action shall be taken by the Planning Commission on any item not on the posted agenda.

SECTION 5. ORDER OF BUSINESS

5.1 The order of business at meetings of the Planning Commission shall be as follows:

A. CALL TO ORDER

B. ROLL CALL ATTENDANCE

C. DECLARATION OF POSTING AGENDA

D. WORKSHOP (as deemed appropriate)

E. PLEDGE OF ALLEGIANCE

F. PUBLIC COMMENT

This item refers to those matters not scheduled on the agenda where a member of the public wants to address a matter of importance to the Planning Commission. Since the matter is not one on the agenda, no action by Commission can be taken. If a Commissioner so desires, the matter may be placed on the agenda of a future Commission meeting for review and consideration pursuant to Section 9.

G. CHANGE IN ORDER OF BUSINESS.

The Chair may entertain a motion by a majority request of Commissioners present to take matters listed on the agenda out of the prescribed order.

H. CONSENT CALENDAR

These are items of a routine or generally uncontested nature. Any Commissioner or member of the public may request to have an item pulled from the Consent Calendar and acted on individually by the Commission. Items pulled will be discussed after action is taken on the balance of the Consent Calendar· and before moving on to public hearings.

I. PUBLIC HEARINGS

These matters are ones that are duly noticed and published in a newspaper of general circulation and, where required by Law, written notice is given to the affected residents who have the opportunity to speak in favor or against a matter or ask questions about the matter. Public hearings shall be conducted pursuant to City Council Policy CP-03-01.

J. OTHER BUSINESS

These are other matters of City business which are not appropriately placed on the consent calendar and do not require published notices and require Commission action and direction.

K. DIRECTOR'S REPORT/ANNOUNCEMENTS

These are communication items from the Director, including future agenda items. Director will take input from Commissioners on items of interest. Examples of a Director's report or announcement include notice of cancellation of meetings, reminders of scheduled workshops, report back to the Commission, and pending agenda items.

L. ADJOURNMENT

5.2 Review Status of Agenda at 11:00 p.m. If, at 11:00 p.m., the Planning Commission has not concluded its business, it shall review the status of the agenda and determine by majority vote whether to extend the meeting beyond 11:00 p.m., continue any remaining items, or adjourn the meeting to another date and time.

SECTION 6. PUBLIC COMMENT

6.1 Public Comment. Persons present at meetings of the Planning Commission may comment on individual items on the agenda at the time the items are scheduled to be heard. In addition, comments may be offered on items not on the agenda under that portion of the agenda.

6.2 Limitations. The public comment period may be 3 minutes for items on the agenda or items not listed on the agenda. Speakers are called in the order the speaker cards are submitted. Project applicants or appellants will be allowed more than the designated 3 minutes in accordance with City Council Policy 03-01. Consistent with this policy, the Chair or Presiding Officer may recall an applicant or appellant to address questions after the public comment is heard. The Chair or Presiding Officer may allow more time and/or allow speakers to concede their time to a designated speaker of a group unless a majority of the Planning Commission objects. Speakers that wish to designate a group speaker shall notify the Minutes Clerk before discussion on the item begins.

6.3 Procedure. To address the Planning Commission, each speaker is requested to fill out a Speaker Card and turn it in to the Minutes Clerk before discussion on the agenda item begins. The speaker is requested to provide their name and contact information and the subject or subjects upon which the speaker wishes to address the Planning Commission. Speakers who do not wish to provide their name should provide an alternative designation so that they can be recognized by the Minutes Clerk.

SECTION 7. APPOINTMENT OF OFFICERS

7.1 In June of each year, the selection of chair and vice chair shall be pursuant to City Council Policy CP 96-02, except that if a majority of the Commissioners see the need to extend the term due to special circumstances, the term of the Chair and Vice Chair may be extended for one year. The term of service for these offices shall be one year, beginning at the first meeting in July of each year. No commissioner shall serve more than two consecutive full terms as chairperson. The Chair may resign at any time during his or her role as chair, at which time the Vice Chair may serve the remining term.

SECTION 8. PROCEDURES FOR THE CONDUCT OF MEETINGS

8.1 Role of the Chair/Presiding Officer

A. The Presiding Officer of the Planning Commission, who shall be the Chair or in the Chair's absence shall be the Vice Chair, or in their absence any other designated Commissioner, shall be responsible for maintaining the order and decorum of meetings. It shall be the duty and responsibility of the Presiding Officer to ensure that the rules of operation and decorum contained herein are observed. The Presiding Officer shall maintain control of communication between Commissioners and between the Commission, staff, and public.

B. Communication with Commissioners

1. Commissioners should request the floor from the Presiding Officer before speaking.

2. When one Commissioner has the floor and is speaking, other Commissioners shall not interrupt or otherwise disturb the speaker.

3. With the concurrence of the Chair, a Commissioner holding the floor may address a question to another Commissioner. The Commissioner being questioned may or may not respond while the floor is still held by the Commissioner asking the question. The reply shall be limited to the question asked.

C. The Chair/Presiding Officer may declare that an item within the meeting will be conducted in "workshop" format, which means that the procedures described in section 8.1B do not strictly apply. This is to allow for a more open discussion without strict formalities.

D. Communication with Members of the Public Addressing the Commission

1. The Chair shall open the floor for public testimony (typically referred to as public comment) as appropriate.

2. Commissioners may question a person addressing the Commission at the conclusion of the person's comments or upon expiration of the person's time to speak. Such questions should be directed to the person through the Presiding Officer unless the Presiding Officer grants the Commissioner permission to directly question the person.

3. Staff shall be a resource to the Planning Commission to answer questions arising during discussions between Commissioners and between Commissioners and members of the public. Communications in this regard shall be through the Presiding Officer.

4. Members of the public shall direct their questions and comments through the Presiding Officer.

8.2 Rules of Order. The Planning Commission adopts no specific rules of order except those listed herein. The Planning Commission shall refer to *The Standard Code of Parliamentary Procedure* by Alice Sturgis (McGraw Hill) as a guide for the conduct of meetings. The Sturgis guideline regarding not requiring seconds for governmental bodies' motions, resolutions or ordinances is not adopted as the rule in the City. The Chair has the discretion to impose reasonable rules at any particular meeting based upon facts and circumstances found at any particular meeting. These latter rules will be followed unless objected to by a majority of the Commissioners present.

8.3 Motions. The Chair or any Commissioner may bring a matter of business on the agenda before the Commission by making a motion. Before the matter can be considered or debated it must be seconded. Once the motion has been properly made and seconded, the Presiding Officer shall open the matter for full debate offering the first opportunity to debate to the moving party and, thereafter, to any Commissioner recognized by the Chair or Presiding Officer. Debate shall be closed upon consent of a majority of the Commission.

8.4 Reconsideration. Immediately after a vote on a matter, any Commissioner may request to have his/her vote changed on a matter before the Commission moves on to the next item. Such a request will be granted by the Chair unless a majority of the Commission objects.

A matter may be reconsidered by the Planning Commission if a Commissioner on the prevailing side of the vote requests reconsideration. Such a motion may be made at a meeting where such action is taken or at a subsequent meeting of the Commission, however, nothing in this policy precludes the majority of Commissioners from requesting reconsideration of any item.

8.5 Debate.

A. The discussions and deliberations at meetings of the Planning Commission are to secure the informed judgement of Commissioners on proposals submitted for decision. This purpose is best served by the exchange of thought through discussion and debate.

Debate is regulated by these rules in order to assure every Commissioner a reasonable and equal opportunity to be heard.

B. Obtaining the Floor for Debate.

As soon as a debatable motion has been stated to the Commission by the Chair, any Commissioner has a right to discuss it after obtaining the floor. The Commissioner obtains the floor by seeking recognition from the Chair. A Commissioner who has been recognized is entitled to be heard so long as he/she observes the rules of debate.

C. Speaking More Than Once.

To encourage the full participation of all of the Commissioners, no Commissioner or Commissioners shall be permitted to monopolize the discussion of the question. If a Commissioner has already spoken and other Commissioners wish to speak, the latter Commissioners should be recognized in preference to the Commissioner who has already spoken. However, if no other Commissioners seek recognition, the Chair may recognize the Commissioner who has already spoken.

D. Relevancy of Debate.

All discussion must be relevant to the motion before the Planning Commission. A Commissioner is given the floor only for the purpose of discussing the pending question; discussion which departs is out of order. The Chair should then direct the speaker to limit discussion to the question before the Planning Commission.

A motion-its nature or consequences-may be attacked vigorously. But, it is never permissible to attack the motives, character, or personality of a Commissioner, City staff, or any member of the public either directly or by innuendo or implication. It is the duty of the Chair instantly to stop any Commissioner who engages in personal attacks. It is the motion, not its proposer, that is the subject of debate. Meetings must

discuss measures and ideas, not people.

Arguments, for or against a measure, should be stated as concisely as possible.

Debate must be fundamentally impersonal. All discussion is addressed to the Chair and must never be directed to any individual.

E. Chair's Duties During Debate.

The Chair has the responsibility of controlling and expediting debate. A Commissioner who has been recognized to speak on a question has a right to the undivided attention of the Commission.

It is the duty of the Chair to keep the subject clearly before the Commissioners, to rule out irrelevant discussion, and to restate the question whenever necessary.

SECTION 9. ITEMS TO BE PLACED ON THE AGENDA

9.1 Any Commissioner may at any time request to have any matter that can be legally agendized to be placed on the agenda of the Planning Commission by submitting a memo to the Community Development Director. The memo should be succinct, describe the issue, and the proposed referral, and include any background materials or information relating to the matter. The Community Development Director will transmit all of the documentation to the Deputy City Clerk for distribution to the Planning Commission and public as part of the agenda packets for the meeting.

9.2 The Community Development Director will place the item on the next available Planning Commission meeting agenda.

9.3 At the meeting at which the referral is agendized, the Planning Commission will consider the proposal and vote on its disposition. A majority of those present are necessary to formally refer an item to the City Staff. Staff will indicate if the referral is inappropriate or otherwise unattainable which shall be considered by the Planning Commission during its deliberation.

SECTION 10. DECORUM

10.1 Commissioners. Commissioners value and recognize the importance of the trust invested to them by the public to accomplish the business of the City. Commissioners shall accord the utmost courtesy to each other, to City employees, and to the public appearing before the Planning Commission.

10.2 City Employees. City staff and consultants shall observe the same rules of order and decorum applicable to the Planning Commission. City staff shall act at all times in a business and professional manner towards Commissioners and members of the public.

10.3 Public. Members of the public attending Planning Commission meetings shall observe the same rules of order and decorum applicable to the Planning Commission.

10.4 Noise in the Chambers. Noise emanating from the audience within the Commission Chambers or lobby area, which disrupts Planning Commission meetings, shall not be permitted.

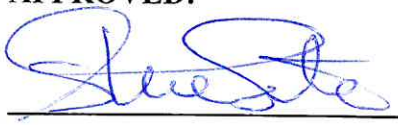
10.5 Sergeant-at-Arms. The Chief of Police, or his/her designated representative, shall be ex-officio Sergeant-at-Arms of the Planning Commission.

SECTION 11. VIOLATIONS OF PROCEDURES

11.1 Nothing in these policies and procedures shall invalidate a properly noticed and acted upon action of the Planning Commission in accordance with State Law.

This Policy Shall remain in effect until modified by the City Council.

APPROVED:



STEVE TATE, MAYOR

CITY OF MORGAN HILL

PLANNING COMMISSION STAFF REPORT
MEETING DATE: July 8, 2025

PREPARED BY:
Tiffany Brown, Senior Planner
APPROVED BY: Jennifer Carman

ZA2024-0001/EA2024-0009: DEWITT-WEST HILLS CHURCH: DEWITT – WEST HILLS CHURCH: REQUEST FOR A PLANNED DEVELOPMENT WITH MASTER PLAN OF A 5.75-ACRE PARCEL FOR THE REMODEL AND EXPANSION OF AN EXISTING RELIGIOUS FACILITY. THE PLAN INCLUDES DEMOLITION OF THE TEMPORARY CLASSROOM FACILITIES AND THE CONSTRUCTION OF PERMANENT CLASSROOM FACILITIES, AND THE REMODEL AND EXPANSION OF THE EXISTING SANCTUARY WITH ASSOCIATED SITE IMPROVEMENTS.

RECOMMENDATION(S)

1. Open/Close the public hearing; and
2. Continue the item to August 12, 2025 Planning Commission Hearing.

LOCATION MAP/PROJECT INFORMATION:

1.	Location:	16695 DeWitt Avenue (APN 773-09-011)
2.	Site Area:	5.75 Acres
3.	General Plan:	Open Space
4.	Zoning:	Open Space

BACKGROUND:

Part of the project includes working on an easement agreement with the Open Space Authority (OSA). The agreement is scheduled to be heard a the next Board meeting. This item will be continued to the August 12, 2025 hearing to ensure an agreement has been achieved with OSA and the West Hills Community Church facility.

ATTACHMENTS:
None

CITY OF MORGAN HILL

PLANNING COMMISSION STAFF REPORT
MEETING DATE: July 8, 2025

PREPARED BY:
Tiffany Brown, Senior Planner
APPROVED BY: Jennifer Carman

SD2024-0009/SR2024-0019/EA2024-0014: DIANA – VALLEY OAK; REQUEST FOR A VESTING TENTATIVE MAP TO ALLOW FOR THE DIVISION OF 19 LOTS AND A DESIGN PERMIT APPLICATION TO CONSTRUCT 93 ATTACHED RESIDENTIAL UNITS ON AN APPROXIMATE 5-ACRE PARCEL LOCATED AT THE NORTHEAST CORNER OF BUTTERFIELD BLVD. AND DIANA AVE.

RECOMMENDATION(S)

1. Open/close the public hearing;
2. Adopt a Resolution approving a Design Permit for the development of 93 townhome-style units; and
3. Adopt a Resolution approving a Vesting Tentative Map to create 19 lots on an approximate 5-acre site.

LOCATION MAP/PROJECT INFORMATION:

1.	Location:	375 Diana Avenue (APN726-12-001 and -004)
2.	Site Area:	5.3 - Acres
3.	General Plan:	Residential Attached Medium (16-24 units per acre)
4.	Zoning:	Residential Attached Medium (RAM)

BACKGROUND:
The applicant, Valley Oak Partners, LLC, applied for a Vesting Tentative Map and Design Permit with associated environmental review for the development of 93 attached residential (townhome-style) units on an approximate 5-acre site located on the northeast corner of Butterfield Boulevard and Diana Avenue. The project site is bound to the west by the engineered stream channel that runs along Butterfield Boulevard. The project was reviewed for compliance with the Residential Development Design and Development Standards for Residential Projects and is in compliance with all standards except number 51: Stream Channel and Riparian Setbacks. While the waterway is an engineered stream channel and not a natural stream, the waterway meets the Santa Clara Valley Habitat Plan criteria for a Category 2 Stream as the drainage contains a defined bed and bank and specific topograph position and artificial hydrological connection to a downstream source. The standard for a Category 2 stream is a 35-foot setback from top of bank. The project, as designed, is set back 21-feet from the top of bank of the stream. The Santa Clara Valley Habitat Agency has a process where exceptions to the 35-foot setback can be made. This project went through that process and received support for the setback reduction. (See Attachment)

The project was heard at the May 21, 2025 City Council meeting for the request of one waiver (City Council Resolution No. 25-011) to the Residential Development Design and Development Standards for Residential Projects No. 51: Stream Channel and Riparian Setbacks and was approved. The project is now before the Planning Commission for a Vesting Subdivision Map with associated site improvements and Design Permit.

PROJECT DESCRIPTION:
The project includes the demolition of the existing buildings on the project site, removal of the four existing Coast Live Oak trees, and the subdivision of the 5.3-acre site into 19 lots with associated site improvements and parks. The application includes a design permit to construct 93 three-story attached residential units dispersed across the site with one access point from Diana Avenue that circulates to each home through internal roadways and walkways.

Residential units would range from two- to four-bedrooms with gross living areas ranging from approximately 1,410 square feet to approximately 2,093 square feet. Each unit includes a 2-car garage; in addition, 31 surface parking spaces will also be provided, for a grand total of 217 parking spaces.

The project includes two neighborhood parks totaling approximately 34,970 square feet; an additional 13,950 square feet of private open space will also be provided. The parks include amenities such as benches, shade trellis areas, picnic and BBQ areas, and an exercise structure. A second-level deck will provide private open space for each unit.

Site Description
The project site is surrounded to the north, east, and south by developed single-family detached and multi-family attached residential neighborhoods and bound to the west by the engineered stream channel and Butterfield Boulevard. The existing site is generally level and developed with a single-family residence, two accessory buildings, and paved areas for vehicle access. There are four mature Coast Live Oak trees located near the front half of the property and the driveway. The remainder of the site is mowed, non-native annual grass.

Surrounding Uses

	General Plan Land Use	Zoning	Existing Use
North	Residential	Residential	Developed

	Detached Medium	Detached Medium	Residential Neighborhood
South	Residential Attached Medium	Residential Attached Medium	Developed Residential Neighborhood
East	Residential Attached Low	Residential Attached Low	Developed Residential Neighborhood
West	Public Facilities	Public Facilities	Transit Center and park-and-ride lot

PROJECT ANALYSIS AND FINDINGS:

ANALYSIS

The proposed project was analyzed with respect to conformance with the: 1) Morgan Hill 2035 General Plan; 2) Inclusionary Housing Ordinance; 3) Zoning; and 4) California Environmental Quality Act:

1. General Plan Land Use Consistency

The General Plan designates this site as Residential Attached Medium. This designation accommodates 16-24 units per net acre, most of which are townhomes, apartments, or condominiums. The proposed project is approximately 18 units/acre and meets the allowable density range. The project is in conformance with the General Plan, but not limited to, the Policies listed below:

Policy CNF-8.1 High Quality Design. *Encourage design features and amenities in new development and redevelopment.*

The project as designed incorporates landscaped pathways with internal connectivity and connectivity to existing infrastructure. The new residential unit's front doors face the other neighborhoods and public right-of-way, providing an inclusive and connecting environment. The proposed architecture provides variety in materials and colors, and complements the adjacent neighborhoods.

Policy CNF-11.3, Appropriate Residential Transitions. *Provide for an acceptable transition in lot size and density between adjacent residential areas.*

The project site's General Plan land use designation is Residential Attached Medium, transitioning to Residential Attached Low to the east and Residential Attached Medium to the south.

Policy CNF-3.6, Adequate Services and Infrastructure. *Allow residential growth only if it is within the ability for the City to provide adequate public services and infrastructure for new development and the community at large.*

The project is within the density range analyzed within the 2035 General Plan EIR. The 2035 General Plan EIR analyzed and confirmed adequate services available for new development within the density range for each designation.

2. Inclusionary Housing Ordinance (IHO)

The purpose of the IHO is to further the City's efforts to require housing available for extremely low-income, very low-income, and moderate-income households by requiring builders of new market-rate housing to include affordable housing units within their projects. The Housing Element of the General Plan implements the established policy of the State of California that each community should foster an adequate supply of housing for persons at all economic levels. The IHO Ordinance

was promulgated to promote and protect public health, safety, and general welfare while preserving and enhancing economic diversity.

The project will provide 14 below-market-rate units (15% of the project) to be restricted for sale to qualified moderate-income buyers. This is in compliance with the City's IHO Ordinance and an IHO agreement will be required prior to the final map, as listed in the conditions of approval.

3. Zoning Ordinance Consistency

The proposed project is zoned Residential Attached Medium. The purpose of the residential attached zoning district is to provide a location for attached housing types to meet the full range of housing needs in Morgan Hill. The residential attached zoning districts accommodate small lot single-family homes, townhomes, and multifamily dwellings at a range of densities and support the economic vitality of nearby commercial areas, including increasing opportunities for residents to walk or bike to destinations.

The project site is located on the northeast corner of Butterfield Blvd. and Diana Ave., which is directly across from the park-and-ride lot for the Transit Center/Caltrain Station. The project includes 93 attached townhome-style units dispersed across 16 buildings, interior streetway circulation, and associated on- and off-site improvements consistent with new developments.

The Project requires a subdivision map and a design permit with associated environmental review. The purpose, analysis, and consistency for the subdivision map and design permit are summarized below.

A. Vesting Tentative Map

The purpose of the Subdivision Ordinance is to ensure consistency with the Subdivision Map Act, the Morgan Hill General Plan, and Morgan Hill Zoning Standards, which reference the preservation of public health, safety, and general welfare, promoting orderly growth and development, promoting open space, conservation, protection and proper use of land, and insuring adequate traffic circulation, utilities and services. The proposed map meets the required lot width, length, and square footage minimums for the Residential Attached Medium zoning designation.

Open Space and Amenities:

The proposed project would include approximately 34,970 square feet of common open space and 13,950 square feet of private open space. Proposed common space amenities include benches, a passive recreation area, shade trellis area, picnic / BBQ areas, and an exercise structure. Second level deck areas would provide private open space for each unit.

Circulation:

Vehicular access would be via a driveway located along the Diana Avenue frontage in the southeast corner of the project site, and internal circulation would be provided by a newly constructed 26-foot wide internal road. A total of 217 parking spaces would be provided, consisting of private two-car garages for each residence and 31 surface parking spaces throughout the site. The project would include walkways for pedestrian access and circulation that connect residential entries to the surrounding streets, surface parking, and common open space.

Landscaping, Trees, and Irrigation:

The project site currently contains four mature coast live oak (*Quercus agrifolia*) trees within the southern portion of the site. All four trees exceed the 18-inch indigenous circumference requirement to qualify as a City-designated Ordinance Size Tree. The proposed project includes removal of the existing trees due to circulation and traffic safety needs.

Landscaping would include a 6-foot perimeter fence around the project site and patio fencing

around individual patios. As conditioned, a tree removal permit will be required and the appropriate tree replacements will be required per the City's Tree Ordinance. Proposed landscaping includes street trees, accent trees and shrubs, perimeter screening trees, and planting areas designed to comply with City of Morgan Hill Water Conservation and Landscape Ordinance Chapter 18.148 of the Morgan Hill Municipal Code and the requirements of Chapter 18.64 (Landscaping) of the Morgan Hill Municipal code.

Stormwater Management:
The project's stormwater management plan is in compliance with the City Municipal Code. As proposed, the project includes stormwater basins and subsurface stormwater storage. One bio-retention area (1,150 square feet) would be located in the west corner of the project site, and a second bio-retention area (5,167 square feet) and an underground manifold with a storage capacity of 29,858 cubic feet would be located in the south corner of the project site.

Planning Commission Review:
In approving or conditionally approving a Vesting Tentative Map and Design Permit, the Planning Commission shall find the following:

Findings:
A. Vesting Tentative Map
The proposed subdivision, together with its provisions for its design and improvements, is consistent with applicable general or specific plans adopted by the city; is physically suitable for the type of development; is physically suitable for the proposed density of development; are not likely to cause substantial environmental damage or substantially and avoidably injure fish or wildlife or their habitat; is not likely to cause serious public health problems; and will not conflict with easements, acquired by the public at large, for access through or use of, property within the proposed subdivision

The Subdivision, as proposed, is consistent with the General Plan and meets all development standards for the zoning designation with the approved waiver to the riparian setback. The General Plan anticipated this type of growth at this location and shows that the city has adequate infrastructure to support the new development.

B. Design Permit - Residential Development Design and Design Standards (Objective Standards)
Senate Bill 330 (SB 330), also known as the Housing Crisis Act of 2019, is a California state law that was signed into law on October 9, 2019. The law was designed to address California's housing crisis by streamlining the approval process for housing developments and giving developers more flexibility in where they can build. SB 330 has also streamlined the approval process for housing developments in Morgan Hill. Under the law, housing developments are subject to a ministerial approval process, which means that they are approved or denied based on objective criteria or standards, rather than through a discretionary process that allows for public input and debate. In response to SB330, the City adopted Residential Development Design and Development Standards for new housing projects.

The purpose of the Residential Development Design and Development Standards (Standards) is to articulate project design requirements for all residential and mixed-use developments. These Standards are utilized in the review process by clearly stating City objectives for high-quality, residential projects that are aesthetically pleasing, livable, sustainable, and well-connected to neighborhood services. The Standards checklist that applies to the project is attached to this report. The project, as conditioned, is found to be consistent with all applicable Objective Criteria Items listed.

Design Permit Findings

A design permit is a discretionary action that enables the City to ensure that the proposed development exhibits a high-quality design consistent with the General Plan and any other applicable Specific Plan or area Plan adopted by the City Council. The design permit process is also intended to ensure that new development and uses are compatible with their surroundings and minimize negative impacts on neighboring properties.

In accordance with Section 18.108.040 (Design Permit), the Planning Commission shall act on any design permit application for any project determined by the Development Services Director to be significant. A significant project as defined by the Zoning Code includes any residential development of more than 100 units. This project would normally be considered under an Administrative Design Permit but a Vesting Tentative Map requires site, architectural, and landscape plan approval, thus elevating design approval to the Planning Commission. For approval of a Design Permit, the following findings shall be made:

a) The proposed project is consistent with the General Plan and any applicable Specific Plan, Area Plan, or other design policies and regulations adopted by the City Council.
As summarized above, the project is consistent with the 2035 General Plan and Zoning Ordinance with the approval of one waiver to the riparian setback.

b) The proposed project complies with all applicable provisions of the zoning code and municipal code.
The project as proposed, with the approval of one waiver to the riparian setback, meets the zoning standards within the Municipal Code. In addition, the project as conditioned will meet the Building Code, Fire Prevention Code, and Engineering Standards.

c) The proposed project complies with all applicable design standards and guidelines contained in the design review handbook.
Per Government Code Section 65589.5(d)(5), the project is not required to be consistent with the Design Review handbook as the handbook includes subjective - not objective criteria. However, the project has been reviewed for compliance with the Residential Development Design and Development Standards and is found to be in compliance.

d) The proposed project has been reviewed in compliance with the California Environmental Quality Act (CEQA).
The City of Morgan Hill, as the Lead Agency, has prepared an Initial Study for the Diana-Valley Oak project in compliance with the California Environmental Quality Act (CEQA), and the regulations and policies of the City of Morgan Hill, California. The outcome of the Initial Study is further discussed in the CEQA section at the end of this report.

e) The proposed development will not be detrimental to the public health, safety, or welfare or materially injurious to the properties or improvements in the vicinity.
The project and circulation were designed to City standards. As conditioned, the project will comply with stormwater and Building Code requirements and therefore will not be detrimental to public health, safety, or welfare, and will not be materially injurious to the properties or improvements in the vicinity.

f) The proposed project complies with all applicable design review criteria in Subsection H - Design Review Criteria in Chapter 18.108.040 for Design Permits.
Per Government Code Section 65589.5(d)(5), the project does not have to be consistent with the Design Review criteria as it is subjective.

g) For new residential development, the project complies with commitments made through the residential development control system (RDCS).
Commitment requirements of RDCS are suspended as a response to Government Code Section

63000, the “Housing Crisis Act of 2019”.

CONCLUSION:

The project as proposed is found to be consistent with the General Plan, Zoning Ordinance, and the City's Objective Criteria. The project site was anticipated for the development of multifamily attached homes within the 2035 General Plan. The increase in water demand, wastewater generation, and stormwater drainage associated with the project will be adequately accommodated by existing facilities and will not require major expansion or extension of existing water, wastewater, electrical, or telecommunications facilities in the project area. The project will be built in compliance with the Building Code and therefore will not be detrimental to public health or safety.

CEQA (California Environmental Quality Act):

Project

The City of Morgan Hill, as the Lead Agency, has prepared an Initial Study for the Diana-Valley Oak project in compliance with the California Environmental Quality Act (CEQA), and the regulations and policies of the City of Morgan Hill. The project is consistent with the General Plan and Zoning. New effects would be substantially mitigated under uniformly applicable development policies or standards. Pursuant to CEQA Guidelines Section 15183, no further review is required.

COMMUNITY ENGAGEMENT:

The proposed project was publicly noticed (mailing to property owners within 300-feet of the project site and newspaper legal noticing) for the minimum 10-day period and a sign was posted on the project site pursuant to the Planning Division requirements.

ATTACHMENTS:

1. Diana Valley Oak Design Permit Resolution
2. Exhibit A - Design Permit Conditions of Approval
3. 375_Diana Design Permit Plans
4. Vesting Subdivision Map Resolution
5. Exhibit A - Diana Valley Oak - Vesting Subdivision Map
6. Exhibit B - Vesting Subdivision Conditions of Approval
7. City Council Resolution No. 25-011 Diana-Vally Oak
8. Habitat Agency Exception To Setback Recomendation
9. Initial Study

RESOLUTION NO. 25-07

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF MORGAN HILL APPROVING A DESIGN PERMIT TO ALLOW FOR THE CONSTRUCTION OF 93 MULTIFAMILY ATTACHED UNITS LOCATED ON THE NORTHEAST CORNER OF BUTTERFIELD BLVD. AND DIANA AVENUE (APN:726-12-001 and 004)

WHEREAS, a SB330 Preliminary Application (PRE2024-0003) was submitted by Valley Oak Partners, LLC on February 26, 2024.

WHEREAS, on July 22, 2024, Valley Oak Partners, LLC submitted a SB330 Design Permit application to allow for the construction of 93 attached townhome-style units dispersed between 16 buildings with private open space and neighborhood parks located on the northeast corner of Butterfield Blvd. and Diana Avenue. (SR2024-0019/EA2024-0014); and

WHEREAS, the City of Morgan Hill, as the Lead Agency, prepared an Initial Study in compliance with the California Environmental Quality Act (CEQA), and the regulations and policies of the City of Morgan Hill, California and found the project to be consistent with the General Plan and Zoning, and any project-induced effects are found to be substantially mitigated under uniformly applicable development policies or standards. Therefore, pursuant to CEQA Guidelines Section 15183, the Development Services Director determined that no further review is required; and

WHEREAS, such request was considered by the Planning Commission at their regular meeting of July 8, 2025, at which time the Planning Commission approved the design permit application SR2024-0019: Diana-Valley Oak; and

WHEREAS, testimony received at a duly noticed public hearing, along with exhibits and drawings and other materials have been considered in the review process.

NOW, THEREFORE, THE MORGAN HILL PLANNING COMMISSION DOES RESOLVE AS FOLLOWS:

SECTION 1. The project has been found consistent with the findings and criteria for Design Review permit approval contained in Section 18.108.040 of the Morgan Hill Municipal Code.

SECTION 2. The project was reviewed for compliance with the Residential Development Design and Development Standards and as conditioned is found to be in compliance with the Standards.

SECTION 3. The Planning Commission approves design permit SR2024-0019. The design shall be expressly conditioned in conformance with conditions incorporated herein and as attached as Exhibit “A”. Minor deviations to the

Design Review permit may be approved by the Development Services Director when consistent with the overall intent of the project.

PASSED AND ADOPTED THIS 8TH DAY OF JULY 2025, AT A REGULAR MEETING OF THE PLANNING COMMISSION BY THE FOLLOWING VOTE:

AYES: COMMISSIONERS:

NOES: COMMISSIONERS:

ABSTAIN: COMMISSIONERS:

ABSENT: COMMISSIONERS:

ATTEST: **APPROVED:**

JENNA LUNA, Deputy City Clerk **LIAM DOWNEY, Chair**

EXHIBIT "A"
STANDARD CONDITIONS

APPLICATION NO: SR2024-0019
THE FOLLOWING APPROVAL REQUIREMENTS AND ANY SPECIAL CONDITIONS SHALL BE APPLIED THROUGH THE DEVELOPMENT APPROVAL PROCESS.

Legend

MHMC= Morgan Hill Municipal Code
MHARH= Morgan Hill Architectural Review Handbook
CMH= City of Morgan Hill
CFC= California Fire Code

PROJECT DESCRIPTION

Design Permit application to allow for the construction of 93 attached townhome-style units dispersed between 16 buildings with private open space and neighborhood parks located on the northeast corner of Butterfield Blvd. and Diana Avenue at 375 Diana Avenue as defined by Assessor Parcel Numbers 726-12-001 and -004.

The project shall comply with all requirements of related project approvals granted by the City, including all of the following:

Initial Study EA2024-0014
Vesting Subdivision Map SD2024-0009

Affordable Housing.
The project will provide 14 below-market-rate units (15% of the project) to be restricted for sale to qualified moderate-income buyers. Prior to the recordation of the final map (SD2024-0009), an Inclusionary Housing Ordinance Agreement shall be executed between the developer/applicant and the City.

PROJECT CONDITIONS OF APPROVAL

This design permit approval is limited to the plan set stamped approved on July 8th, 2025, on file (File Number SR2024-0019) with the Development Services Department. The approved building plans and landscape plans must be in substantial conformance with the design permit plans as determined by the Development Services Director. These documents show the location and dimensions of all vehicle and pedestrian circulation ways (ingress/egress), common areas, and other easement areas.

It shall be the responsibility of the Owner to ensure that any changes or modifications to the Project or any Unit are in compliance with the original City Conditions of Approval of the Project, which are hereby incorporated herein as set forth in full.

PLANNING DIVISION

1. Defense and Indemnity: As part of, and in connection, with this application to the City of Morgan Hill, Applicant agrees to defend, indemnify, and hold harmless the City of Morgan Hill, its officers, agents, employees, officials and representatives (Indemnitees) from and against any and all claims, actions, or proceedings arising from any suit for damages or for equitable or injunctive relief which is filed against City to attack, set aside, void or annul its approval of this application or any related decision, or the adoption of any environmental documents which relates to said approval. The City shall promptly notify the Applicant of any such claim, action or proceeding and the City shall cooperate fully in the defense thereof. In the event that Applicant is required to defend Indemnitees in connection with the proceeding, Indemnitees shall retain the right to approve (a) the counsel to so defend Indemnitees; (b) all significant decisions concerning the manner in which the defense is conducted; and (c) any and all settlements, which approval shall not be unreasonably withheld. This indemnification shall include, but is not limited to, (a) all pre-tender litigation costs incurred on behalf of the City, including City's attorney's fees and all other litigation costs and expenses, including expert witnesses, required to defend against any lawsuit brought as a result of City's approval or approvals; (b) reasonable internal City administrative costs, including but not limited to staff time and expense spent on the litigation, after tender is accepted; and (c) all damages, costs, expenses, attorney fees or expert witness fees that may be awarded to the prevailing party arising out of or in connection with the approval of the application or related decision. City may, in its sole discretion, participate in the defense of such action; but such participation shall not relieve Applicant of its obligations under this condition. The undersigned hereby represents that they are the Applicant or are fully empowered by the Applicant as their agent to agree to provide the indemnification, defense and hold harmless obligations, and the signature below represents the unconditional agreement by Applicant to be bound by such conditions.

2. Time Limits: The design permit approval granted pursuant to this Resolution shall remain in effect for two years from July 8th, 2025. Failure to obtain building permits and commence grading within this term shall result in termination of approval unless an extension of time is granted with a showing of just cause prior to expiration date. (MHMC 18.108.040)

SITE DEVELOPMENT

3. Final Site Development Plans: Final site development plans shall be reviewed for conformance with SR2024-0019 and in accordance with Morgan Hill Municipal

Code Section 18.108.040 (Design Permit) and approved by the Development Services Department prior to issuance of a building permit. All such plans shall include:

A. Detail depicting all concrete curbs as full formed. Pervious paving will be incorporated into paved and landscaped areas per the Objective Criteria Design Standards 41.

B. Provision of catalogue drawings depicting the proposed parking area lighting fixtures. Exterior lighting of the building and site shall be designed so that lighting is not directed onto adjacent properties and light source is shielded from direct off-site viewing.

C. Ramps, special parking spaces, signing and other physical features for the disabled, shall be provided throughout the site for all publicly used facilities.

D. All mechanical equipment, including electrical and gas meters, post indicator valve, backflow prevention devices, etc., shall be architecturally screened from view or located interior to the building. All ground mounted utility appurtenances such as transformers shall not be visible from any public right-of-way and shall be adequately screened through the use or combination of concrete or masonry walls, berming, and landscaping. (MHARH p.20, 45, 79) For additional screening, backflow preventers shall be painted dark green, except the fire connection which shall be painted yellow.

E. All existing on-site overhead utilities shall be placed underground in an approved conduit from the service connection at the street or at the property line to the service connection at the building.

4. Pedestrian Access: The Project shall provide pedestrian walkways in compliance with ADA requirements and with Section 18.72.060.H of the Morgan Hill Municipal Code, which states the following:

    A. Parking lots with more than thirty parking spaces shall include a pedestrian walkway in compliance with ADA requirements.

    B. The design of the pedestrian walkway shall be clearly visible and distinguished from parking and circulation areas through striping, contrasting paving material, or other similar method as approved by the Development Services Director.

5. Bicycle parking. The project shall provide short-term and long-term bicycle parking spaces in conformance with Section 18.72.080 and Table 18.72-7 of the Morgan Hill Municipal Code:

Table 18.72-7: Required Bicycle Parking Spaces

Land Use	Required Bicycle Parking Spaces	
	Short-Term Spaces	Long-Term Spaces
Multi-family dwellings	10 percent of required automobile spaces; min. of 4 spaces	1 per 5 units

A. Short-Term/Class II Bicycle Parking Standards. Short-term bicycle parking shall be located within one hundred feet of the primary entrance of the structure or use it is intended to serve.

B. Long-Term Bicycle Parking Standards. The following standards apply to long-term bicycle parking:
   a. Location. Long-term bicycle parking shall be located on or within seven hundred fifty feet of the use that it is intended to serve.
   b. Security. Long-term bicycle parking spaces shall be secured. Spaces are considered secured if they are:
      i. In a locked room or area enclosed by a fence with a locked gate;
      ii. Within view or within one hundred feet of an attendant or security guard;
      iii. In an area that is monitored by a security camera; or
      iv. Visible from employee work areas.

C. Parking Space Dimensions.
   a. Minimum dimensions of two feet by six feet shall be provided for each bicycle parking space.
   b. An aisle of at least five feet shall be provided behind all bicycle parking to allow room for maneuvering.
   c. 2 feet of clearance shall be provided between bicycle parking spaces and adjacent walls, polls, landscaping, pedestrian paths, and other similar features.
   d. Four feet of clearance shall be provided between bicycle parking spaces and adjacent automobile parking spaces and drive aisles.

D. Rack Design. Bicycle racks must be capable of locking both the wheels and the frame of the bicycle and of supporting bicycles in an upright position.

E. Cover. Required cover for bicycle parking spaces shall be permanent, designed to protect the bicycle from rainfall, and at least seven feet above the floor or ground.

The location of all bicycle parking spaces shall be identified prior to the issuance of a building permit.

6. Tree Protection: Unless tree removal has been previously approved, all trees located within 25 feet of any site disturbance shall be protected using the following minimum protection measures (these guidelines shall be included with all site development plans):

A. Mark all trees to be saved with a survey flag or ribbon. Do not nail or staple directly to the tree.

B. Erect a temporary fence enclosing an area equal to at least the dripline of the tree (or as far from the trunk as possible). This tree protection zone shall not be used for parking, storage of building materials, or other equipment or the placement of temporary or permanent fill. Signs should be posted identifying the restriction of uses in the tree protection zone.

C. Locate structures, grade changes, and other ground or surface disturbances (e.g. concrete pours) as far as feasible from the “dripline” area of the tree.

D. Avoid root damage through grading, trenching, and compaction, at least within an area 1.5 times the dripline area of the tree. Where root damage cannot be avoided, roots encountered over 1 inch in diameter should be exposed approximately 12 inches beyond the area to be disturbed (towards the tree stem), by hand excavation, or with specialized hydraulic or pneumatic equipment, cut cleanly with hand pruners or power saw and immediately back-filled with soil. Avoid tearing or otherwise disturbing that portion of the roots to remain.

E. The addition of plant or other landscaping materials shall remain outside of the dripline of all trees.

F. All trees proposed to be removed from the project site shall be replaced at a 1:1 ratio of at least minimum 15-gallon in size pursuant to Section 12.32.080 of the Municipal Code. All mitigation/replacement trees shall be shown on the landscape plans and approved by the Development Services Director prior to the issuance of the building/grading permit.

G. Any tree subject to Chapter 12.32 Restrictions On Removal Of Significant Trees of the Morgan Hill Municipal Code requires approval from the Planning Division. The applicant shall request approval prior to removing

any significant trees.

BUILDING DESIGN

7. Roof mounted mechanical equipment: All roof mounted mechanical equipment shall be placed within a screened roof top enclosure depicted on the elevation drawings or located below the parapet level and shall not be visible from the ground at any distance from the building. Cross section roof drawings shall be provided at the building permit stage indicating the relative height of the screen wall or parapet. Minimum screen height or parapet depth shall be 5 feet or greater to match the height of any proposed equipment. (MHARH p.48, 65, 87, 106)

8. Building mounted lighting: Lighting fixtures shall not project above the facia or roofline of the building. Any ground mounted lighting projecting onto the building or site shall be subject to the review and approval of the Development Services Director. Adjustment to the lighting intensity may be required after the commencement of the use. (MHARH p. 67, 109)

9. Architectural elements

   A. All vents, gutters, downspouts, flashing, electrical conduits, etc. shall be painted to match the color of the adjacent surface or otherwise designed in harmony with the building exterior.

   B. Soffits and other architectural elements visible from view but not detailed on the plans shall be finished in a material in harmony with the exterior of the building.

10. Landscape maintenance agreement: The applicant may be required to enter into a two-year landscape maintenance agreement effective upon acceptance of landscaping improvements and provide an appropriate bond as required by Section 18.64.070 (Landscaping maintenance and enforcement) of the Municipal Code. If bond is required, amount shall be equal to 100 percent of the value of the landscaping and irrigation improvements for the development project.

11. Planting and irrigation working drawings: Detailed landscape planting and irrigation working drawings shall be submitted to the Development Services Director for approval prior to issuance of building permits. Landscape plans for streets and landscape easements shall be part of the improvement plan submittal.

12. Lighting: Walkways and pedestrian pathways in landscaped areas or common areas not considered building entrances or a part of parking lot areas shall be

illuminated with a minimum of one (1) foot-candle to ensure safe nighttime conditions. (MHARH p.30, 67, 108)

A. A final photometric plan shall be provided for review and approval to the Development Services Director prior to issuance of a building permit.

13. Undeveloped site area: The balance of a building site not developed as part of this project approval shall have landscaping installed acceptable to the Planning Division. (MHARH p., 57, 98)

14. Maintenance of landscaping: The landscaping installed and accepted with this project shall be maintained on the site as stated within the approved plans. Any alteration or modification to the landscaping shall not be permitted unless otherwise approved by the Development Services Director.

15. Water Conserving Landscape Ordinance: The landscape plans shall be in conformance with the City's Water Conserving Landscape Ordinance that was developed in accordance with California law. This Ordinance restricts landscaping turf to certain areas, specifies plant selection, requires certain types of irrigation equipment, and calls for the development of comprehensive water use calculations as an aspect of the submitted landscape plans. (MHMC 18.64)

16. Reciprocal Ingress/Egress Easements: Prior to issuance of a certificate of occupancy, the property owner shall record an appropriate deed restriction and covenant running with the land subject to review and approval of the Development Services Director for a reciprocal ingress/egress easement along the common driveway.

17. Signs: Separate application required for sign approval: Signs proposed for this development shall be designed in conformance with the Sign Ordinance and shall require separate application and approval by the Planning Division prior to installation of any signs.

18. Habitat Plan Fees: The approved project is covered pursuant to the Santa Clara Valley Habitat Plan (Habitat Plan) and subject to fees and conditions contained in the Habitat Plan.

19. Habitat Plan Application Package: Prior to issuance of a grading permit, the project shall complete and submit a Habitat Plan Application Package. All fees shall be paid prior to issuance of a grading permit. (MHMC 18.132)

20. Habitat Plan Conditions: Any additional conditions or mitigations required by the Habitat Plan shall be clearly stated on all plans that involve any ground disturbing

activity (i.e. grading plans, improvement plans, paving plans, demolition plans or other plans for site clearing or temporary stockpile of dirt). (MHMC 18.132)

AIR QUALITY

21. Dust, Noise, Vibration and Materials Management Plan: A management plan detailing strategies for control of noise, dust and vibration, and storage of hazardous materials during construction of the project shall be submitted for review prior issuance of a grading permit and requirements shall be included on all site development and grading plans. The intent of this condition is to minimize construction related disturbance of residents of the nearby or adjacent properties. (MHMC 18.76)

22. Basic Construction Mitigation Measure (BCMMs) Related to Dust Suppression. The following measures shall be implemented with the project:

    A. All exposed surfaces (e.g. parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.

    B. All haul trucks transporting soil, sand, or other loose material off-site shall be covered.

    C. All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.

    D. All vehicle speeds on unpaved roads shall be limited to 15 mph.

    E. All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.

    F. All excavation, grading, and/or demolition activities shall be suspended when average wind speeds exceed 20 mph.

    G. All trucks and equipment, including their tires, shall be washed off prior to leaving the site.

    H. Unpaved roads providing access to sites located 100 feet or further from a paved road shall be treated with a 6-to 12-inch layer of compacted woodchips, mulch, or gravel.

    I. Post a publicly visible sign with the telephone number and person to contact at the lead agency regarding dust complaints. This person shall respond

and take corrective action within 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations.

For projects that exceed BAAQMD thresholds:

A. Limit the simultaneous occurrence of excavation, grading, and ground-disturbing construction activities.

B. Install wind breaks (e.g., trees, fences) on the windward side(s) of actively disturbed areas of construction. Wind breaks should have at maximum 50 percent air porosity.

C. Plant vegetative ground cover (e.g., fast-germinating native grass seed) in disturbed areas as soon as possible and watered appropriately until vegetation is established.

D. Install sandbags or other erosion control measures to prevent silt runoff to public roadways from sites with a slope greater than one percent.

E. Minimize the amount of excavated material or waste materials stored at the site.

F. Use zero-emission and hybrid-powered equipment to the greatest extent possible, particularly if emissions are occurring near sensitive receptors or located within a BAAQMD-designated Community Air Risk Evaluation (CARE) area or Assembly Bill 617 community.

G. Require all diesel-fueled off-road construction equipment be equipped with EPA Tier 4 Final compliant engines or better as a condition of contract.

H. Minimize idling time either by shutting equipment off when not in use or reducing the time of idling to no more than 2 minutes (A 5-minute limit is required by the state airborne toxics control measure [Title 13, Sections 2449(d)(3) and 2485 of the California Code of Regulations]). Provide clear signage that posts this requirement for workers at the entrances to the site and develop an enforceable mechanism to monitor idling time to ensure compliance with this measure.

I. Where grid power is available, prohibit portable diesel engines and provide electrical hook ups for electric construction tools, such as saws, drills and compressors, and using electric tools whenever feasible.

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CULTURAL RESOURCES

23. Significant historic or archaeological materials: A moderate potential exists for unrecorded historic-period archaeological resources to be within the project area. The developer shall enter into written contracts with an archaeologist and the Tamien Nation Tribe, and pay all fees associated with the activities required by this condition. The following policies and procedures for treatment and disposition of inadvertently discovered human remains or archaeological materials shall apply:

    A. Prior to start of grading or earthmoving activity on the “first day of construction”, the archaeologist and Tamien Nation Tribal Monitor shall hold a pre-construction meeting for the purposes of "cultural sensitivity training" with the general contractor and subcontractors.

    B. A Tamien Nation Tribal Monitor shall be present on-site to monitor all ground-disturbing activities and an archaeologist shall be on-call. Where historical or archaeological artifacts are found, work in areas where remains or artifacts are found will be restricted or stopped until proper protocols are met, as described below:

        a. Work at the location of the find will halt immediately within fifty feet of the find. If an archaeologist is not present at the time of the discovery, the applicant shall contact an archaeologist for evaluation of the find to determine whether it qualifies as a unique archaeological resource as defined by this chapter;

        b. If the find is determined not to be a Unique Archaeological Resource, construction can continue. The archaeologist will prepare a brief informal memo/letter in collaboration with a tribal representative that describes and assesses the significance of the resource, including a discussion of the methods used to determine significance for the find;

        c. If the find appears significant and to qualify as a unique archaeological resource, the archaeologist will determine if the resource can be avoided and will detail avoidance procedures in a formal memo/letter; and

        d. If the resource cannot be avoided, the archaeologist in collaboration with a tribal representative shall develop within forty-eight hours an action plan to avoid or minimize impacts. The field crew shall not proceed until the action plan is approved by the Development Services Director. The action plan shall be in conformance with California Public Resources Code 21083.2.

    C. The following policies and procedures for treatment and disposition of

inadvertently discovered human remains or archaeological materials shall apply. If human remains are discovered, it is probable they are the remains of Native Americans,

a. If human remains are encountered, they shall be treated with dignity and respect as due to them. Discovery of Native American remains is a very sensitive issue and serious concern. Information about such a discovery shall be held in confidence by all project personnel on a need to know basis. The rights of Native Americans to practice ceremonial observances on sites, in labs and around artifacts shall be upheld.

b. Remains should not be held by human hands. Surgical gloves should be worn if remains need to be handled.

c. Surgical mask should also be worn to prevent exposure to pathogens that may be associated with the remains.

D. In the event that known or suspected Native American remains are encountered, or significant historic or archaeological materials are discovered, ground-disturbing activities shall be immediately stopped. Examples of significant historic or archaeological materials include, but are not limited to, concentrations of historic artifacts (e.g., bottles, ceramics) or prehistoric artifacts (chipped chert or obsidian, arrow points, ground stone mortars and pestles), culturally altered ash stained midden soils associated with pre-contact Native American habitation sites, concentrations of fire-altered rock and/or burned or charred organic materials and historic structure remains such as stone lined building foundations, wells or privy pits. Ground-disturbing project activities may continue in other areas that are outside the exclusion zone as defined below.

E. An "exclusion zone" where unauthorized equipment and personnel are not permitted shall be established (e.g., taped off) around the discovery area plus a reasonable buffer zone by the contractor foreman or authorized representative, or party who made the discovery and initiated these protocols, or if on-site at the time or discovery, by the monitoring archaeologist and tribal representative (typically twenty-five to fifty feet for single burial or archaeological find).

F. The discovery locale shall be secured (e.g., 24-hour surveillance) as directed by the City or County if considered prudent to avoid further disturbances.

G. The Contractor Foreman or authorized representative, or party who made

the discovery and initiated these protocols shall be responsible for immediately contacting by telephone the parties listed below to report the find and initiate the consultation process for treatment and disposition:

- The City of Morgan Hill Development Services Director (408) 779-7247
- The Contractor's Point(s) of Contact
- The Coroner of the County of Santa Clara (if human remains found) (408) 793-1900
- The Native American Heritage Commission (NAHC) in Sacramento (916) 653-4082
- The Amah Mutsun Tribal Band (916) 481-5785 (H) or (916) 743-5833 (C)
- The Tamien Nation (707)295-4011 (office) and (925)336-5359 (THPO)

H. The Coroner has two working days to examine the remains after being notified of the discovery. If the remains are Native American the Coroner has 24 hours to notify the NAHC.

I. The NAHC is responsible for identifying and immediately notifying the Most Likely Descendant (MLD). (Note: NAHC policy holds that the Native American Monitor will not be designated the MLD.)

J. Within 24 hours of their notification by the NAHC, the MLD will be granted permission to inspect the discovery site if they so choose.

K. Within 24 hours of their notification by the NAHC, the MLD may recommend to the City's Development Services Director the recommended means for treating or disposing, with appropriate dignity, the human remains and any associated grave goods. The recommendation may include the scientific removal and non-destructive or destructive analysis of human remains and items associated with Native American burials. Only those osteological analyses or DNA analyses recommended by the appropriate tribe may be considered and carried out.

L. If the MLD recommendation is rejected by the City of Morgan Hill the parties will attempt to mediate the disagreement with the NAHC. If mediation fails then the remains and all associated grave offerings shall be reburied with appropriate dignity on the property in a location not subject to further subsurface disturbance.

24. Noise Construction Hours: The project shall comply with Chapter 8.28 of the Morgan Hill Municipal Code which prohibits construction activities between 8:00

PM and 7:00 AM, Monday through Friday, and between 6:00 PM and 9:00 AM on Saturdays. Construction activities may not occur on Sundays or federal holidays.

25. Mitigation Fee Act: Notice is hereby given that, pursuant to the Mitigation Fee Act, the City of Morgan Hill charges certain fees (as such term is defined in Government Code Section 66000) pursuant to MHMC Chapter 3.56 in connection with approval of this development project for the purpose of defraying all or a portion of the cost of public facilities related to this development project (Mitigation Fee Act Fees). MHMC Section 3.56.050 provides for automatic annual adjustment on January 15 of those fees in existence utilizing the Engineering News Record Index for the preceding twelve months. These fees do not include fees for processing applications for governmental regulatory actions or approvals. The Mitigation Fee Act Fees applying to this project are listed in the schedule of fees to be provided at building permit stage and are generally described below in the Engineering Divisions Conditions, section EE. Notice is also hereby given that the Developer has an opportunity to protest the imposition of the Mitigation Fee Act Fees within 90 days of the approval or conditional approval of this development project and that the 90-day protest period has begun.

26. Covenants, Conditions and Restrictions: The applicant shall provide a set of Covenants, Conditions and Restrictions (CC&R's), Bylaws and Articles of Incorporation, for review and approval by the Development Services Director prior to final occupancy or recordation of a final map. All such CC&Rs shall include the following:

    A. The Owners recognize that the use, modification and proper maintenance of the Common Area and public right-of-way(s)* are for the benefit of all citizens of the City of Morgan Hill (City) and that the City is an intended third party beneficiary of these covenants, conditions and restrictions and may, upon notice of hearing as set forth below, exercise the same powers of enforcement as the Association.

        *Public right-of-way: Exclusive of streets dedicated to and accepted by the City of Morgan Hill.

    B. The City may, by mail or personal delivery, give written notice of the breach of any maintenance obligation to the Association with a demand that such breach be remedied. If such breach is not remedied within thirty (30) days of the mailing or delivery of such notice, the City shall have standing and the right (but not the obligation) to bring a court action against the Association and Owners to enforce such provision. In addition, the City shall be entitled to recover reasonable attorneys' fees and costs incurred in such action.

C. The Notice may also contain a date for a hearing on the matter before a City employee designated by the City (which hearing shall be held no sooner than fifteen (15) days after mailing of such notice), and if after such hearing the City determines that there has been inadequate maintenance, the City shall have the right (but not the obligation) to undertake the maintenance of the Common Area or public right-of-way in question. Any and all costs incurred by the City in so maintaining the Common Area or public right-of-way shall be a lien against all the properties included with the Project and shall be the personal responsibility of the Owners and the Association.

D. The entire Project and all of the properties located thereon shall be subject to the conditions and restrictions of all subdivision and other Project approvals by the City, with respect to the Project. Any changes and/or modifications to the Project and/or any Unit, including but not limited to changes to the exterior of any Unit, may be subject to review and approval of the City of Morgan Hill as may be determined by review of the Project approvals by the City of Morgan Hill.

E. This section may not be amended without the prior written consent of the Development Services Director for the City. Nothing contained in this section shall limit any other right or remedy which the City may have under its ordinances or state law.

F. For the purposes of this section, the question of whether there has been a breach of a maintenance obligation or adequate maintenance shall be determined by the provisions of the original Declaration as first recorded with the County Recorder for Santa Clara County and by any amendment thereto, but only to the extent that such maintenance obligation or duty of maintenance is increased by such amendment.

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ENGINEERING DIVISION

27. Stormwater Management: The project shall comply with the California Regional Water Quality Control Board Central Coast Region Resolution No. R3-2013-0032 as documented by the Stormwater Management Guidance Manual for Low Impact Development and Post-Construction Requirements. The Preliminary Stormwater Control Plan/Report (“Report”) with revision date of 4/1/2025 states that DMA-3, or the 4.5-foot landscape strip along the detached sidewalk is designated as a self-treating area. This landscape area within DMA-3 cannot be considered self-treating, as the adjacent sidewalk is proposed to drain into it. However, it can be considered self-retaining, if designed to be a landscaped area

that is slightly concave to allow up to 3 inches of ponding. At improvement plan stage, confirm if the landscape area within DMA-3 can be designed as self-retaining, as defined in the Stormwater Guidance Manual, and revise the plans and the Report accordingly. Additional narrative within the stormwater control Plan/Report will also be required at the improvement plan stage to include demonstration that any stored water within the bubbler catch basins / bubble-up drains will dissipate within 48 hours.

28. Grading: A Preliminary Geotechnical Investigation was prepared for the project by Cornerstone Earth Group. At improvement plan stage, provide additional analysis confirming the relative stability adjacent to the SCMs and Butterfield Channel per the recommendations from the Geotechnical Investigation.

29. Bio-retention Basin (SCM-2): At the improvement plan stage, provide a dedicated overland release point with erosion protection at the bio-retention basin (SCM-2). Add sections through bio-retention basin (SCM-2) and perforated pipe underground manifold (SCM-3) to confirm that the underground manifold system lies outside the building influence of the two adjacent buildings, Buildings 15 and 16, as approved by the project's Geotechnical Engineer.

30. Private Sanitary Sewer Maintenance Agreement: Prior to building permit issuance, the Owner(s) shall enter into a Private Sanitary Sewer Maintenance Agreement with the City for maintenance of all private sanitary sewer facilities which includes the private sewer mains and sewer laterals. The agreement shall be recorded at the County Recorder's Office prior to building final.

31. Impact Fees & Fee Increase: The Developer shall pay all applicable impact fees and other engineering review fees (fees other than impact fees are automatically adjusted annually on July 1st) prior to building permit issuance and building final. The fees will be based on the Public Works Fee Schedule prepared by Land Development Engineering. The estimated total amount of impact fees and engineering review fees for this project based on the Fee Schedule currently in effect is $3,492,000 based on 93- townhome style condominiums (multi-family units) with the square footage of each unit greater than 1,200 square feet.

32. Parkland Dedication/Parkland Fee In-Lieu: This project is also subject to the Parkland Dedication and Parkland Fee In-Lieu requirements (Morgan Hill Municipal Code Chapter 17.28). At the time of filing of the project's Final Map, the project shall pay fees in lieu of parkland dedication to meet the parkland obligation. The project's parkland obligation will be calculated using the formula shown in Municipal Code Section 17.28.060. Private recreation credits, which could allow a credit of up to 40% towards the parkland obligation, could be

available for private open space(s) within the subdivision that meets the standard requirements listed in Municipal Code Section 17.28.130.

33. Design of Sewer Improvements: The applicant shall cause to be undertaken the design and construction of sanitary sewer improvements including, but not limited to installation of sewer line extension on the proposed public street(s) or private street(s)/drive aisle(s). The sanitary collection system shall include, but not be limited to manholes with manhole frames and covers, cleanouts, wye-branches and laterals, and separate sewer taps to each lot. These are to be installed by the developer. (MHMC 13.20.355; 17.32.020 C; CMH Sewer System Master Plan; CMH Design Standards and Standard Details for Construction)

34. Sewer Connection: All existing and future sewer lines shall be tied into the City's system and existing septic systems shall be abandoned in accordance with City requirements. (MHMC 13.24.060; 17.32.20 C)

35. Storm Drainage Study: A complete storm drainage study of the proposed development must be submitted showing amount of run-off, and existing and proposed drainage structure capacities. This study shall be subject to review and approval by the City Engineer. All needed improvements will be made by the applicant. No overloading of the existing system will be permitted. (MHMC 17.32.020 B;17.32.090; CMH Design Standards and Standard Details for Construction)

36. Storm Drainage Design: The applicant shall cause the design and construction to be undertaken for a storm drainage collection system shown on the Tentative Map/Design Review plans. All storm drain improvements shall be constructed to the satisfaction of the City Engineer pursuant to City standards. (MHMC 17.32.020 A & B)

37. Storm Drainage Capacity: Collection system shall be designed to be capable of handling a 10-year storm without local flooding. On-site detention facilities shall be designed to a 25-year storm capacity. Streets shall be designed to carry 100-year storm. Items of construction shall include, but not be limited to installation of storm line extension on proposed public street(s), surface and subsurface storm drain facilities, manholes with manhole frames and covers, catch basins and laterals. Note: the project may be required to retain stormwater runoff as part of resolution R3-2013-0032 prior to releasing discharge rates at pre-development flows. (MHMC 17.32.020 B; 18.74.440; CMH Design Standards and Standard Details for Construction; CMH Storm Drainage System Master Plan)

38. Storm Drainage General Requirements: Prior to issuance of a grading permit, the applicant shall complete the following to the satisfaction of the City Engineer pursuant to City standards. Storm drain calculations to determine

detention/retention pond sizing and operations. Plan describing how material excavated during construction will be controlled to prevent this material from entering the storm drain system. Water Pollution Control Drawings (WPCD) for Sediment and Erosion Control. (CMH Design Standards and Standard Details for Construction)

39. Private Storm Drain Connection to Public Storm Drain System: Prior to connection of the private storm drain to the public storm drain system, the point of connection shall be inspected by the City's Environmental Services staff. Developer/Applicant shall contact SW Construction at SW.construction@morganhill.ca.gov for the inspection.

40. Prior to acceptance of public improvements or building final/occupancy, the private storm drain facilities shall be inspected by Civil Engineer of record and the City's Environmental Services staff. If necessary, storm drain pipe, inlets, post-construction stormwater control measures, and detention facilities, shall be cleared of foreign debris, sediment, or silt.

41. NPDES Construction Activity General Permit/SWPPP Requirements: As required by the State Water Resources Control Board (SWRCB) Order No. 2009-0009-DWQ, construction activity resulting in a land disturbance of one (1) acre or more of soil, or whose projects are part of a larger common plan of development that in total disturbs more than one (1) acre, are required to obtain coverage under the National Pollutant Discharge Elimination System (NPDES) General Permit No. CAS000002 for Discharges of Storm Water Associated with Construction Activity (General Permit). To be permitted with the SWRCB under the General Permit, owners must file a complete Notice of Intent (NOI) ONLINE at: http://smarts.waterboards.ca.gov/smarts/faces/SwSmartsLogin.jsp and develop a Storm Water Pollution Prevention Plan (SWPPP) Manual in accordance with the General Permit. The SWPPP Manual shall follow the CASQA SWPPP template/format at https://www.casqa.org/store/products/tabid/154/p-167constructionhandbookportal-initial-subscription.aspx and shall be approved by Public Works Engineering. A Waste Discharger Identification (WDID) number to be issued to the construction site after the SWRCB receives and verifies the submitted ONLINE NOI information. The WDID number and approved SWPPP Manual shall be provided to Public Works and the Building Department prior to any approval of grading activities (SWRCB NPDES General Permit CAS000002).

42. NPDES General Permit Site SWPPP Inspections and Compliance: ALL project onsite and offsite construction activity shall have the site inspected by a qualified third party SWPPP Inspector (QSD or QSP or RCE).

43. SWPPP Inspections shall occur weekly during the rainy season (September 15th thru May 1st).

44. SWPPP Inspections shall occur bi-weekly during the non-rainy season 48 hours prior to and following a forecasted rain event, SWPPP Inspections shall occur in addition to those of SWPPP and NPDES items above.

45. Per each of the inspection conditions 2, 3, or 4, SWPPP inspection reports, and when applicable, Rain Event Action Plans (REAPS) shall be e-mailed to: sw.construction@morganhill.ca.gov no later than 12:00 PM each Monday for the previous week's inspections with a brief statement whether the site is in compliance or non-compliant.

46. Prior to rain events, BMPs not in compliance will need to be corrected immediately.

47. Illicit discharges per the NPDES General Permit, non-compliance of tracking control, and inlet protection within the public right-of-way shall be addressed immediately.

48. Other non-compliance issues need to be addressed within a 24-hour period.

49. Non-compliance issues which have been corrected shall be verified by NPDES SWPPP Inspector by a follow-up inspection.

50. BMP maintenance/inspections shall include tree protection, if applicable.

51. Private Storm Drain Connection to Public Storm Drain System: Prior to connection of the private storm drain to the public storm drain system, the point of connection shall be inspected by the City's Environmental Services staff. Developer/Applicant shall contact SW Construction at SW.construction@morganhill.ca.gov for the inspection.

52. Prior to acceptance of public improvements or occupancy of the final unit, the private storm drain facilities shall be inspected by Civil Engineer of record and the City's Environmental Services staff. If necessary, storm drain pipe, inlets, postconstruction stormwater control measures, and detention facilities, shall be cleared of foreign debris, sediment, or silt.

53. Domestic Water System: The applicant shall cause the design and construction to be undertaken of a domestic water system to the satisfaction of the City Engineer pursuant to City standards. The water system improvements shall be constructed within public easements or street rights-of-way to the satisfaction of the City Engineer pursuant to City Standards and dedicated to the City. (MHMC 17.32.020 A & D; CMH Design Standards and Standard Details for Construction; CMH Water System Master Plan)

54. Water Well Abandonment: Abandonment of any existing water well shall be in conformance with Santa Clara Valley Water District (SCVWD) Ordinance 90-1. Location and disposition to be shown on the plan. Well(s) shall be properly registered with the SCVWD and either be maintained or abandoned in accordance with SCVWD standards.

55. Water Line Extension: Install water line extension on the proposed public streets and/or private streets. (MHMC 17.32.020 A & D; CMH Water System Master Plan)

56. Water Master Meter: All residential units are being served by a master public meter(s) and shall be privately sub-metered as allowed pursuant to Section 13.04.130.C of the Morgan Hill Municipal Code. The owner of a multi-unit residential development that includes habitable dwellings, may, upon compliance with the following, install separate private submeters to each residential unit:

    a. The owner shall obtain approval/permit from the Public Works Department for the submeter system.
    b. Any submeters shall accurately and completely measure all water consumed from the municipal water system.
    c. The owner shall agree to charge the tenant of each unit a water utility charge strictly based on the consumption by the occupants of the unit.
    d. Installation, maintenance, and monitoring of the submeter system shall be the responsibility of the owner, and in no circumstances shall the City be responsible.
    e. If any water conservation plan is implemented or imposed by the City, the owner shall be responsible for complying with any reductions required by such plan as measured by consumption on the meter(s) directly connected to the municipal water system.

57. Failure to abide by the above conditions, and/or any other conditions the City may impose, may result in revocation of any permit issued and/or other action as authorized by law, such as at the owner's expense to install individual public water meters for each unit.

58. Owner/Developer shall execute an agreement with the City to cover/outline the requirements of Section 13.04.130.C of the Municipal Code to be reviewed and approved by the City Engineer or designee.

59. Records of bookkeeping and private sub-metering usage shall be accurately maintained digitally. Upon request from the City, records shall be produced to the City within a 24-hour period.

60. Undergrounding New Utilities: The applicant shall cause the design and construction required to underground all electric, gas, Cable TV, and communication lines within the development. Such design and construction shall be to the satisfaction of the affected utilities and the City Engineer pursuant to City standards. (MHMC 17.32.020 E.1)

61. Landscaping and Irrigation Systems: Landscaping and irrigation systems serving common areas that are required to be installed in the public right-of-way on the perimeter of this project shall be continuously maintained by the property owner or designated maintenance entity.

62. Final Landscape Plans: Final landscape plans shall be submitted with and included as part of the improvement plans for the project. (MHMC 17.08.090)

63. Pre-construction Meeting: Prior to the approval of any Building Permit for grading activity, the developer shall schedule a pre-construction meeting with the Public Works Inspection Division with the following project team members:
    a. Civil Engineer of record
    b. Geotechnical Engineer of record
    c. Third Party QSD/QSP SWPPP Inspector
    d. General Contractor
    e. Sub-Contractors

64. As-Built Submittal Standards: The developer shall submit digital as-builts of the project's Final Map, Grading Plan, and Civil and Landscape Improvement Plans which adhere to the City's updated GIS/CAD Developer Submittal Standards.

65. Stormwater Post Construction Requirements (PCRs): Project shall comply with the California Regional Water Quality Control Board Central Coast Region Resolution No. R3-2013-0032 as documented by the Stormwater Management Guidance Manual for Low Impact Development and Post-Construction Requirements (developed from Resolution No. R-2013-0032 Attachment 1 and 2 at: http://www.waterboards.ca.gov/centralcoast/water_issues/programs/stormwater/docs/lid/lid_hydromod_charette_index.shtml). A copy of the Guidance Manual can be obtained from the City's Land Development Engineering webpage. Project shall provide Stormwater Runoff Management Plan, Stormwater Control Plan and Checklist, and applicable calculations per the Guidance Manual. Project shall meet the applicable
    Post-Construction Requirements:
    a. Performance Requirement a: Site Design and Runoff Reduction
    b. Performance Requirement b: Water Quality Treatment
    c. Performance Requirement c: Runoff Retention
    d. Performance Requirement d: Peak Management

66. Peak Storm Water Runoff Discharge Rates: Post-development peak storm water runoff discharge rates shall not exceed the estimated pre-development rate for developments where the increased peak storm water discharge rate will result in increased potential for downstream erosion. Note: the project may be required to retain stormwater runoff as part of resolution R3-2013-0032 prior to releasing discharge rates at pre-development flows.

67. Storm Drain System Stenciling and Signage All storm drain inlets and catch basins within the project area must be stenciled with prohibitive language (such as: “NO DUMPING – DRAINS TO CREEK”) and/or graphical icons to discourage illegal dumping. Signs and prohibitive language and/or graphical icons, which prohibit illegal dumping, must be posted at public access points along channels and creeks within the project area. Legibility of stencils and signs must be maintained.

68. Design Standards for Structural or Treatment Control BMPs: The post-construction treatment control BMPs shall incorporate, at a minimum, either a volumetric or flow based treatment control design standard, or both, as identified below to mitigate (infiltrate, filter or treat) storm water runoff:
    A. Volumetric Treatment Control BMP
        a. The 85th percentile 24-hour runoff event determined as the maximized capture storm water volume for the area, from the formula recommended in Urban Runoff Quality Management, WEF Manual of Practice No. 23/ASCE Manual of Practice No. 87, (1998); or
        b. The volume of annual runoff based on unit basin storage water quality volume, to achieve 80 percent or more volume treatment by the method recommended in California Stormwater Best Management Practices Handbook – Industrial/ Commercial, (2003); or
        c. The volume of runoff produced from a historical-record based reference 24-hour rainfall criterion for “treatment” that achieves approximately the same reduction pollutant loads achieved by the 85th percentile 24-hour runoff event.
    B. Flow Based Treatment Control BMP:
        a. The flow of runoff produced from a rain event equal to at least two times the 85th percentile hourly rainfall intensity for the area; or
        b. The flow of runoff produced from a rain event that will result in treatment of the same portion of runoff as treated using volumetric standards above.

69. Inlets and Riser Pipes for Underground Stormwater Infiltration and Storage Facilities: Underground stormwater infiltration and storage facilities shall include adequate inlets and/or risers for visual inspection, maintenance, and as flush ports.

70. Stormwater Runoff Management Plan (SWRMP): The Stormwater Runoff Management Plan shall include sufficient information to evaluate the environmental characteristics of affected areas, the potential impacts of the proposed development on water resources, and the effectiveness and acceptability of measures (post construction BMPs) proposed for managing stormwater runoff.
    A. The Stormwater Runoff Management Plan shall be prepared under the direction of a professional civil engineer registered in the State of California. The responsible professional civil engineer shall stamp and sign the approved Stormwater Runoff Management Plan.
    B. The developer shall provide a signed certification from the civil engineer responsible for preparing the Stormwater Runoff Management Plan that all stormwater best management practices have been designed to meet the requirements.

71. Stormwater BMP Operation, Maintenance, and Replacement Responsibility: Prior to building final, the property owner shall submit a signed certification (with signature, date & license number/seal) certifying that all post-construction stormwater management/BMP facilities shown on the as-built drawings were inspected by the civil engineer (or by a qualified third-party stormwater inspector hired by the permittee/owner) and have been constructed in accordance with the approved plans and specifications.

72. All on-site stormwater management facilities shall be operated and maintained in good condition and promptly repaired/replaced by the property owner(s), an owners' or homeowners' association or other legal entity approved by the City.

73. Any repairs or restoration/replacement and maintenance shall be in accordance with City-approved plans.

74. The property owner(s) shall develop a maintenance schedule for the life of any stormwater management facility and shall describe the maintenance to be completed, the time period for completion, and who shall perform the maintenance. This maintenance schedule shall be included with the approved Stormwater Runoff Management Plan.

75. Stormwater BMP Operation and Maintenance Agreement (SWBOMA): Prior to the issuance of any building permit requiring stormwater management BMPs, the owner(s) of the site shall enter into a formal written Stormwater BMP Operation and Maintenance Agreement with the City. The City shall record this agreement, against the property or properties involved, with the County of Santa Clara and it shall be binding on all subsequent owners of land served by the storm water management BMPs. The City standard Stormwater BMP Operation and

Maintenance Agreement will be provided by Land Development Engineering at building permit/improvement plan stage.

76. Stormwater BMP Inspection Responsibility: The property owner(s) shall be responsible for having all stormwater management facilities inspected for condition and function by a certified Qualified Stormwater Practitioner (QSP).

77. Unless otherwise required by the City Engineer or designee, stormwater facility inspections shall be done at least twice per year (April 15th and September 15th) by the QSP. Written records shall be kept of all inspections and shall include, at minimum, the following information:
a. Site address;
b. Date and time of inspection;
c. Name of the person conducting the inspection;
d. List of stormwater facilities inspected;
e. Condition of each stormwater facility inspected;
f. Description of any needed maintenance or repairs; and
g. As applicable, the need for site re-inspection.

Upon completion of each inspection, an inspection report shall be submitted to Environmental Services Division.

78. Records of Maintenance and Inspection Activities: On or before April 15th and September 15th of each year, the party responsible for the operation and maintenance of on-site stormwater management facilities under the BMP Operation and Maintenance Agreement shall provide the City Engineer or designee with records of all inspections, maintenance and repairs.

79. Annual Certification of SWRMP: On or before September 30th of each year, a Registered Civil Engineer (RCE) shall provide written certification that the project's stormwater quality design standards are properly maintained and functioning as required by the SWRMP.

BUILIDNG DIVISION

80. California Code of Regulations: Project shall be designed to comply with the edition of the California Codes of Regulations as amended by the Morgan Hill Municipal Code Title 15 that is in effect at time of Building Permit Application submittal.

81. Compliance with Morgan Hill Municipal Code: Project shall comply with the Morgan Hill Municipal Code (MHMC) including but not limited to:

A. MHMC 15.65 Sustainable Building Regulations

B. MHMC 15.62 Electric Vehicle Charging Infrastructure
C. MHMC 15.40 Building Security
D. MHMC 15.38 Wage Theft Preventions
E. MHMC 18.148 Water Conservation
F. MHMC 15.63 Prohibition of Natural Gas Infrastructure in New Buildings
G. MHMC 18.76.090 Noise Standards – Noise mitigations based on acoustical analysis per Municipal Code and California Codes.

82. Acoustical Analysis: An acoustical analysis report shall be submitted with the building permit documents showing interior and exterior noise mitigations for compliance to the MHMC, California Building code and CAL Green Code.

FIRE DIVISION

83. Preliminary Review Only: The requirements and conditions stated in this review are preliminary and are intended to be used for the purposes of project planning. An official Fire Department review of the project will be conducted upon receipt of a complete plan submittal application that clearly shows all intended grading, demolition, construction or building modifications.

84. Proposal limited to: Review of this Development proposal is limited to acceptability of site access as they pertain to fire department operations, and shall not be construed as a substitute for formal plan review to determine compliance with adopted model codes. Prior to performing any work, the applicant shall make application to, and receive from, the Building Department all applicable construction permits.

85. The following will be deferred submittals under a separate permit: underground fire service, fire sprinklers, fire alarm (if required).

86. Fire Lane Marking Required: Provide marking for all roadways within the project. Markings shall be per fire department specifications. Installations shall also conform to Local Government Standards and the City of Morgan Hill Standard Details and Specifications 11-F. (CFC Section 503)

87. Parking Along Roadways: The required width of fire access roadways shall not be obstructed in any manner. Parking shall not be allowed along roadways less than 28 feet in width. Parking will be allowed along one side of the street for roadways 28-35 feet in width. For roadways equal to or greater than 36 feet, parking will be allowed on both sides of the roadway. Roadway widths shall be measured face to face of curb. Parking spaces are based on an 8-foot-wide space. (CFC Section 503)

POLICE DEPARTMENT

88. With the submittal of the photometric plan, ensure efficient lighting is presented between buildings 13 &14, between buildings 2 & 3 & 4, and on the southwest corner of the project site.

HOUSING DIVISION

89. Inclusionary Housing Agreement: The developer shall execute and record an Inclusionary Affordable Housing Agreement with the City prior recordation of final map. (MHMC 14.04.050)

90. BMR Standards: The Below Market Rate (BMR) units shall comply with the BMR standards.

BMR standards:

A. Location. BMR units shall be distributed evenly throughout the project.
B. Lot Size. Lot size shall be at least the same size as the smallest lot of a market rate unit within the project;
C. Bedroom Count. Average bedroom count shall be the same as the average bedroom count in the market rate units in the project;
D. Exterior. Exterior trim entry door hardware, and finish to the same standard as the Market Rate
E. Minimum standards for equipment, fixtures, appliances and finishes have been established for the BMR units. All items installed by the developer shall be of good quality and in new condition. Good quality shall be deemed as entry level but generally not the lowest level of product offered for that application. All products shall offer durability, reliability and maintain a quality appearance and function that is standard to most other median priced homes in the area. The below listed items must be installed as a basic feature of each BMR home.
F. Minimum Interior standard finishes will be as follows:
    a. All closets shall have doors
    b. Interior doors to be raised panel type or same as market rate
    c. Door hardware to be brass finish or equivalent
    d. Appliances shall be major brand name
    e. Microwave with an exhaust vent shall be installed over the range
    f. Kitchen counters shall be white ceramic tile
    g. Kitchen cabinets shall be stained wood with white melamine interiors
    h. Units will be roughed in for AC including electrical and line set

i. Basic alarm system to secure all accessible openings to the home
j. Carpet in bedrooms, hallways, family rooms
k. Linoleum or tile entry, bathroom kitchens
l. Laminate flooring may substitute for carpet or linoleum
m. Electric garage door opener

G. Timing of Construction. BMR units shall be constructed in proportion to the BMR ownership housing requirement applicable to the project. For example, for a project with 389 units and an 20% BMR rental housing commitment, at least one BMR unit shall be constructed before or concurrently with every 5th market rate unit constructed. The last market rate unit to be completed in the project may not receive a certificate of occupancy until the last BMR unit has received a certificate of occupancy. The Director may approve a modified schedule if the timing requirement will create unreasonable delays in the issuance of certificates of occupancy for market rate units.

H. To align with the Inclusionary Housing Ordinance requirement on “BMR units being geographically and proportionally disbursed”, one of the below market rate units designated in Building 10 be relocated to Building 11 and one of the below market rate units in Building 8 be located to Building 13.

SB330 PROJECT APPLICATION
375 DIANA AVENUE

MORGAN HILL, CA

NOTE: LANDSCAPE ELEMENTS (TREES, FENCES, ETC.) SHOWN FOR GRAPHICAL REPRESENTATION ONLY. SEE LANDSCAPING DRAWINGS FOR MORE INFO.

VOP DAHLIN MH engineering Co. C2 Collaborative

SB330 PROJECT APPLICATION
375 DIANA AVENUE

MORGAN HILL, CA

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A.5	SITE CONTEXT PHOTOS CONTINUED
A.6	SITE PLAN
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JT5	JOINT TRENCH COMPOSITE PLAN
JT6	JOINT TRENCH COMPOSITE PLAN
SL1	STREET LIGHTING GENERAL NOTES AND DETAILS
SL2	STREET LIGHTING GENERAL NOTES AND DETAILS
SL3	STREET LIGHTING SITE PLAN
SL4	STREET LIGHTING SITE PLAN
PM	PHOTOMETRICS

PROJECT TEAM:

APPLICANT:
Valley Oak Partners, LLC
734 The Alameda, San Jose, CA 95126
Tel: 510-673-2078
Contact: Jeff Aguilar

ARCHITECT:
DAHLIN
5865 Owens Drive,
Pleasanton, CA 94588
Tel: 925-251-7200
Contact: Eric Muzzy

CIVIL ENGINEER:
MH Engineering
16075 Vineyard Blvd,
Morgan Hill, CA 95037
Tel: 408-779-7381x242
Contact: Harry Singla

LANDSCAPE ARCHITECT:
C2 Collaborative
100 Avenida Miramar
San Clements, CA 92672
Tel: 949-366-6624
Contact: Jack Haden

JOINT TRENCH:
Tarrar Utility Consultants
9245 Laguna Springs Drive Suite 380
Elk Grove, CA 95758
Tel: 925-240-2595
Contact: Lourdes Garcia Rodriguez

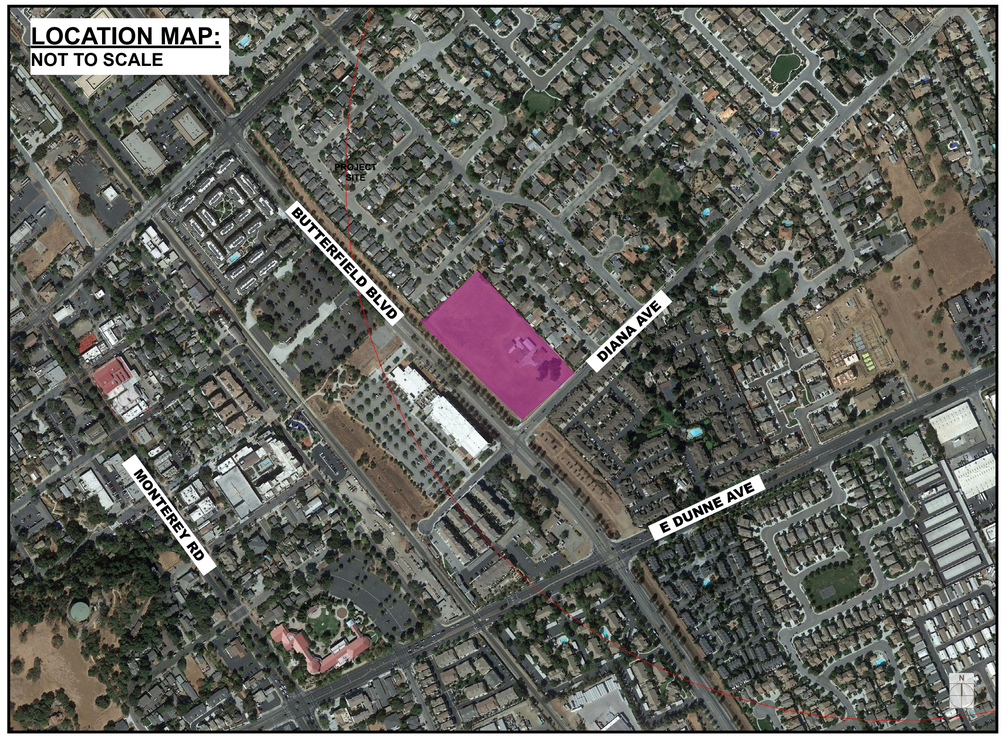
CODE INFORMATION:

APPLICABLE CODES:
2022 CALIFORNIA BUILDING CODE (CBC)
2022 CALIFORNIA ELECTRICAL CODE (CEC)
2022 CALIFORNIA MECHANICAL CODE (CMC)
2022 CALIFORNIA PLUMBING CODE (CPC)
2022 CALIFORNIA ENERGY CODE
2022 CALIFORNIA FIRE CODE (CFC)
2022 CALIFORNIA GREEN BUILDING STANDARDS CODE (CALGreen Code)
CALIFORNIA CODE OF REGULATIONS (CCR)
CITY OF MORGAN HILL, CALIFORNIA MUNICIPAL CODE (CMC)

OCCUPANCY GROUP:	R-2 (Dwellings) & U (Private Garages)
CONSTRUCTION TYPE:	VB
ALLOWABLE AREA:	21,000 SF
ALLOWABLE HEIGHT:	3 STORIES, 40’
SPRINKLER SYSTEM:	NFPA 13

NOTES:
1. There will be no combustible construction prior to hydrant installation.
2. Fire alarm required per CFC Sec. 907
3. Project is not defined as “public housing” and is being designed to 2022 CBC Chapter 11A accessibility standards.
4. Project is an all-electric development.

LOCATION MAP:
NOT TO SCALE



PROJECT DATA:

APNs: 726-12-001, 726-12-004

GROSS PARCEL AREA: 5.45 ACRES
NET PARCEL AREA: 5.30 ACRES

GENERAL PLAN: RESIDENTIAL ATTACHED MEDIUM (RAM)
ZONING: RESIDENTIAL ATTACHED MEDIUM (RAM)

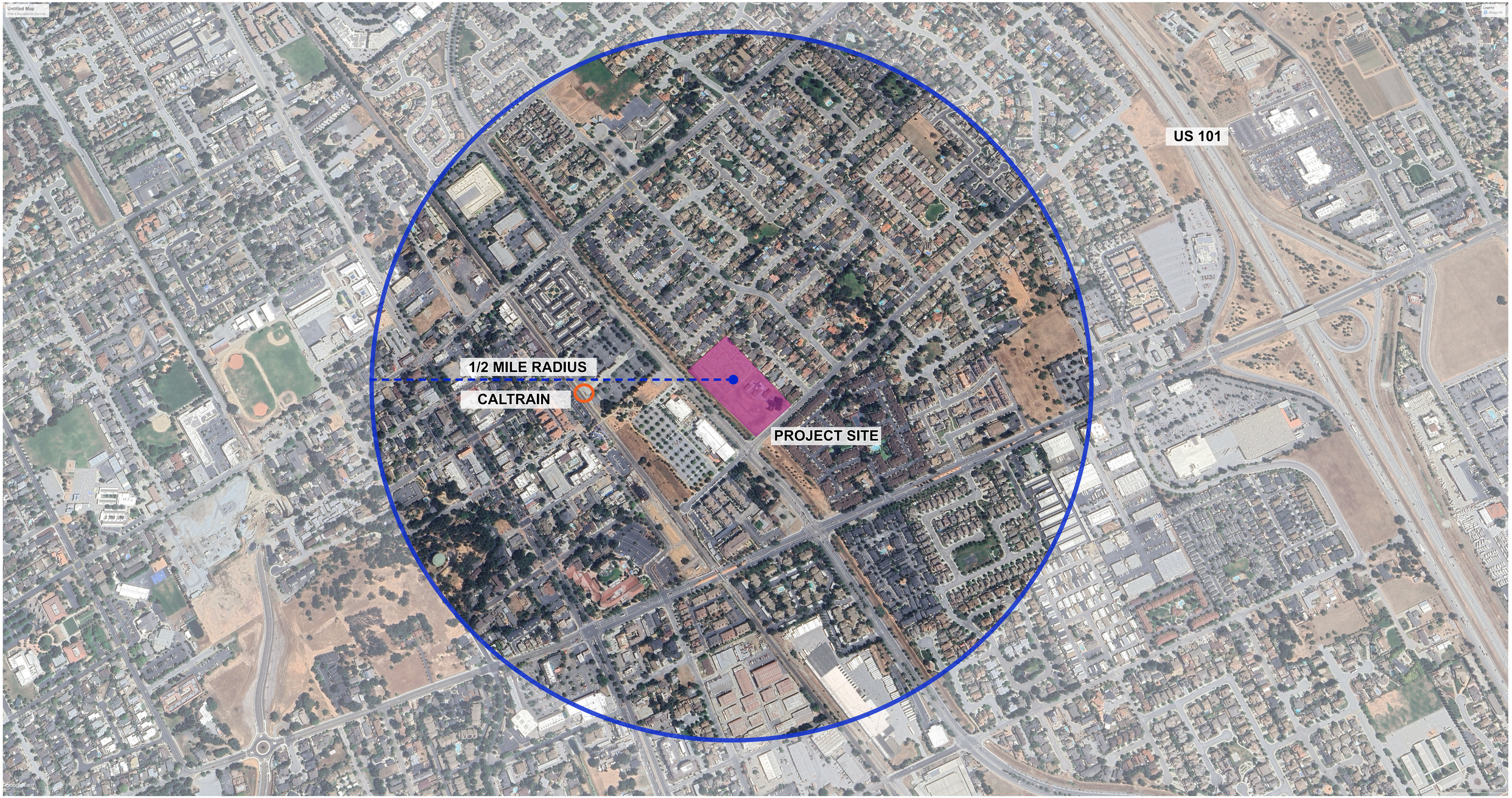
BASE DENSITY: 16-24 DU/NET ACRE MAX. (PER GENERAL PLAN)
BASE UNITS: 85-127 UNITS (16 x 5.30 = 84.8 MIN. UNITS TO 24 x 5.30 = 127.2 MAX. UNITS)

PROPOSED UNITS: 93 UNITS
PROPOSED DENSITY: 17.5 DU/ACRE (COMPLIANT WITH THE GENERAL PLAN DENSITY).

REQUIRED PARKING: 217 SPACES (@ 1 COVERED SPACE/UNIT + 1.0 UNCOVERED SPACE/2-BEDUNIT / 1.5 UNCOVERED SPACE/4-BED UNIT)
PROPOSED PARKING: 218 SPACES (@ 2 COVERED SPACES/UNIT + 0.5 UNCOVERED SPACES/4-BED UNIT)

PROJECT DESCRIPTION:

The project site is located at 375 Diana Avenue and has a net parcel area of +/-5.3 acres. The existing site consists of a single-family detached home. The project proposes demolition of existing building, and construction of a new residential community of 3-story “townhome style” condominium units. Residential development at the proposed density is allowed per Residential Attached Medium General Plan Land Use and Zoning development standards. The project layout is intended to complement the surrounding neighborhood, with residential entries and the vehicular project entry located along the Diana Avenue frontage. Walkways will connect residential entries to the surrounding streets, surface parking, and common open space. Proposed amenities include benches, a passive recreation area, shade trellis area, picnic / BBQ areas, and an exercise structure. The architectural design includes two elevation styles with two color and material schemes for each style. Resident parking will be provided in 2-car private garages for each home, and 31 additional surface parking spaces throughout the site. Proposed 2nd level deck areas will provide private open space for each home.



SHEET A.3

375 DIANA AVENUE

IN MORGAN HILL, CA

VICINITY MAP

N

0 150 300 600 900 FEET

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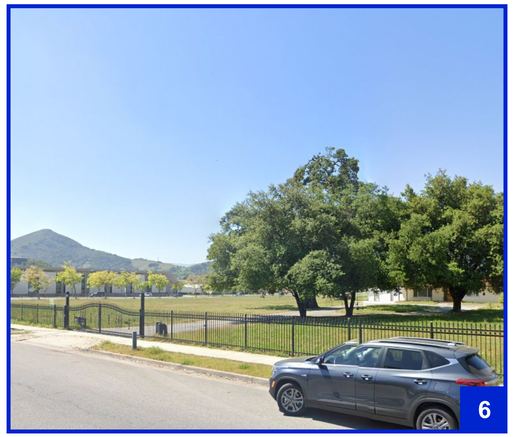

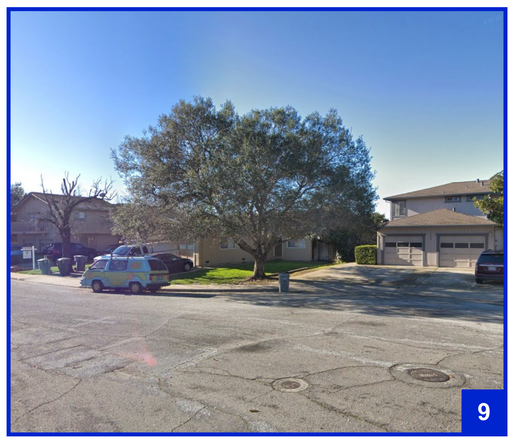

SHEET A.4

375 DIANA AVENUE

IN MORGAN HILL, CA

SITE CONTEXT PHOTOS

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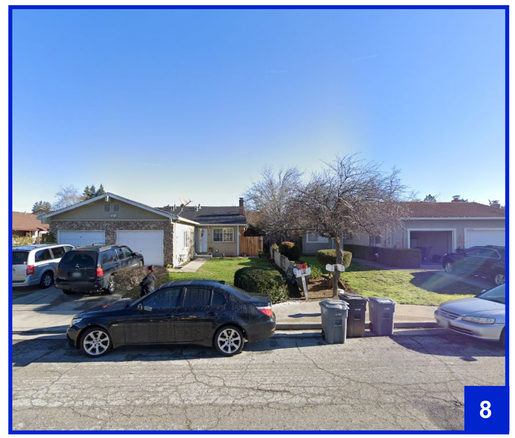

SHEET A.5

375 DIANA AVENUE

IN MORGAN HILL, CA

SITE CONTEXT PHOTOS

CONTINUED

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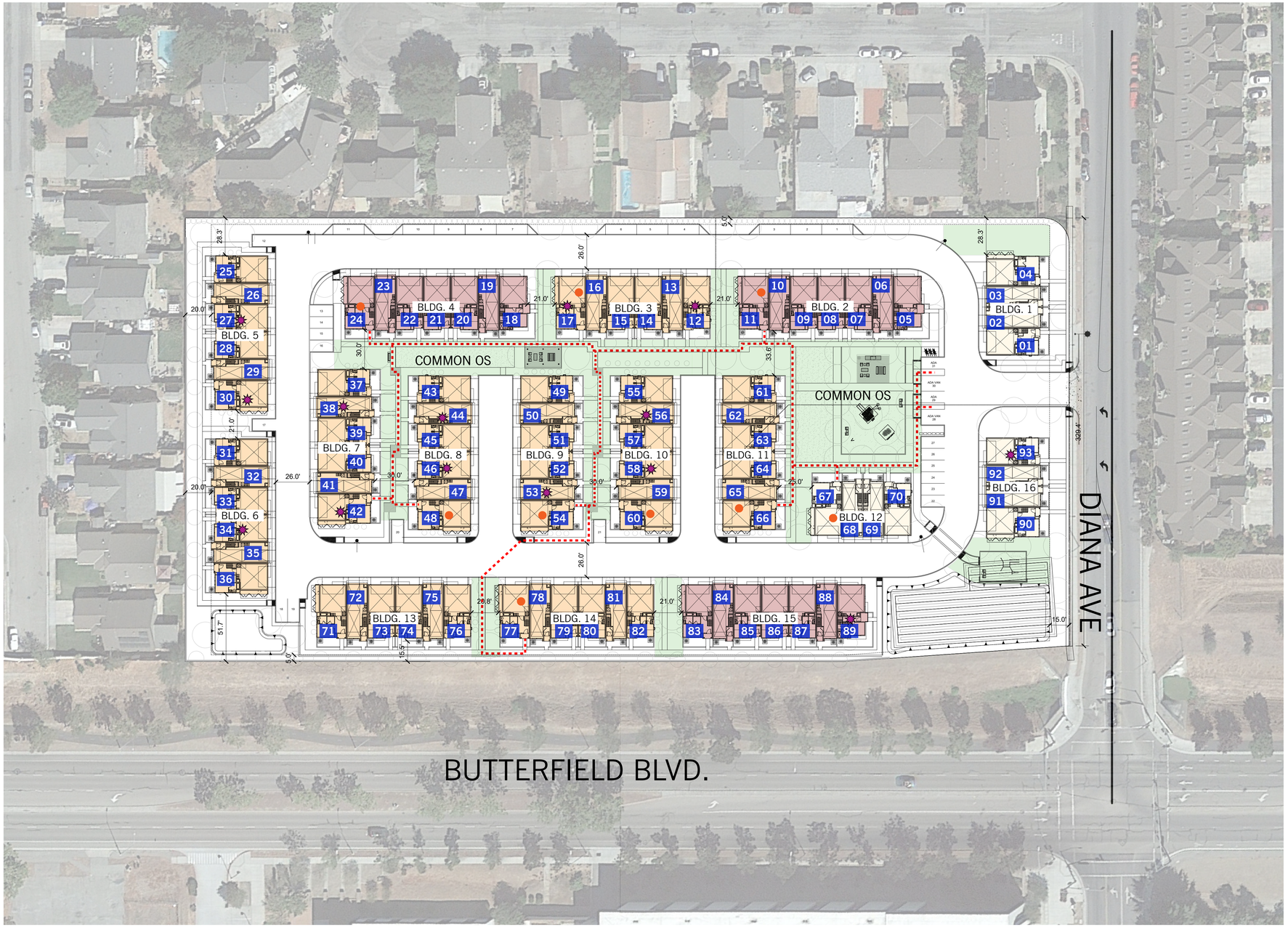

EV READY PARKING SPACE | 00 LOT NUMBER | 4-PLEX | 6-PLEX | 7-PLEX | ADAPTABLE UNITS | ACCESSIBLE PATH OF TRAVEL | BMR UNITS

PROJECT SUMMARY					
Site Location:	375 Diana Ave, Morgan Hill CA				
Accessor Parcel Number	726-12-001, 726-12-004				
Gross Parcel Area	237,402	sf	5.45	acres	
Net Parcel Area	231,049	sf	5.30	acres	
DEVELOPMENT REGULATIONS	**REQUIRED**				**PROVIDED**
GP Designation	RAM (Resi Attached Medium)				
GP Density	16 - 24 du/ net acre				17.5
Zoning Designation	RAM (Resi Attached Medium)				
Min. Lot Size					
Lot area	6,000	SF min			231,049
Lot width	60'	min			329.4'
Lot depth	85'	min			680.1'
Lot Coverage	60%	max			35.0%
Site area per dwelling unit	2,000 sf	min			2,484
Setbacks	BASE ZONING				
Front	15'	min			15' min
Rear	20'	min			20' min
Interior Side	5'	min			29' min
Street Side	15'	min			15.5' min
Building height (overall)	3-stories /40'				3-stories /40'
OPEN SPACE	**REQUIRED**				**PROVIDED**
Common Open Space	150 sf per unit	min			376 sf per unit
Private Open Space	150 sf per unit	min			150 sf per unit
On-Site Recreational Amenities	(2) x Tier 1, (2) x Tier 2, (1) Tier (3)				(2) x Tier 1, (2) x Tier 2, (1) Tier (3)
Tier 1					Benches, Passive rec. area
Tier 2					Shade trellis area, 2 Picnic / BBQ Areas
Tier 3					Exercise structure
PARKING STANDARDS	**REQUIRED**				**PROVIDED**
	covered		uncovered		
2 bed - TH	1	/ unit	1	/ unit	2 covered / unit (64 Total)
4 bed - TH	1	/ unit	1.5	/ unit	2 covered/unit (122 Total) .5 uncovered/unit (31 Total)
Short term bike spaces	10% of req'd auto spaces				10% of req'd auto spaces (22 Total)
Long term bike spaces	1/ 5 units				1 / unit

ARCHITECTURAL SUMMARY

unit name	unit count	bedroom count	bathroom count	gross living area / unit	total gross living area	garage area	porch area	deck area	total deck area
th 1	32	2	2.5	1,410	45,120	598	20	100	3,200
th 2	29	4	3.5	1,975	57,275	498	15	110	3,190
th 2x	16	4	3.5	2,050	32,800	561	25	106	1,696
th 2C	13	4	3.5	1,963	25,519	498	26	81	1,053
th 3	3	4	3.5	2,093	6,279	514	51	105	315
Total	**93**				**166,993**				**9,454**

BUILDING CALCULATIONS

bldg name	bldg count	unit count / bldg	building area - level 1	building area - level 2	building area - level 3	building area / bldg	total building area	coverage area / bldg	total coverage area
4 unit TH	3	4	3,163	2,987	3,348	9,498	28,494	3,400	10,200
6 unit TH	10	6	4,852	4,523	5,039	14,414	144,140	5,190	51,900
7 unit TH	3	7	5,718	5,387	6,017	17,122	51,366	6,191	18,573
Total	**16**						**224,000**		**80,673**

SHEET A.6

375 DIANA AVENUE

IN MORGAN HILL, CA

SITE PLAN

0 20 40 80 120 FEET

N

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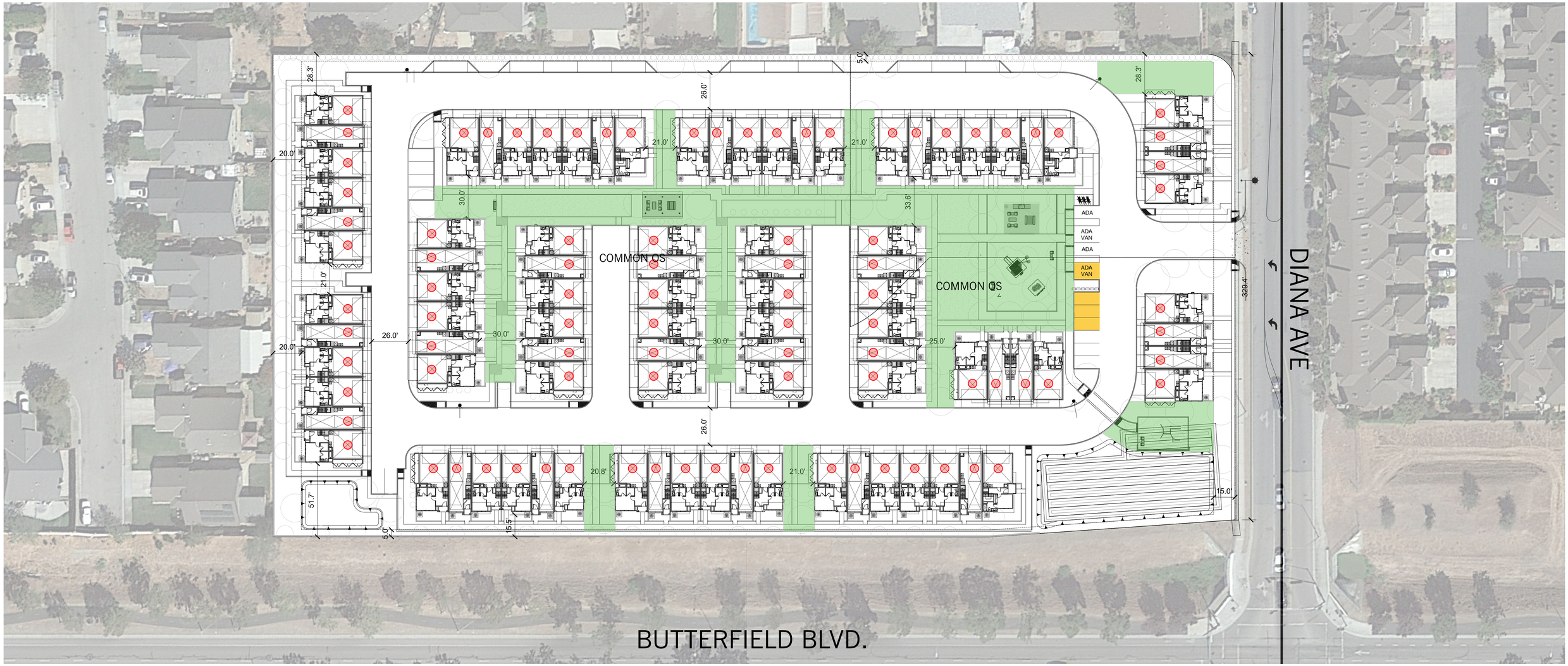
PROJECT NO. 1005.013 | APRIL 2, 2025



LEGEND

EV READY PARKING SPACE WITH EV CHARGERS

GARAGE EQUIPPED WITH 1 LEVEL 2 (40 AMP) AND 1 LEVEL 1 (20 AMP) CHARGER / RECEPTACLE

Electric Vehicle (EV) Parking Summary (Townhomes)				
	Required EV Spaces per the following codes:			Provided Spaces
	Morgan Hill Municipal Code[1]	CalGreen[2]	CBC[3]	
Total Number of Townhome Garage Spaces:	MHMC requires each two-car garage to have (1) Level 2 (40 amp) charger/receptacle and (1) Level (20amp) charger/receptacle	N/A	N/A	93 Level 2 (40 amp) + 93 Level 1 (20 amp) = 186
Total Common Area Parking Spaces:				31
EV ready parking spaces with EV chargers:	N/A	10% of total (4)	See Note 3	4(1 ADA VAN)
Total Provided EV Spaces:				4

Note: 1. Per City of Morgan Hill Municipal Code Section 15.62.060
2. Per Cal Green BuildingCode Section 4.106.4.2.2
3. Per CBC Section 11B-228.3.2.1, if providing 1-4 EVCS, one must be van accessible
4. Per Cal Green BuildingCode Section 4.106.4.2.2.1.1 the EVCS space shall be located adjacent to an accessible parking space or route

SHEET A.6.1

375 DIANA AVENUE

IN MORGAN HILL, CA

EXHIBIT
EV PARKING SUMMARY

FEET
N
0 16 32 64 96

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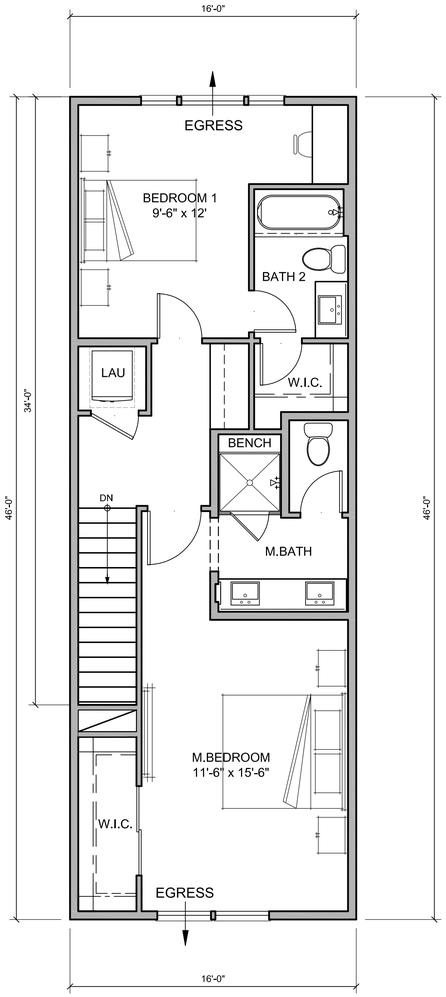
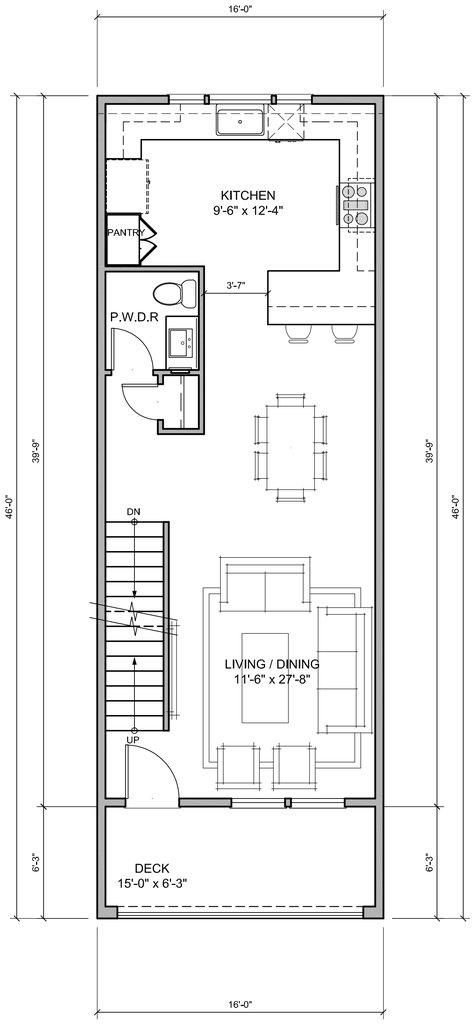


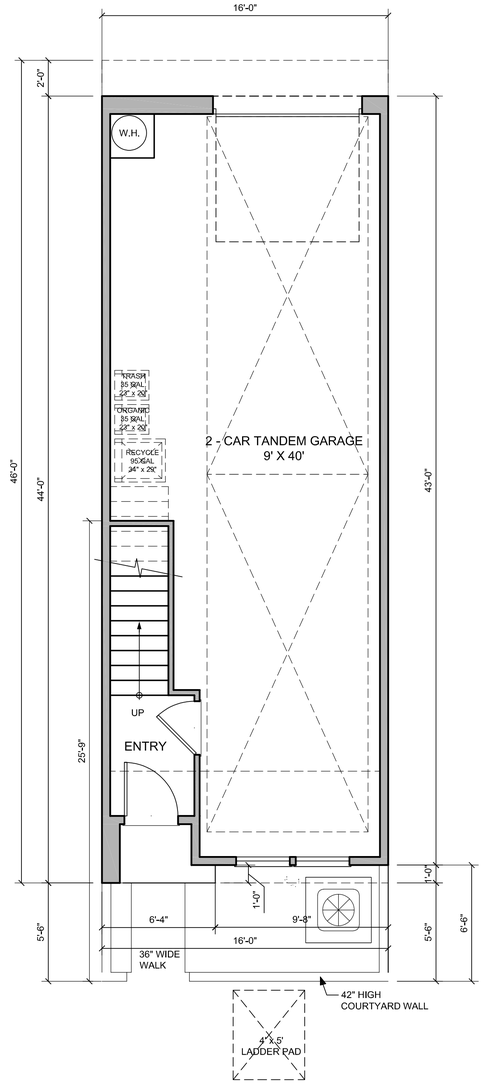
PLAN 1 THIRD FLOOR

SCALE: 1/4" = 1'-0"



PLAN 1 SECOND FLOOR

SCALE: 1/4" = 1'-0"



PLAN 1 FIRST FLOOR

SCALE: 1/4" = 1'-0"

PLAN 1

2 BEDROOMS / 2.5 BATHS

FIRST FLOOR:	79 SQ. FT.
SECOND FLOOR:	636 SQ. FT.
THIRD FLOOR:	695 SQ. FT.
TOTAL LIVING:	1410 SQ. FT.
GARAGE:	598 SQ. FT.
PORCH:	20 SQ. FT.
2ND FLOOR DECK:	100 SQ. FT.

SHEET A.7

375 DIANA AVENUE

IN MORGAN HILL, CA

FLOOR PLANS

UNIT PLAN 1

N

0 2 4 8 12 FEET

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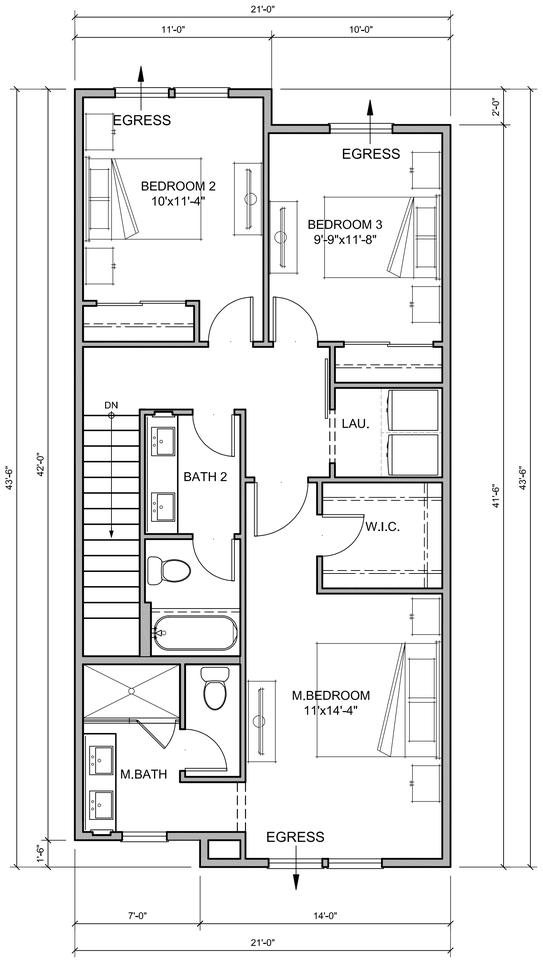
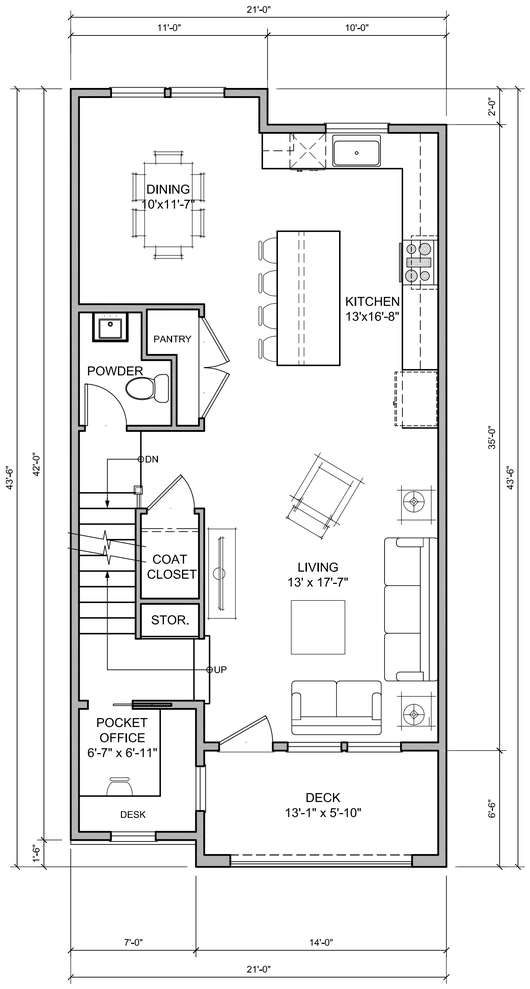


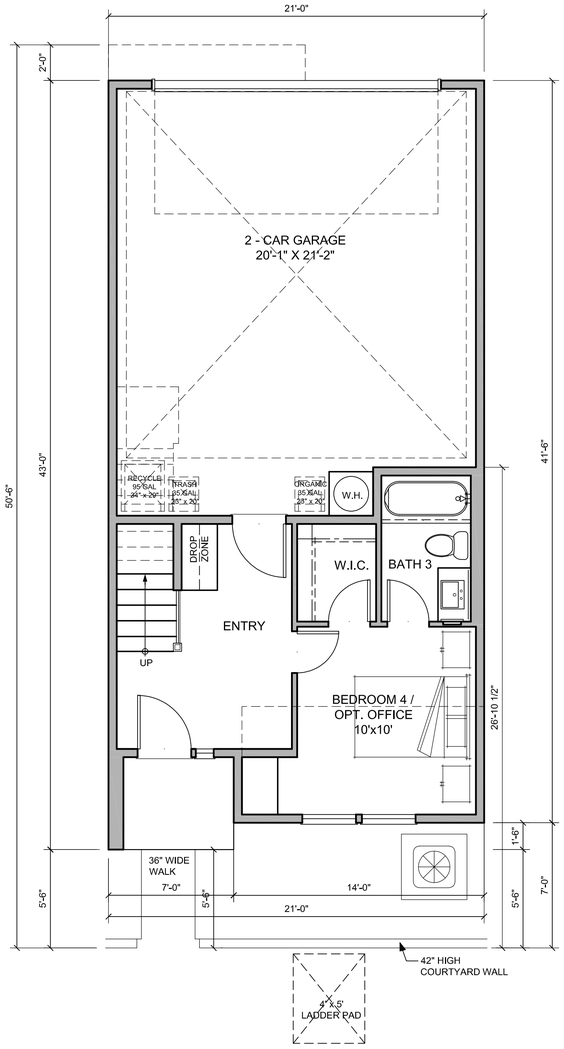
PLAN 2 THIRD FLOOR

SCALE: 1/4" = 1'-0"



PLAN 2 SECOND FLOOR

SCALE: 1/4" = 1'-0"



PLAN 2 FIRST FLOOR

SCALE: 1/4" = 1'-0"

PLAN 2

4 BEDROOMS / 3.5 BATHS

FIRST FLOOR:	347 SQ. FT.
SECOND FLOOR:	794 SQ. FT.
THIRD FLOOR:	834 SQ. FT.
TOTAL LIVING:	1975 SQ. FT.
GARAGE:	498 SQ. FT.
PORCH:	15 SQ. FT.
2ND FLOOR DECK:	110 SQ. FT.

SHEET A.8

375 DIANA AVENUE

IN MORGAN HILL, CA

FLOOR PLANS

UNIT PLAN 2

N

0 2 4 8 12 FEET

VOP

DAHLIN

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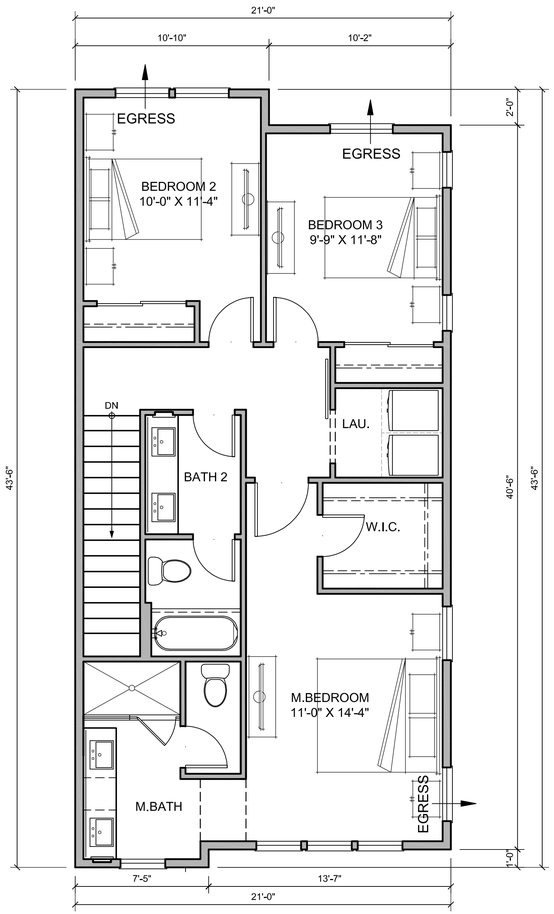
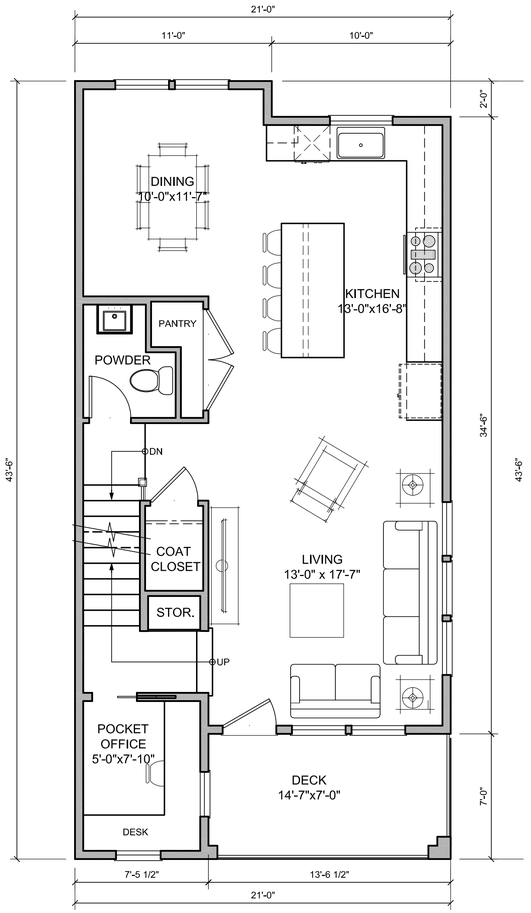


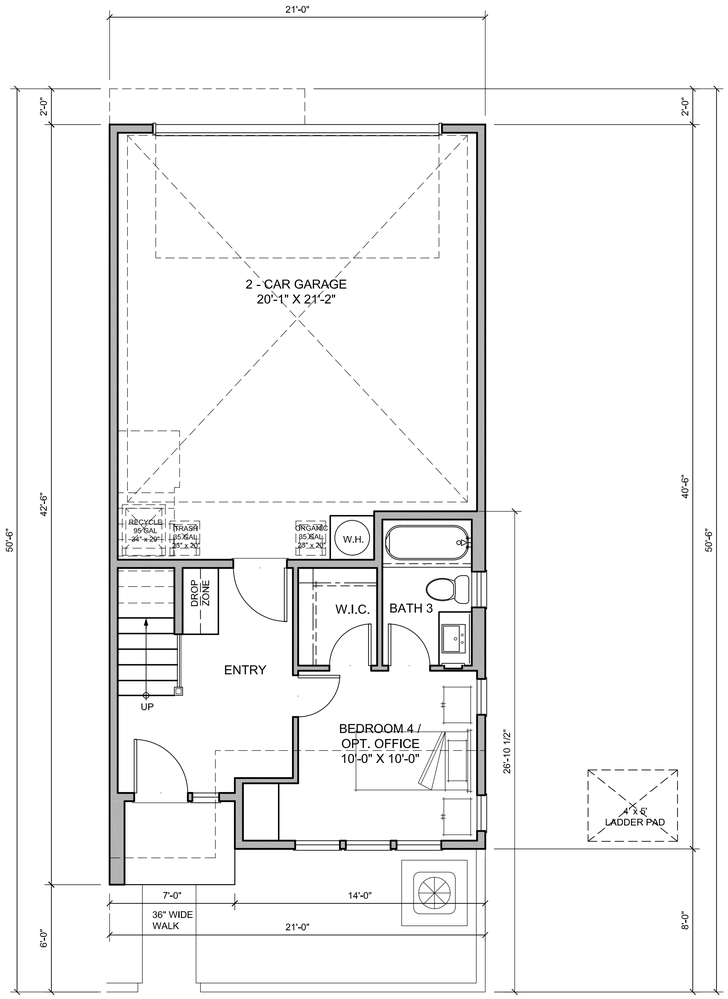
PLAN 2C THIRD FLOOR

SCALE: 1/4" = 1'-0"



PLAN 2C SECOND FLOOR

SCALE: 1/4" = 1'-0"



PLAN 2C FIRST FLOOR

SCALE: 1/4" = 1'-0"

PLAN 2C (Corner)
4 BEDROOMS / 3.5 BATHS

FIRST FLOOR:	333 SQ. FT.
SECOND FLOOR:	799 SQ. FT.
THIRD FLOOR:	831 SQ. FT.
TOTAL LIVING:	1963 SQ. FT.
GARAGE:	498 SQ. FT.
PORCH:	26 SQ. FT.
2ND FLOOR DECK:	81 SQ. FT.

SHEET A.9

375 DIANA AVENUE

IN MORGAN HILL, CA

FLOOR PLANS

UNIT PLAN 2C

N

0 2 4 8 12 FEET

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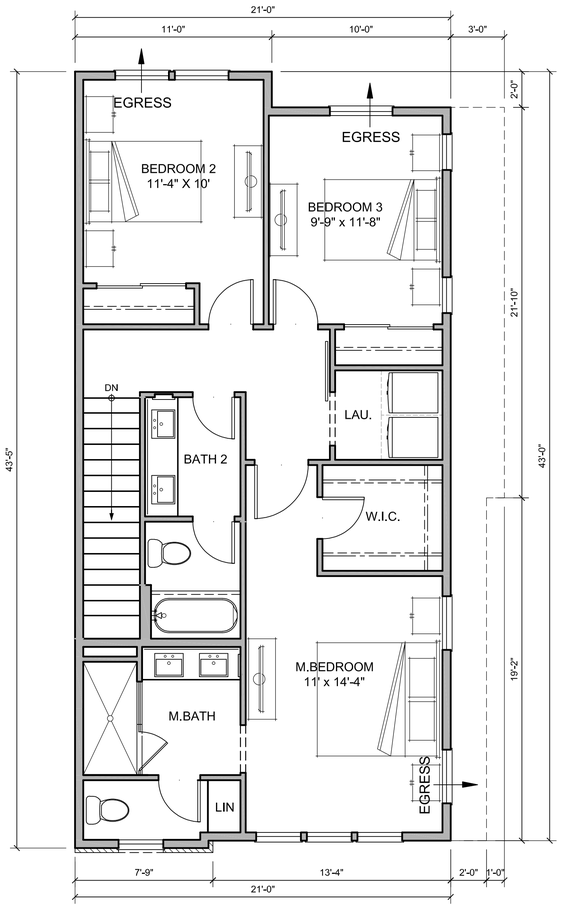
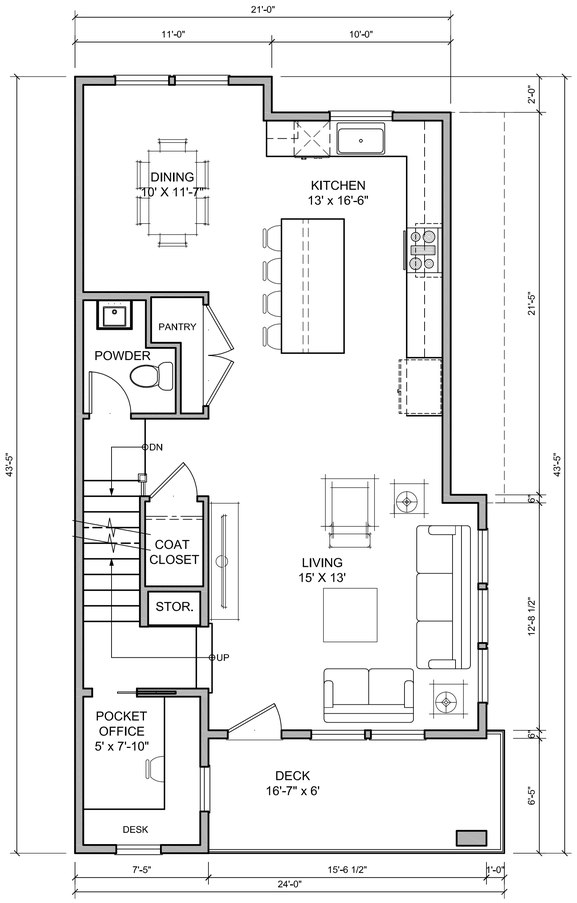


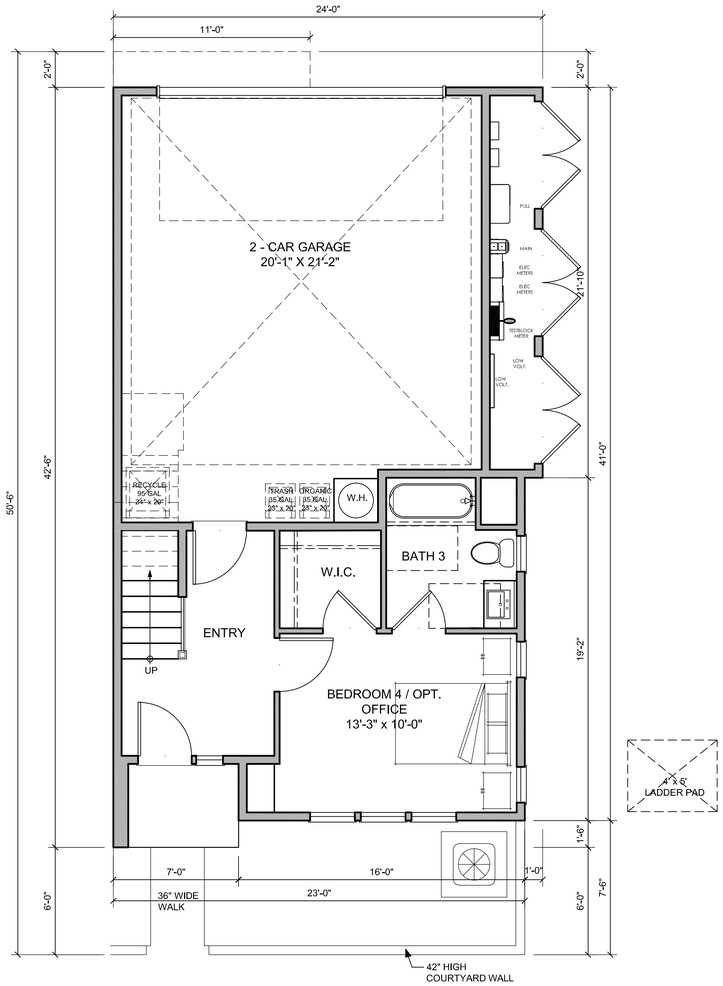
PLAN 2X THIRD FLOOR

SCALE: 1/4" = 1'-0"



PLAN 2X SECOND FLOOR

SCALE: 1/4" = 1'-0"



PLAN 2X FIRST FLOOR

SCALE: 1/4" = 1'-0"

PLAN 2X

4 BEDROOMS / 3.5 BATHS

FIRST FLOOR:	381 SQ. FT.
SECOND FLOOR:	832 SQ. FT.
THIRD FLOOR:	837 SQ. FT.
TOTAL LIVING:	2050 SQ. FT.
GARAGE:	561 SQ. FT.
PORCH:	25 SQ. FT.
2ND FLOOR DECK:	106 SQ. FT.

SHEET A.10

375 DIANA AVENUE

IN MORGAN HILL, CA

FLOOR PLANS

UNIT PLAN 2X

N

0 2 4 8 12 FEET

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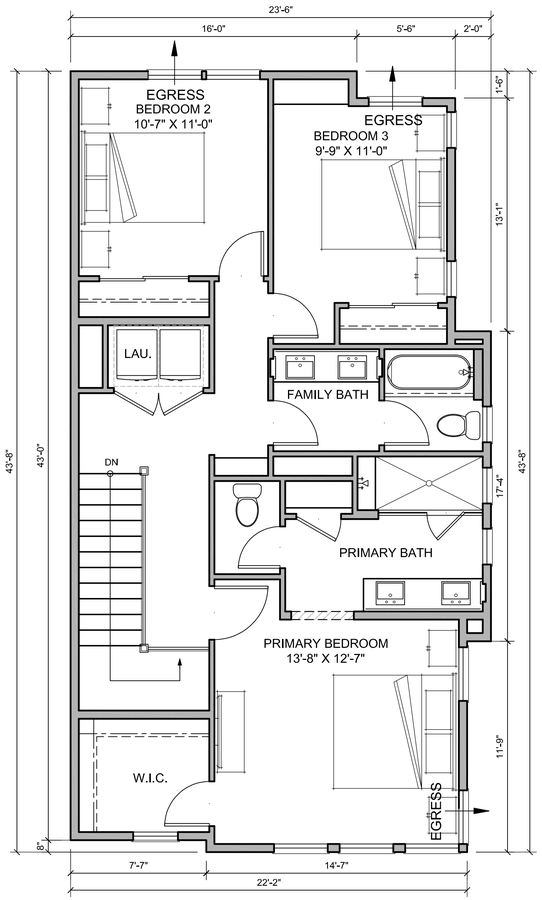
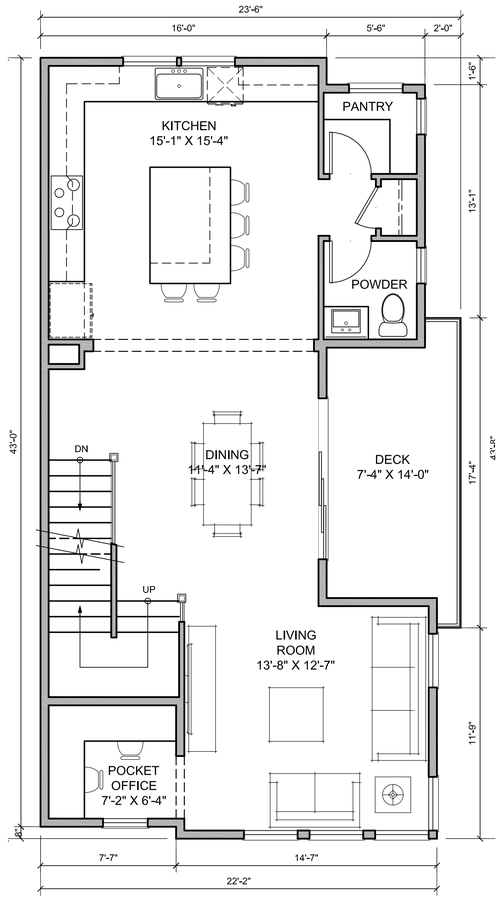


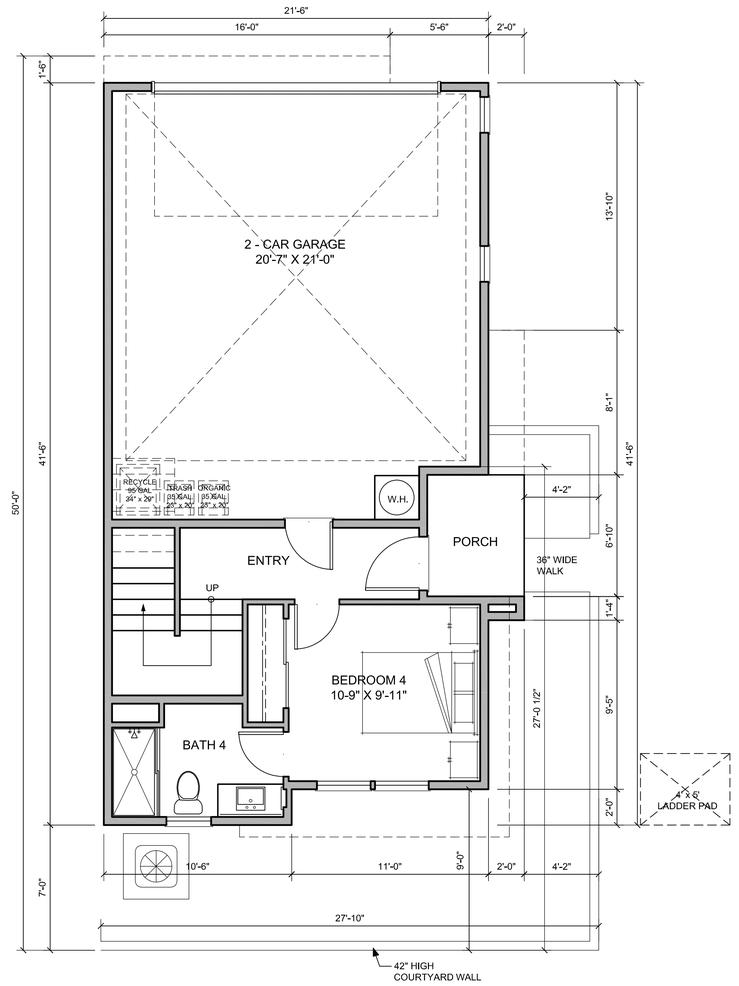
PLAN 3 THIRD FLOOR

SCALE: 1/4" = 1'-0"



PLAN 3 SECOND FLOOR

SCALE: 1/4" = 1'-0"



PLAN 3 FIRST FLOOR

SCALE: 1/4" = 1'-0"

PLAN 3

4 BEDROOMS / 3.5 BATHS

FIRST FLOOR:	333 SQ. FT.
SECOND FLOOR:	857 SQ. FT.
THIRD FLOOR:	903 SQ. FT.
TOTAL LIVING:	2093 SQ. FT.
GARAGE:	514 SQ. FT.
PORCH:	51 SQ. FT.
2ND FLOOR DECK:	105 SQ. FT.

SHEET A.11

375 DIANA AVENUE

IN MORGAN HILL, CA

FLOOR PLANS

UNIT PLAN 3

N

0 2 4 8 12 FEET

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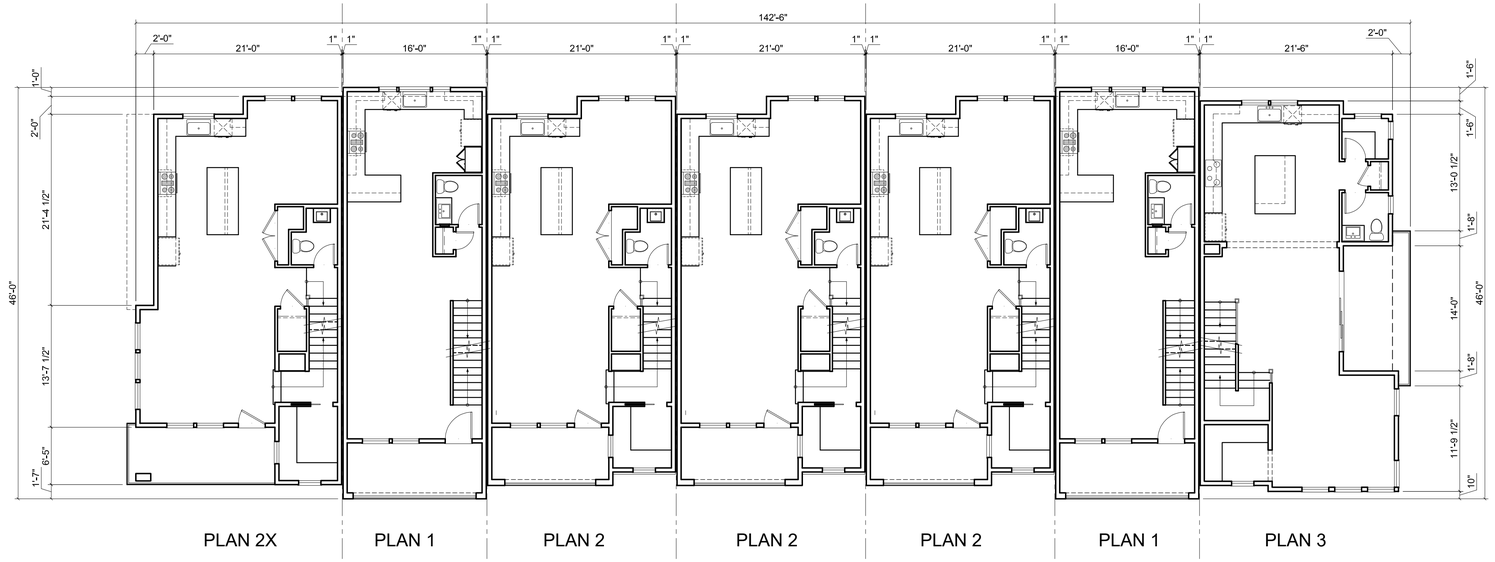
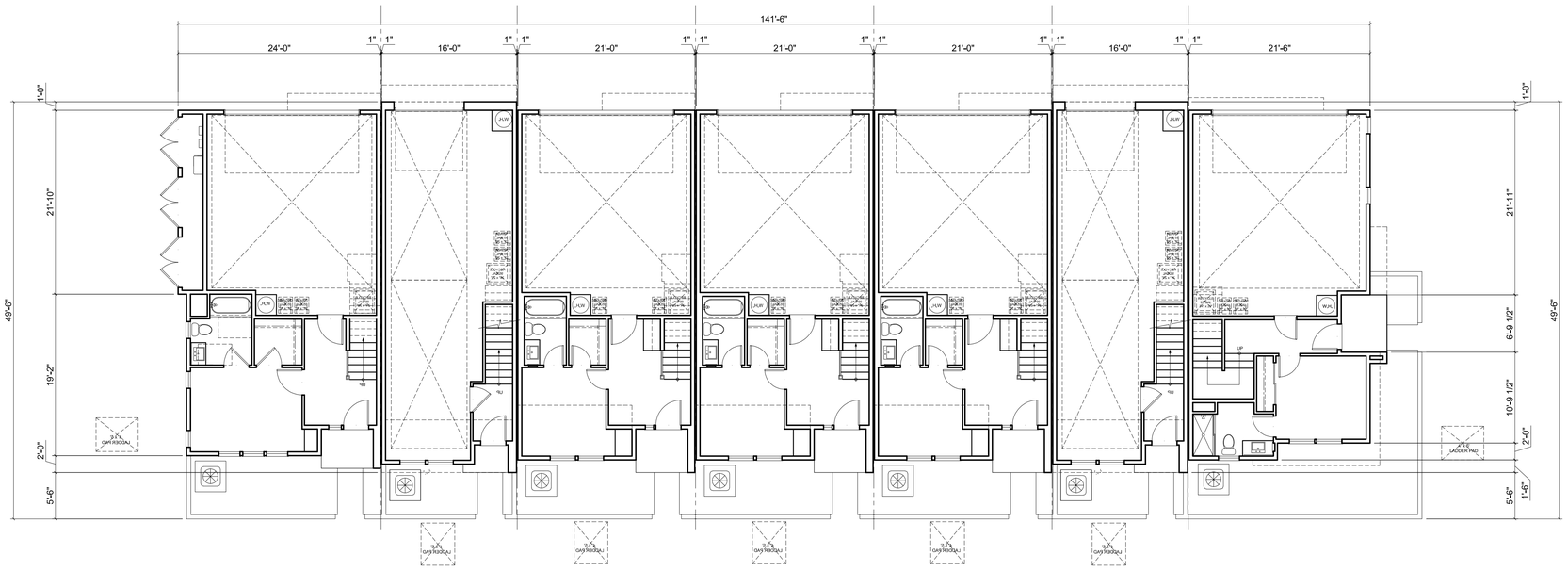


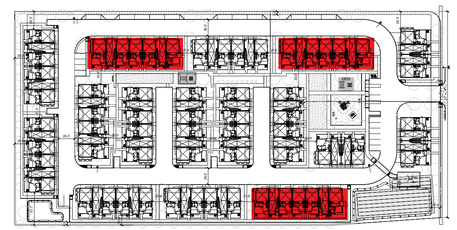
BUILDING 1 - SECOND FLOOR PLAN

SCALE: 1/8" = 1'-0"



BUILDING 1 - FIRST FLOOR PLAN

SCALE: 1/8" = 1'-0"



SITE PLAN KEY

SHEET A.12

375 DIANA AVENUE

IN MORGAN HILL, CA

FLOOR PLANS

BUILDING 1 - 7-PLEX - LEVELS 1 &2

N

0 4 8 16 24 FEET

VOP DAHLIN

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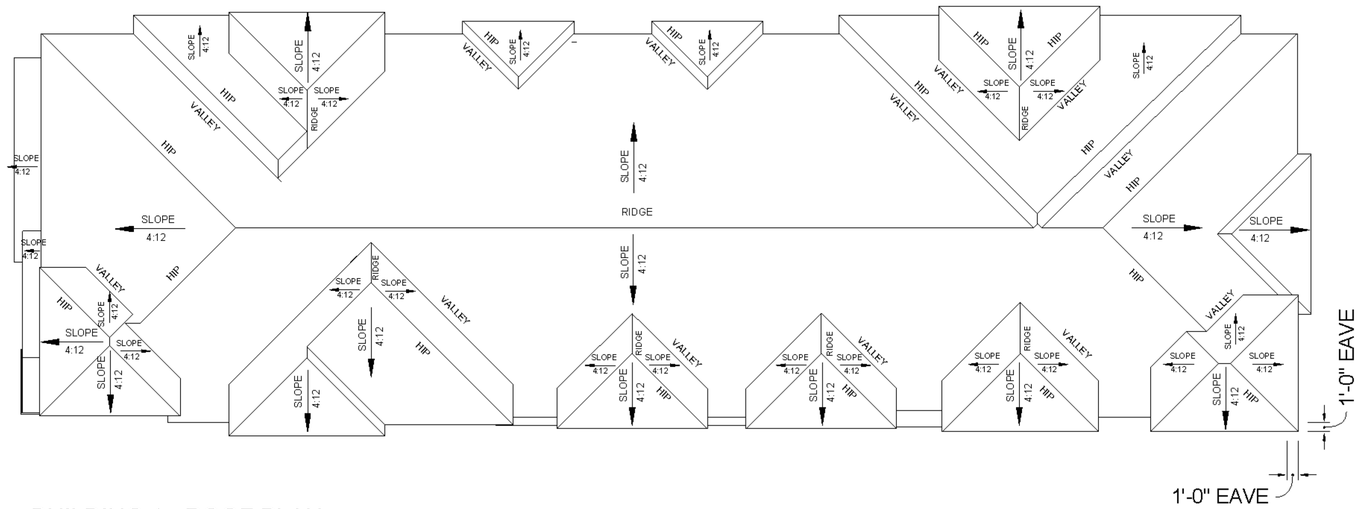
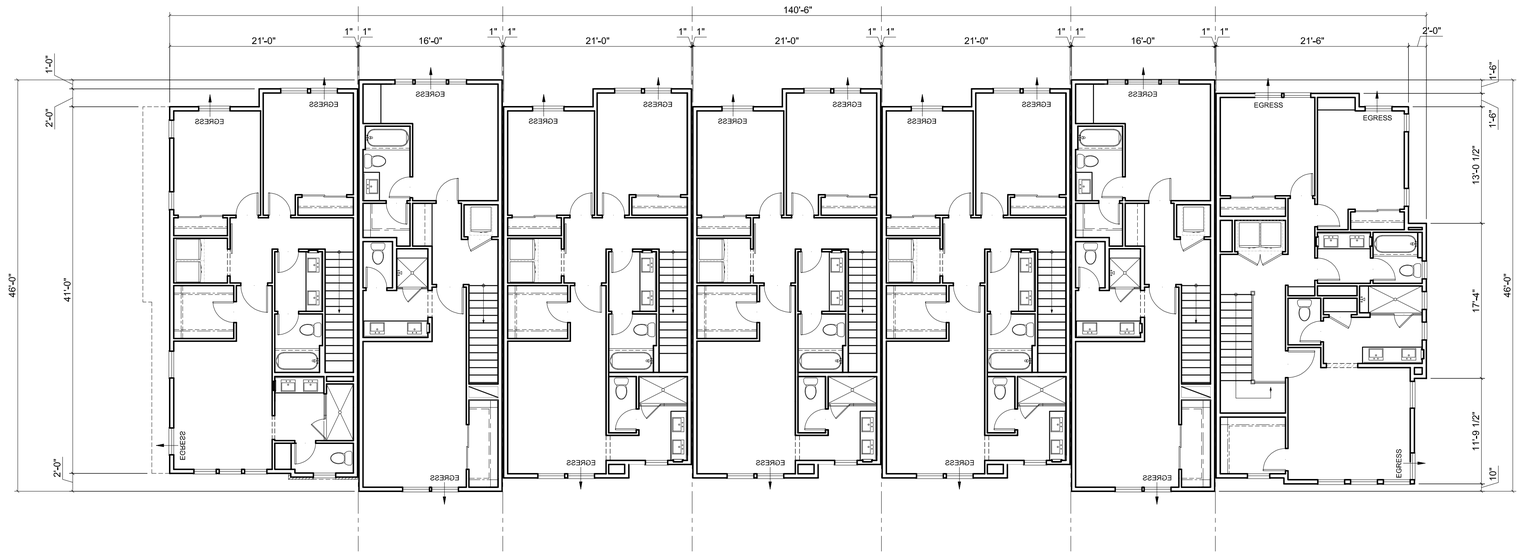


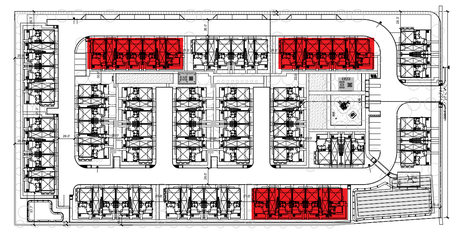
BUILDING 1 - ROOF PLAN

SCALE: 1/8" = 1'-0"



BUILDING 1 - THIRD FLOOR PLAN

SCALE: 1/8" = 1'-0"



SITE PLAN KEY

SHEET A.13

375 DIANA AVENUE

IN MORGAN HILL, CA

FLOOR PLANS

BUILDING 1 - 7-PLEX - LEVELS 3 & ROOF

N

0 4 8 16 24 FEET

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FRONT ELEVATION

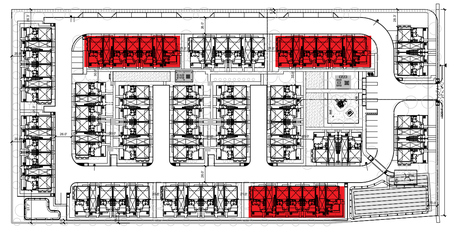
SCALE: 1/8" = 1'-0"

LEFT ELEVATION

SCALE: 1/8" = 1'-0"

MATERIAL LIST

1. FIBERGLASS DOOR
2. VINYL SINGLE HUNG WINDOWS
3. PAINTED STUCCO W/MTL REVEALS
4. ASPHLAT COMPOSITION SHINGLE ROOF
5. HORIZONTAL LAP SIDING
6. PAINTED METAL GARAGE DOOR W/ LITES
7. PAINTED METAL RAILING
8. PAINTED ACCENT PANEL
9. PAINTED MECHANICAL ROOM DOORS
10. PAINTED FASCIA AND TRIM
11. 42" STUCCO COURTYARD WALL W/ STONE CAP



SITE PLAN KEY

SHEET A.14

375 DIANA AVENUE

IN MORGAN HILL, CA

ELEVATIONS

BUILDING 1 - 7-PLEX

N

0 4 8 16 24 FEET

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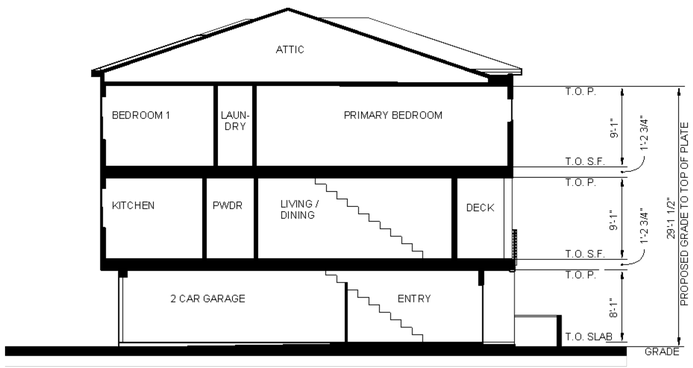
VOP DAHLIN

REAR ELEVATION

SCALE: 1/8" = 1'-0"

RIGHT ELEVATION

SCALE: 1/8" = 1'-0"

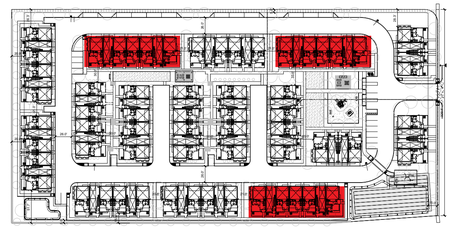


SECTION

SCALE: 1/8" = 1'-0"

MATERIAL LIST

1. FIBERGLASS DOOR
2. VINYL SINGLE HUNG WINDOWS
3. PAINTED STUCCO W/MTL REVEALS
4. ASPHLAT COMPOSITION SHINGLE ROOF
5. HORIZONTAL LAP SIDING
6. PAINTED METAL GARAGE DOOR W/ LITES
7. PAINTED METAL RAILING
8. PAINTED ACCENT PANEL
9. PAINTED MECHANICAL ROOM DOORS
10. PAINTED FASCIA AND TRIM
11. 42" STUCCO COURTYARD WALL W/ STONE CAP



SITE PLAN KEY

SHEET A.15

375 DIANA AVENUE

IN MORGAN HILL, CA

ELEVATIONS

BUILDING 1 - 7-PLEX

N

0 4 8 16 24 FEET

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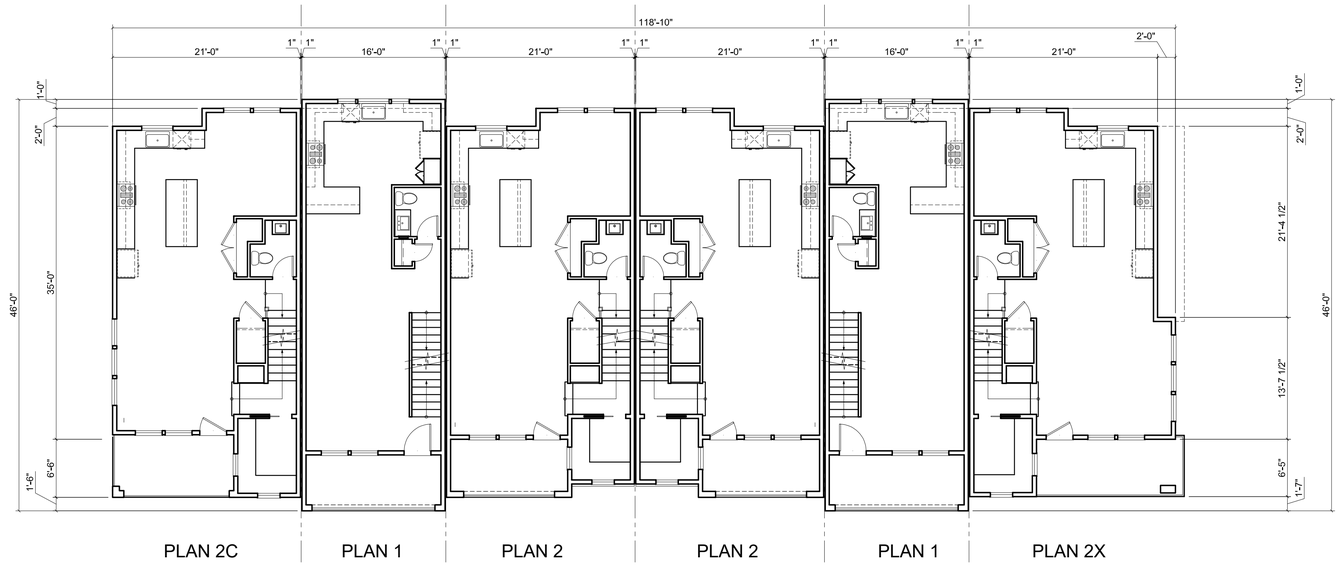
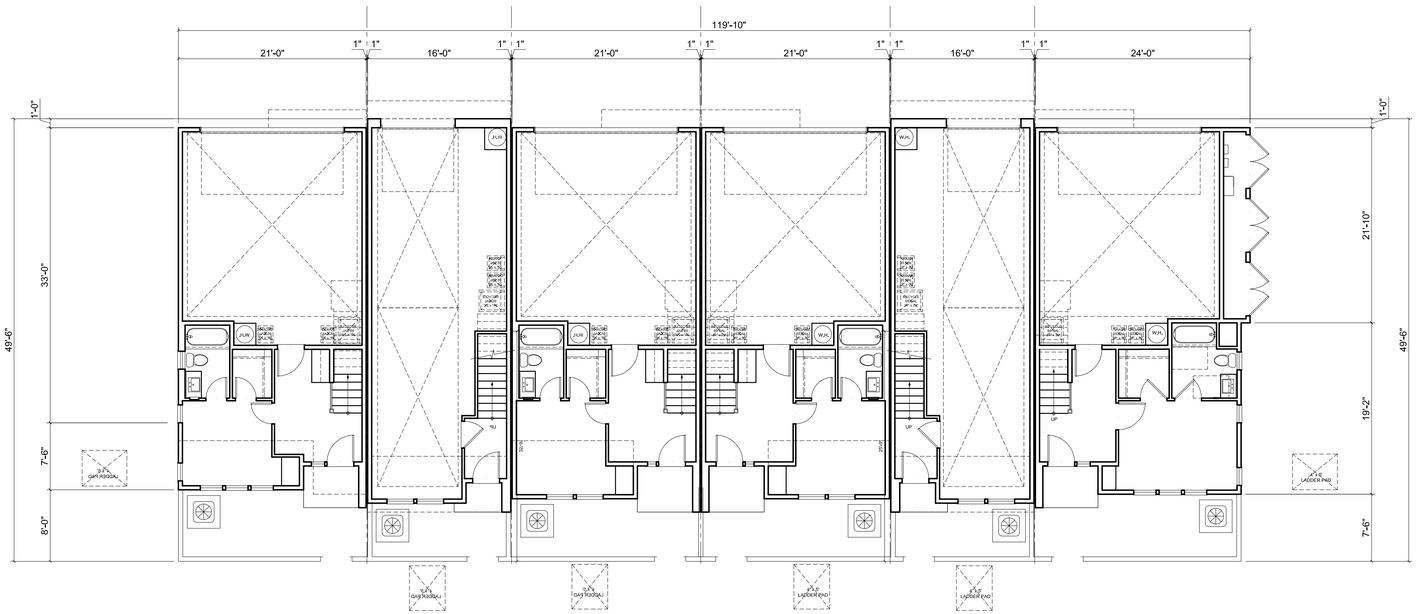


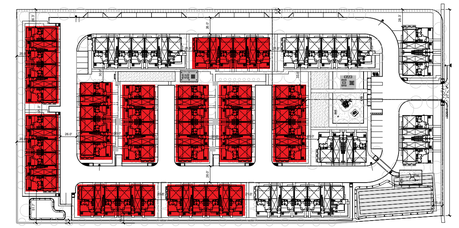
BUILDING 2 - SECOND FLOOR PLAN

SCALE: 1/8" = 1'-0"



BUILDING 2 - FIRST FLOOR PLAN

SCALE: 1/8" = 1'-0"



SITE PLAN KEY

SHEET A.16

375 DIANA AVENUE

IN MORGAN HILL, CA

FLOOR PLANS

BUILDING 2 - 6-PLEX - LEVELS 1 & 2

N

0 4 8 16 24 FEET

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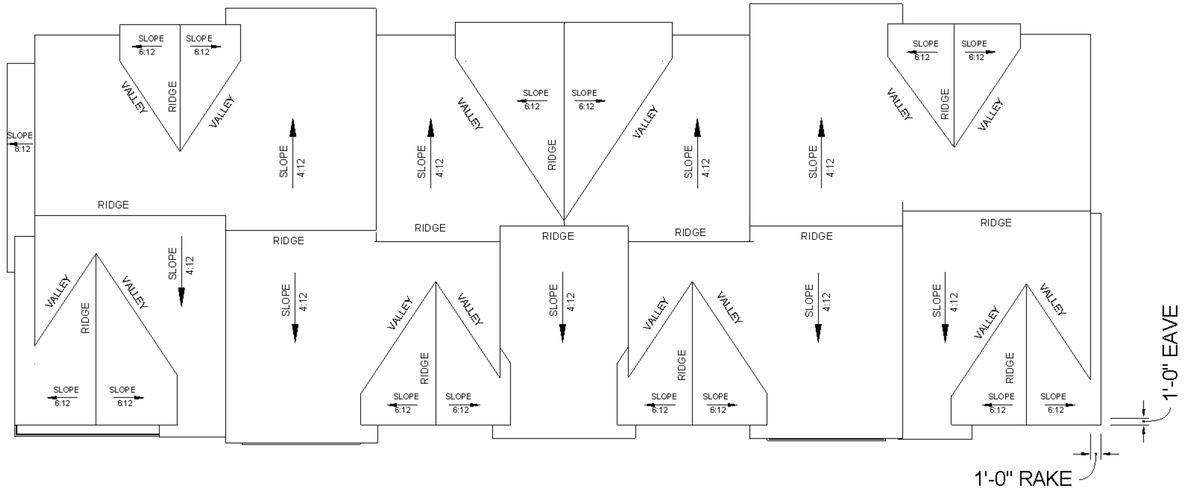
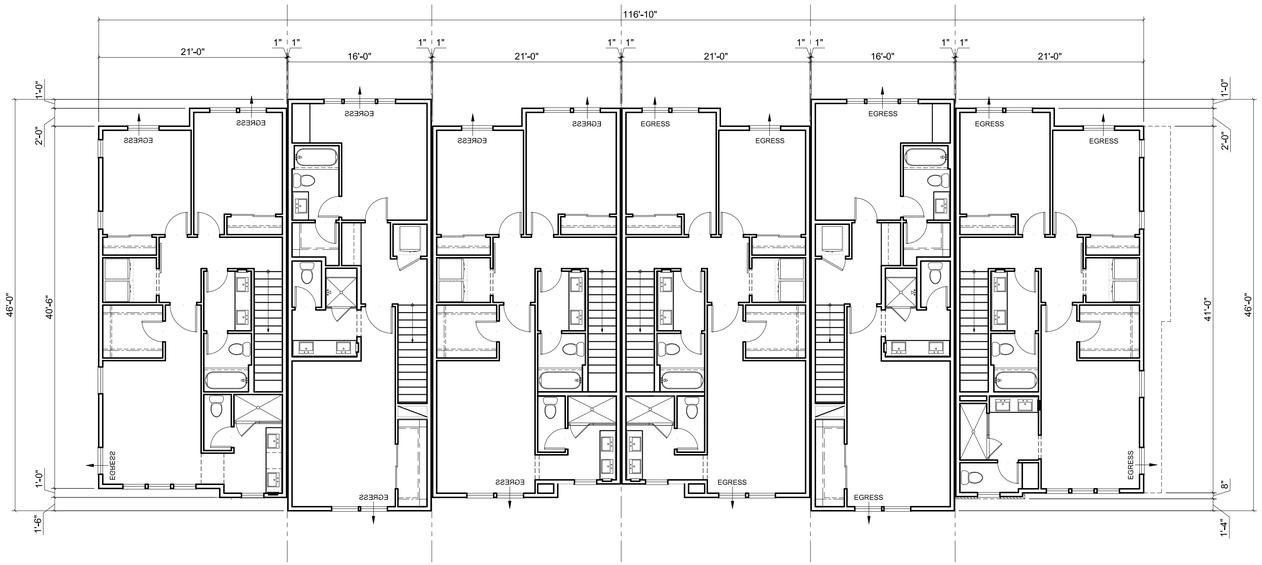
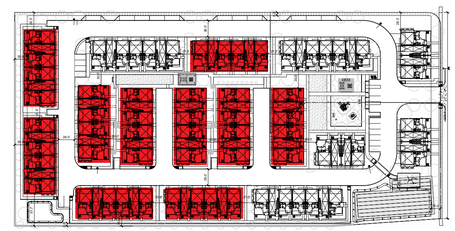


BUILDING 2 - ROOF PLAN

SCALE: 1/8" = 1'-0"





SITE PLAN KEY

BUILDING 2 - THIRD FLOOR PLAN

SCALE: 1/8" = 1'-0"

SHEET A.17

375 DIANA AVENUE

IN MORGAN HILL, CA

FLOOR PLANS

BUILDING 2 - 6-PLEX - LEVELS 3 & ROOF

N

0 4 8 16 24 FEET

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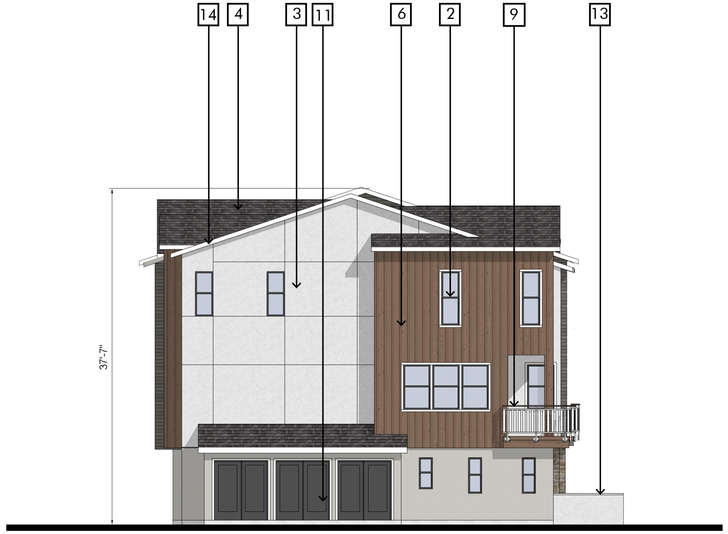
FRONT ELEVATION

SCALE: 1/8" = 1'-0"

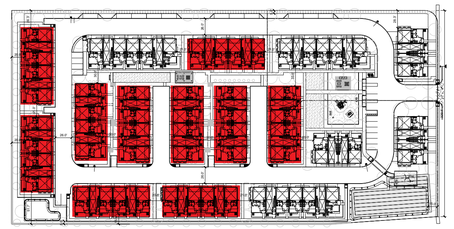
MATERIAL LIST

1. FIBERGLASS DOOR
2. VINYL SINGLE HUNG WINDOWS
3. PAINTED STUCCO W/MTL REVEALS
4. ASPHALT COMPOSITION SHINGLE ROOF
5. HORIZONTAL LAP SIDING
6. PAINTED BOARD & BATTEN SIDING
7. PAINTED STONE VENEER
8. PAINTED METAL PANEL GARAGE DOOR
9. PAINTED WOOD RAILING
10. PAINTED ACCENT PANEL
11. PAINTED MECHANICAL ROOM DOORS
12. PAINTED GABLE BRACKET
13. 42" STUCCO COURTYARD WALL W/ STONE CAP
14. PAINTED FASCIA AND TRIM



LEFT ELEVATION

SCALE: 1/8" = 1'-0"



SITE PLAN KEY

SHEET A.18

375 DIANA AVENUE

IN MORGAN HILL, CA

ELEVATIONS

BUILDING 2 - 6-PLEX - STYLE A

N

0 4 8 16 24 FEET

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REAR ELEVATION

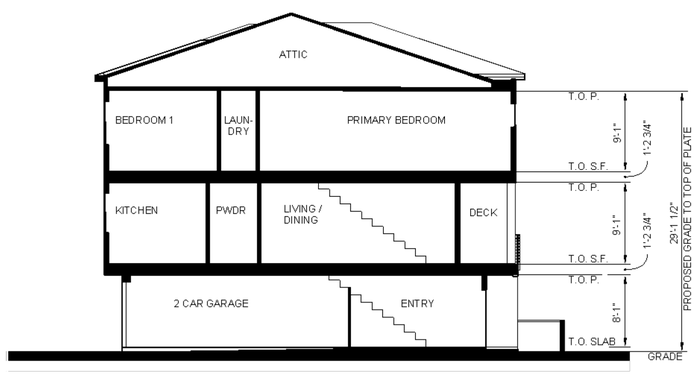
SCALE: 1/8" = 1'-0"

MATERIAL LIST

1. FIBERGLASS DOOR
2. VINYL SINGLE HUNG WINDOWS
3. PAINTED STUCCO W/MTL REVEALS
4. ASPHALT COMPOSITION SHINGLE ROOF
5. HORIZONTAL LAP SIDING
6. PAINTED BOARD & BATTEN SIDING
7. PAINTED STONE VENEER
8. PAINTED METAL PANEL GARAGE DOOR
9. PAINTED WOOD RAILING
10. PAINTED ACCENT PANEL
11. PAINTED MECHANICAL ROOM DOORS
12. PAINTED GABLE BRACKET
13. 42" STUCCO COURTYARD WALL W/ STONE CAP
14. PAINTED FASCIA AND TRIM

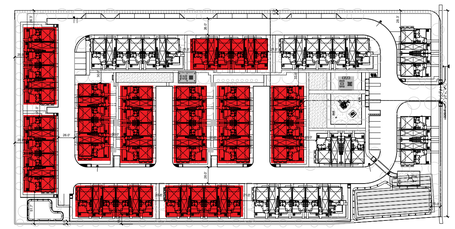
RIGHT ELEVATION

SCALE: 1/8" = 1'-0"



SECTION

SCALE: 1/8" = 1'-0"



SITE PLAN KEY

SHEET A.19

375 DIANA AVENUE

IN MORGAN HILL, CA

ELEVATIONS

BUILDING 2 - 6-PLEX - STYLE A

N

0 4 8 16 24 FEET

DAHLIN GROUP ARCHITECTURE | PLANNING | INTERIORS

WWW.DAHLINGROUP.COM

PROJECT NO. 1005.013 | APRIL 2, 2025

VOP DAHLIN

FRONT ELEVATION

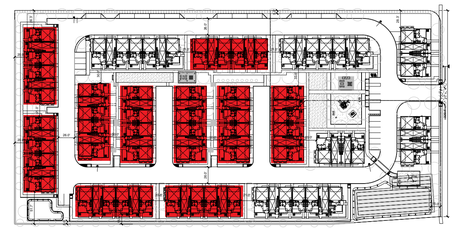
SCALE: 1/8" = 1'-0"

LEFT ELEVATION

SCALE: 1/8" = 1'-0"

MATERIAL LIST

1. FIBERGLASS DOOR
2. VINYL SINGLE HUNG WINDOWS
3. PAINTED STUCCO W/MTL REVEALS
4. ASPHALT COMPOSITION SHINGLE ROOF
5. HORIZONTAL LAP SIDING
6. PAINTED BOARD & BATTEN SIDING
7. STONE VENEER
8. PAINTED METAL GARAGE DOOR W/ LITES
9. PAINTED WOOD RAILING
10. PAINTED ACCENT PANEL
11. PAINTED MECHANICAL ROOM DOORS
12. PAINTED GABLE BRACKET
13. 42" STUCCO COURTYARD WALL W/ STONE CAP
14. PAINTED FASCIA AND TRIM



SITE PLAN KEY

SHEET A.20

375 DIANA AVENUE

IN MORGAN HILL, CA

ELEVATIONS

BUILDING 2 - 6-PLEX - STYLE B

N

0 4 8 16 24 FEET

DAHLIN GROUP ARCHITECTURE | PLANNING | INTERIORS

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PROJECT NO. 1005.013 | APRIL 2, 2025

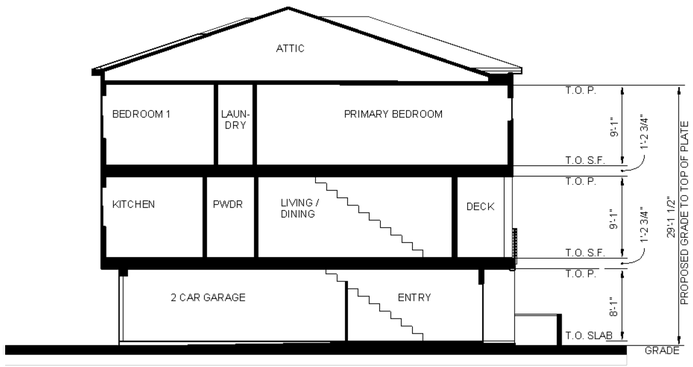
VOP DAHLIN

REAR ELEVATION

SCALE: 1/8" = 1'-0"

RIGHT ELEVATION

SCALE: 1/8" = 1'-0"

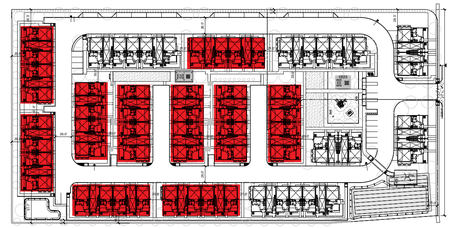


SECTION

SCALE: 1/8" = 1'-0"

MATERIAL LIST

1. FIBERGLASS DOOR
2. VINYL SINGLE HUNG WINDOWS
3. PAINTED STUCCO W/MTL REVEALS
4. ASPHALT COMPOSITION SHINGLE ROOF
5. HORIZONTAL LAP SIDING
6. PAINTED BOARD & BATTEN SIDING
7. STONE VENEER
8. PAINTED METAL GARAGE DOOR W/ LITES
9. PAINTED WOOD RAILING
10. PAINTED ACCENT PANEL
11. PAINTED MECHANICAL ROOM DOORS
12. PAINTED GABLE BRACKET
13. 42" STUCCO COURTYARD WALL W/ STONE CAP
14. PAINTED FASCIA AND TRIM



SITE PLAN KEY

SHEET A.21

375 DIANA AVENUE

IN MORGAN HILL, CA

ELEVATIONS

BUILDING 2 - 6-PLEX - STYLE B

N

0 4 8 16 24 FEET

DAHLIN GROUP ARCHITECTURE | PLANNING | INTERIORS

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PROJECT NO. 1005.013 | APRIL 2, 2025

VOP DAHLIN

FRONT ELEVATION

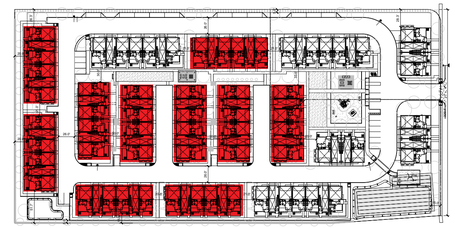
SCALE: 1/8" = 1'-0"

LEFT ELEVATION

SCALE: 1/8" = 1'-0"

MATERIAL LIST

1. FIBERGLASS DOOR
2. VINYL SINGLE HUNG WINDOWS
3. PAINTED STUCCO W/MTL REVEALS
4. ASPHALT COMPOSITION SHINGLE ROOF
5. HORIZONTAL LAP SIDING
6. PAINTED METAL PANEL GARAGE DOOR
7. PAINTED METAL RAILING
8. PAINTED ACCENT PANEL
9. PAINTED MECHANICAL ROOM DOORS
10. 42" STUCCO COURTYARD WALL W/ STONE CAP
11. METAL WINDOW SHADE / CANOPY
12. PAINTED FASCIA AND TRIM



SITE PLAN KEY

SHEET A.22

375 DIANA AVENUE

IN MORGAN HILL, CA

ELEVATIONS

BUILDING 2 - 6-PLEX - STYLE C

N

0 4 8 16 24 FEET

DAHLIN GROUP ARCHITECTURE | PLANNING | INTERIORS

WWW.DAHLINGROUP.COM

PROJECT NO. 1005.013 | APRIL 2, 2025

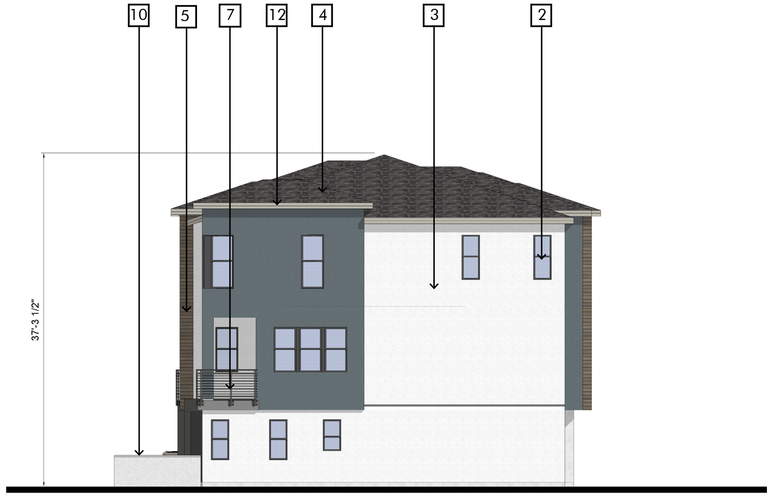
VOP DAHLIN

REAR ELEVATION

SCALE: 1/8" = 1'-0"

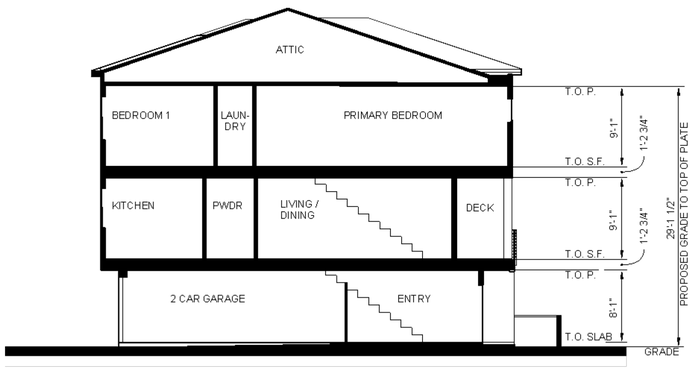
MATERIAL LIST

1. FIBERGLASS DOOR
2. VINYL SINGLE HUNG WINDOWS
3. PAINTED STUCCO W/MTL REVEALS
4. ASPHALT COMPOSITION SHINGLE ROOF
5. HORIZONTAL LAP SIDING
6. PAINTED METAL PANEL GARAGE DOOR
7. PAINTED METAL RAILING
8. PAINTED ACCENT PANEL
9. PAINTED MECHANICAL ROOM DOORS
10. 42" STUCCO COURTYARD WALL W/ STONE CAP
11. METAL WINDOW SHADE / CANOPY
12. PAINTED FASCIA AND TRIM



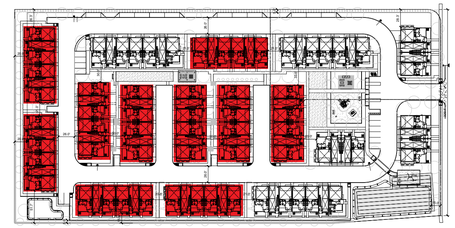
RIGHT ELEVATION

SCALE: 1/8" = 1'-0"



SECTION

SCALE: 1/8" = 1'-0"



SITE PLAN KEY

SHEET A.23

375 DIANA AVENUE

IN MORGAN HILL, CA

ELEVATIONS

BUILDING 2 - 6-PLEX - STYLE C

N

0 4 8 16 24 FEET

DAHLIN GROUP ARCHITECTURE | PLANNING | INTERIORS

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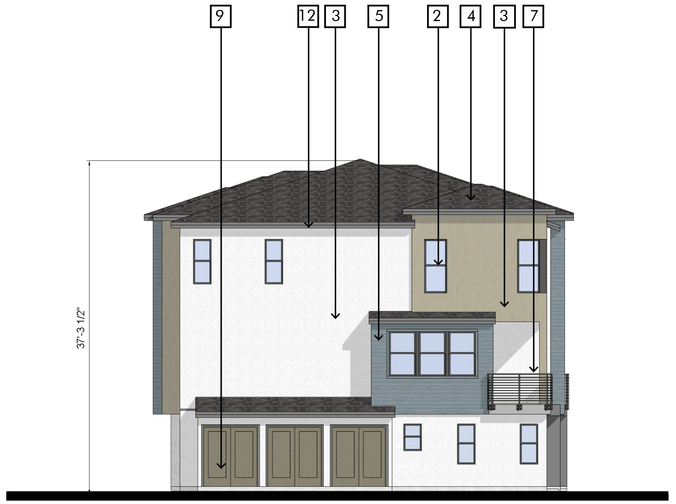
VOP DAHLIN

FRONT ELEVATION

SCALE: 1/8" = 1'-0"

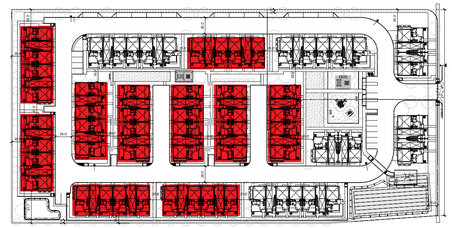


LEFT ELEVATION

SCALE: 1/8" = 1'-0"

MATERIAL LIST

1. FIBERGLASS DOOR
2. VINYL SINGLE HUNG WINDOWS
3. PAINTED STUCCO W/MTL REVEALS
4. ASPHALT COMPOSITION SHINGLE ROOF
5. HORIZONTAL LAP SIDING
6. PAINTED METAL PANEL GARAGE DOOR
7. PAINTED METAL RAILING
8. PAINTED ACCENT PANEL
9. PAINTED MECHANICAL ROOM DOORS
10. 42" STUCCO COURTYARD WALL W/ STONE CAP
11. METAL WINDOW SHADE / CANOPY
12. PAINTED FASCIA AND TRIM



SITE PLAN KEY

SHEET A.24

375 DIANA AVENUE

IN MORGAN HILL, CA

ELEVATIONS

BUILDING 2 - 6-PLEX - STYLE D

N

0 4 8 16 24 FEET

DAHLIN GROUP ARCHITECTURE | PLANNING | INTERIORS

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PROJECT NO. 1005.013 | APRIL 2, 2025

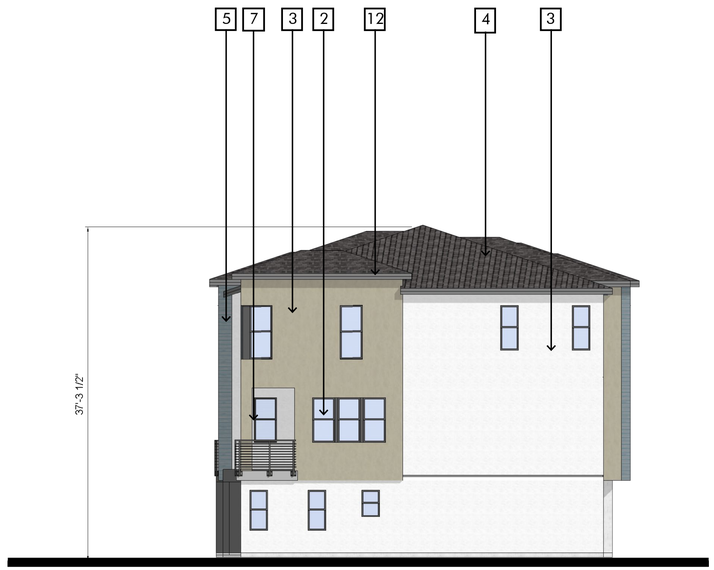
VOP DAHLIN

REAR ELEVATION

SCALE: 1/8" = 1'-0"

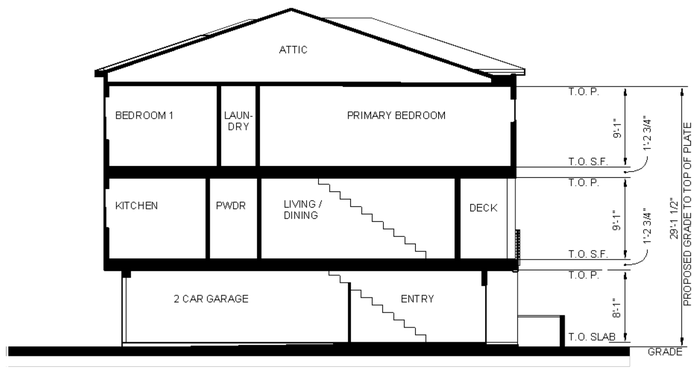
MATERIAL LIST

1. FIBERGLASS DOOR
2. VINYL SINGLE HUNG WINDOWS
3. PAINTED STUCCO W/MTL REVEALS
4. ASPHALT COMPOSITION SHINGLE ROOF
5. HORIZONTAL LAP SIDING
6. PAINTED METAL PANEL GARAGE DOOR
7. PAINTED METAL RAILING
8. PAINTED ACCENT PANEL
9. PAINTED MECHANICAL ROOM DOORS
10. 42" STUCCO COURTYARD WALL W/ STONE CAP
11. METAL WINDOW SHADE / CANOPY
12. PAINTED FASCIA AND TRIM



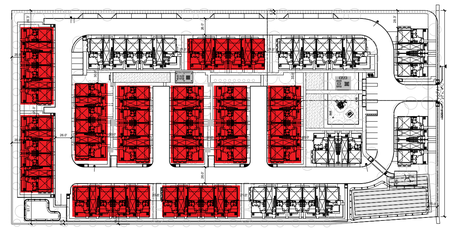
RIGHT ELEVATION

SCALE: 1/8" = 1'-0"



SECTION

SCALE: 1/8" = 1'-0"



SITE PLAN KEY

SHEET A.25

375 DIANA AVENUE

IN MORGAN HILL, CA

ELEVATIONS

BUILDING 2 - 6-PLEX - STYLE D

N

0 4 8 16 24 FEET

DAHLIN GROUP ARCHITECTURE | PLANNING | INTERIORS

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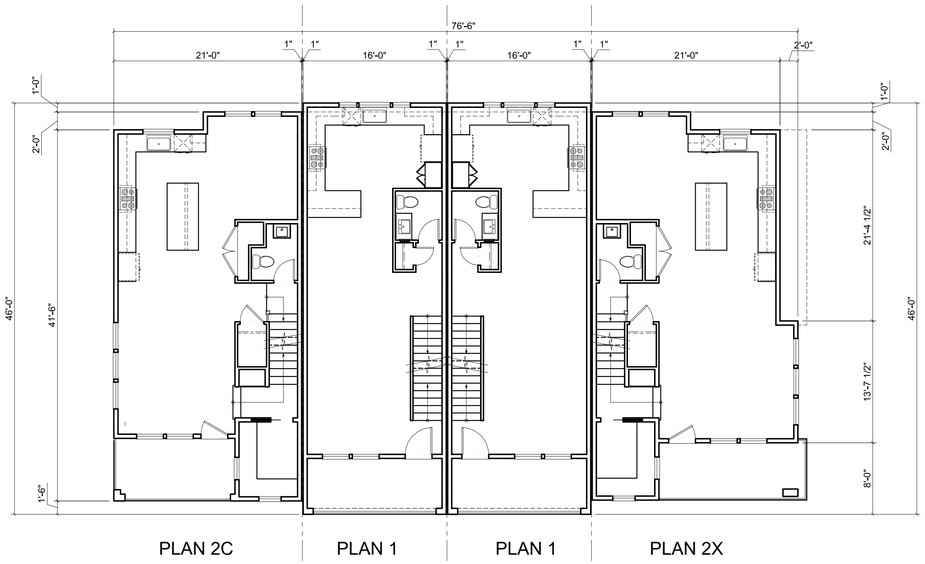
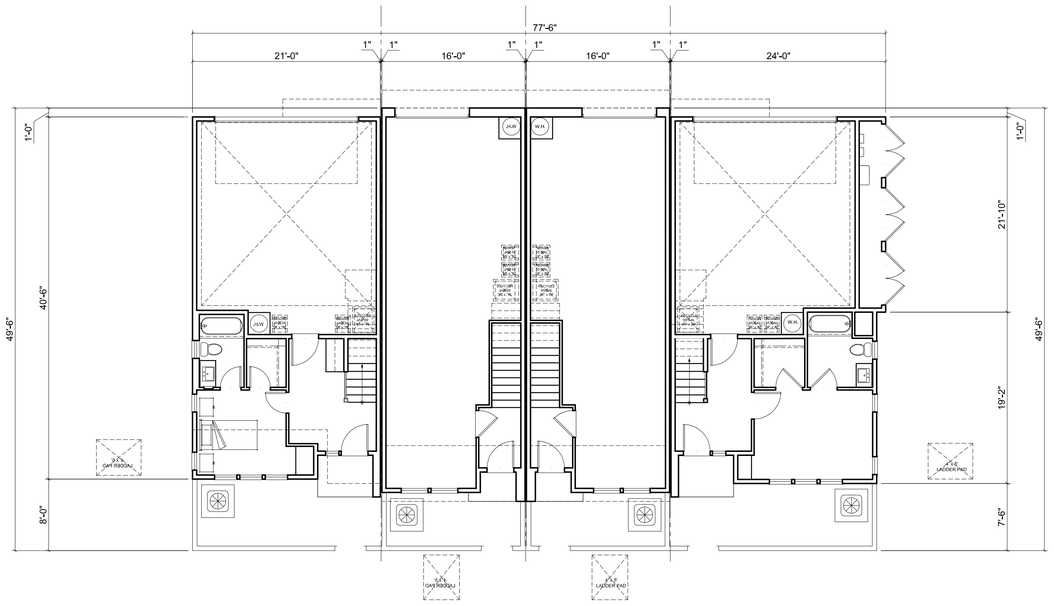


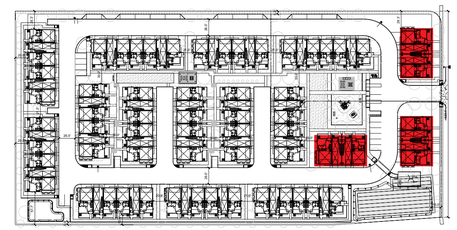
BUILDING 3 - SECOND FLOOR PLAN

SCALE: 1/8" = 1'-0"



BUILDING 3 - FIRST FLOOR PLAN

SCALE: 1/8" = 1'-0"



SITE PLAN KEY

SHEET A.26

375 DIANA AVENUE

IN MORGAN HILL, CA

FLOOR PLANS

BUILDING 3 - 4-PLEX - LEVEL 1 & 2

N

0 4 8 16 24 FEET

DAHLIN GROUP ARCHITECTURE | PLANNING | INTERIORS

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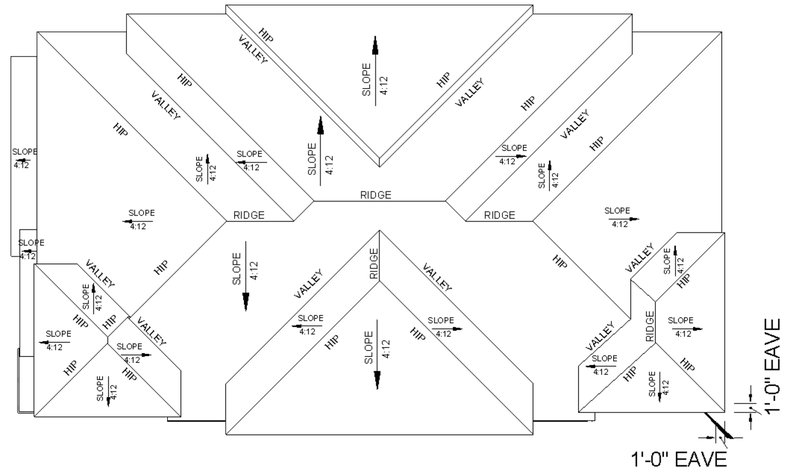
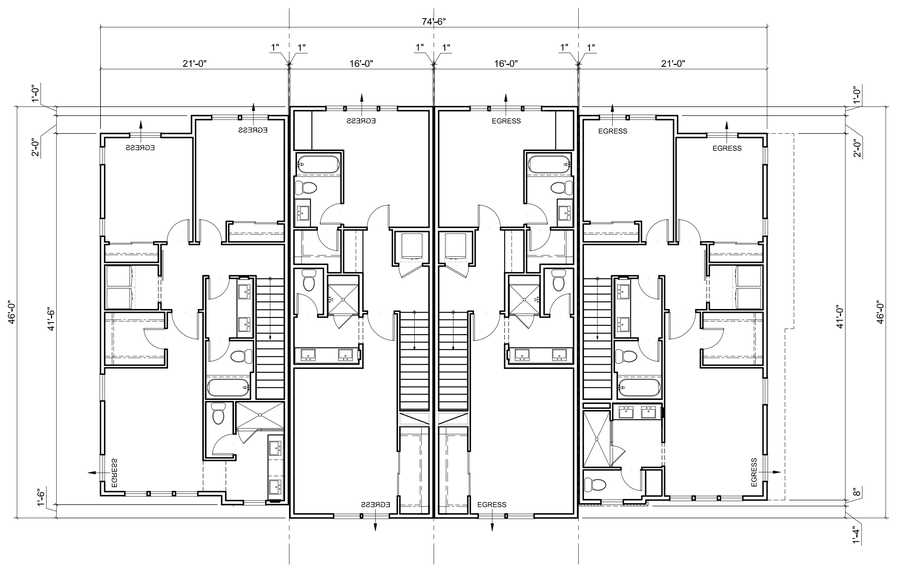
PROJECT NO. 1005.013 | APRIL 2, 2025



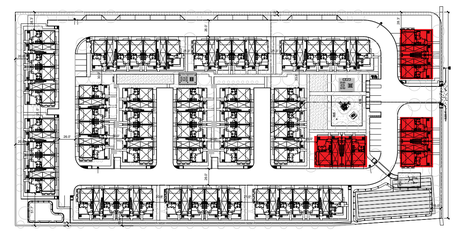
BUILDING 3 - ROOF PLAN

SCALE: 1/8" = 1'-0"



BUILDING 3 - THIRD FLOOR PLAN

SCALE: 1/8" = 1'-0"



SITE PLAN KEY

SHEET A.27

375 DIANA AVENUE

IN MORGAN HILL, CA

FLOOR PLANS

BUILDING 3 - 4-PLEX - LEVELS 3 & ROOF

N

0 4 8 16 24 FEET

VOP DAHLIN

DAHLIN GROUP ARCHITECTURE | PLANNING | INTERIORS

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PROJECT NO. 1005.013 | APRIL 2, 2025

FRONT ELEVATION

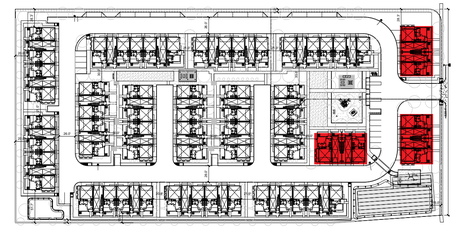
SCALE: 1/8" = 1'-0"

LEFT ELEVATION

SCALE: 1/8" = 1'-0"

MATERIAL LIST

1. FIBERGLASS DOOR
2. VINYL SINGLE HUNG WINDOWS
3. PAINTED STUCCO W/MTL REVEALS
4. ASPHALT COMPOSITION SHINGLE ROOF
5. HORIZONTAL LAP SIDING
6. PAINTED BOARD & BATTEN SIDING
7. PAINTED STONE VENEER
8. PAINTED METAL PANEL GARAGE DOOR
9. PAINTED WOOD RAILING
10. PAINTED ACCENT PANEL
11. PAINTED MECHANICAL ROOM DOORS
12. PAINTED GABLE BRACKET
13. 42" STUCCO COURTYARD WALL W/ STONE CAP
14. PAINTED FASCIA AND TRIM



SITE PLAN KEY

SHEET A.28

375 DIANA AVENUE

IN MORGAN HILL, CA

ELEVATIONS

BUILDING 3 - 4-PLEX - STYLE A

N

0 4 8 16 24 FEET

DAHLIN GROUP ARCHITECTURE | PLANNING | INTERIORS

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PROJECT NO. 1005.013 | APRIL 2, 2025

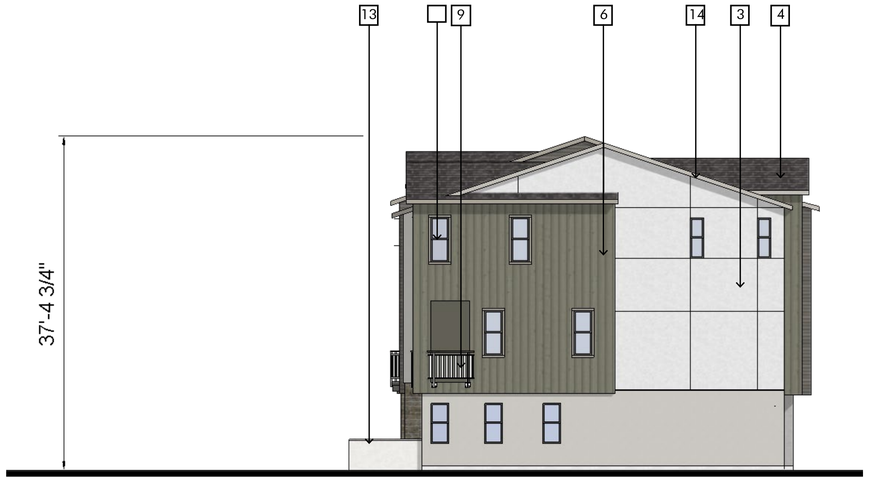
VOP DAHLIN

REAR ELEVATION

SCALE: 1/8" = 1'-0"

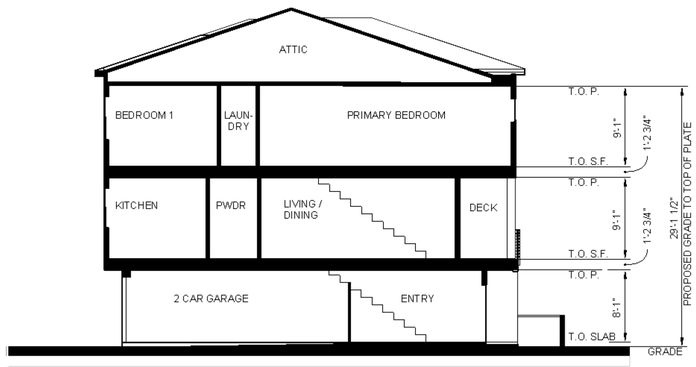
MATERIAL LIST

1. FIBERGLASS DOOR
2. VINYL SINGLE HUNG WINDOWS
3. PAINTED STUCCO W/MTL REVEALS
4. ASPHALT COMPOSITION SHINGLE ROOF
5. HORIZONTAL LAP SIDING
6. PAINTED BOARD & BATTEN SIDING
7. PAINTED STONE VENEER
8. PAINTED METAL PANEL GARAGE DOOR
9. PAINTED WOOD RAILING
10. PAINTED ACCENT PANEL
11. PAINTED MECHANICAL ROOM DOORS
12. PAINTED GABLE BRACKET
13. 42" STUCCO COURTYARD WALL W/ STONE CAP
14. PAINTED FASCIA AND TRIM



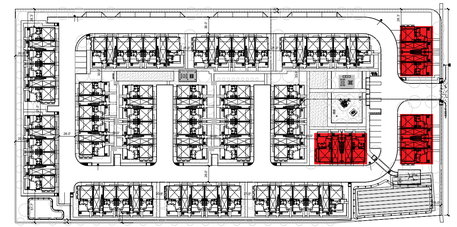
RIGHT ELEVATION

SCALE: 1/8" = 1'-0"



SECTION

SCALE: 1/8" = 1'-0"



SITE PLAN KEY

SHEET A.29

375 DIANA AVENUE

IN MORGAN HILL, CA

ELEVATIONS

BUILDING 3 - 4-PLEX - STYLE A

N

0 4 8 16 24 FEET

DAHLIN GROUP ARCHITECTURE | PLANNING | INTERIORS

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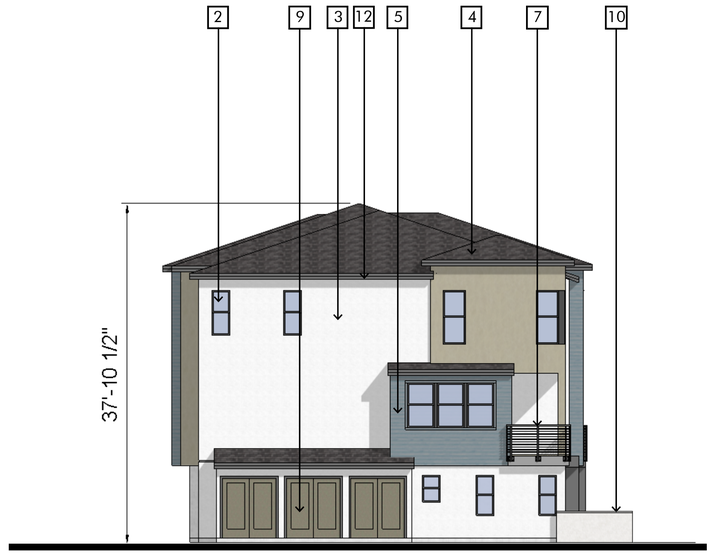
PROJECT NO. 1005.013 | APRIL 2, 2025

FRONT ELEVATION

SCALE: 1/8" = 1'-0"

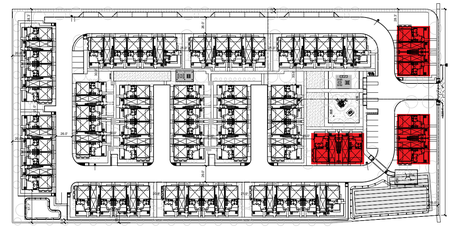


LEFT ELEVATION

SCALE: 1/8" = 1'-0"

MATERIAL LIST

1. FIBERGLASS DOOR
2. VINYL SINGLE HUNG WINDOWS
3. PAINTED STUCCO W/MTL REVEALS
4. ASPHALT COMPOSITION SHINGLE ROOF
5. HORIZONTAL LAP SIDING
6. PAINTED METAL PANEL GARAGE DOOR
7. PAINTED METAL RAILING
8. PAINTED ACCENT PANEL
9. PAINTED MECHANICAL ROOM DOORS
10. 42" STUCCO COURTYARD WALL W/ STONE CAP
11. METAL WINDOW SHADE / CANOPY
12. PAINTED FASCIA AND TRIM



SITE PLAN KEY

SHEET A.30

375 DIANA AVENUE

IN MORGAN HILL, CA

ELEVATIONS

BUILDING 3 - 4-PLEX - STYLE B

N

0 4 8 16 24 FEET

DAHLIN GROUP ARCHITECTURE | PLANNING | INTERIORS

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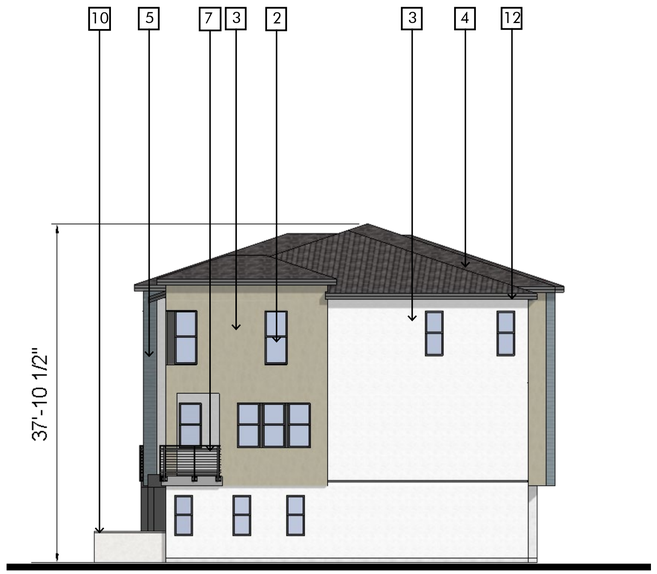
PROJECT NO. 1005.013 | APRIL 2, 2025

VOP DAHLIN

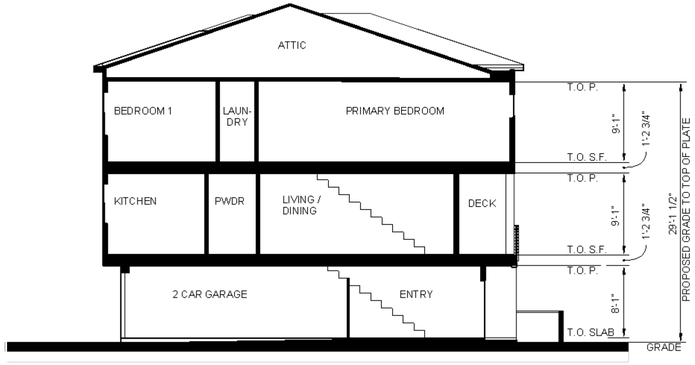
REAR ELEVATION

SCALE: 1/8" = 1'-0"



RIGHT ELEVATION

SCALE: 1/8" = 1'-0"

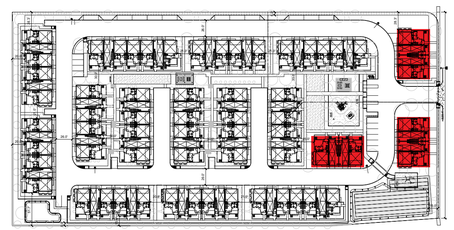


SECTION

SCALE: 1/8" = 1'-0"

MATERIAL LIST

1. FIBERGLASS DOOR
2. VINYL SINGLE HUNG WINDOWS
3. PAINTED STUCCO W/MTL REVEALS
4. ASPHALT COMPOSITION SHINGLE ROOF
5. HORIZONTAL LAP SIDING
6. PAINTED METAL PANEL GARAGE DOOR
7. PAINTED METAL RAILING
8. PAINTED ACCENT PANEL
9. PAINTED MECHANICAL ROOM DOORS
10. 42" STUCCO COURTYARD WALL W/ STONE CAP
11. METAL WINDOW SHADE / CANOPY
12. PAINTED FASCIA AND TRIM



SITE PLAN KEY

SHEET A.31

375 DIANA AVENUE

IN MORGAN HILL, CA

ELEVATIONS

BUILDING 3 - 4-PLEX - STYLE B

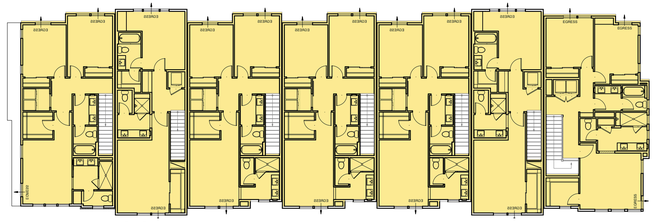
N

0 4 8 16 24 FEET

DAHLIN GROUP ARCHITECTURE | PLANNING | INTERIORS

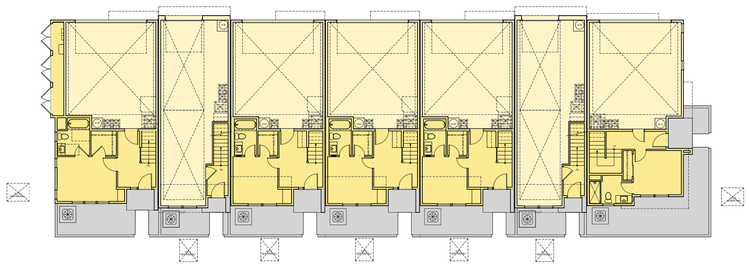
WWW.DAHLINGROUP.COM

PROJECT NO. 1005.013 | APRIL 2, 2025



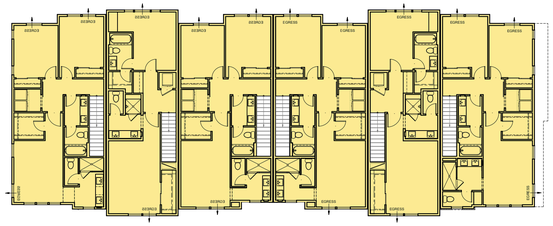
THIRD FLOOR PLAN

SECOND FLOOR PLAN

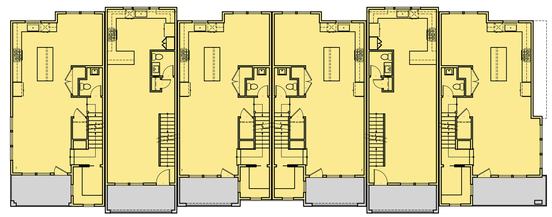


FIRST FLOOR PLAN

BUILDING 1A- 7 PLEX



THIRD FLOOR PLAN



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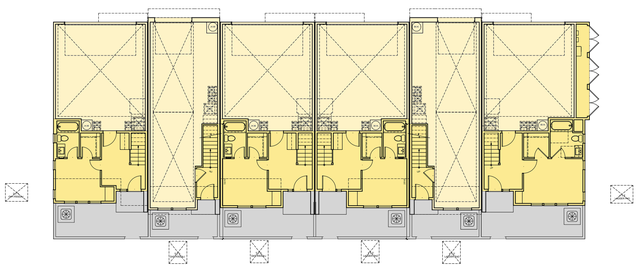


FIRST FLOOR PLAN

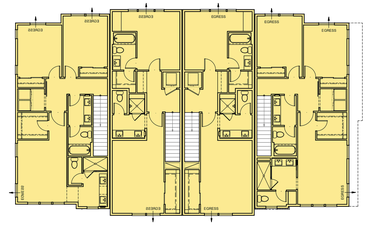
BUILDING 2- 6 PLEX

ARCHITECTURAL SUMMARY

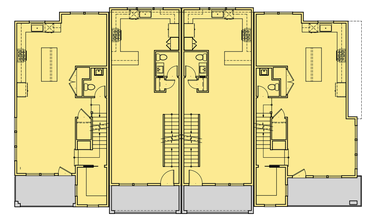
unit name	unit count	bedroom count	bathroom count	gross living area / unit	total gross living area	garage area	porch area	deck area	total deck area
th 1	32	2	2.5	1,415	45,280	598	20	100	3,200
th 2	29	4	3.5	1,975	57,275	498	15	110	3,190
th 2x	16	4	3.5	2,050	32,800	561	25	106	1,696
th 2C	13	4	3.5	1,963	25,519	498	26	81	1,053
th 3	3	4	3.5	2,093	6,279	514	51	105	315
Total	**93**				**167,153**				**9,454**

BUILDING CALCULATIONS

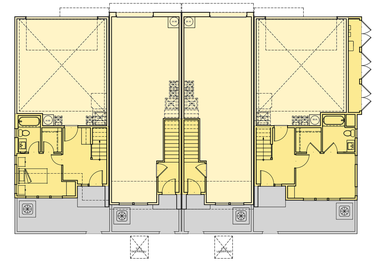
bldg name	bldg count	unit count / bldg	building area - level 1	building area - level 2	building area - level 3	building area / bldg	total building area	coverage area / bldg	total coverage area
4 unit TH	3	4	3,148	2,923	3,260	9,331	27,993	3,378	10,134
6 unit TH	10	6	4,852	4,524	5,039	14,415	144,150	5,181	51,810
7 unit TH	3	7	5,723	5,384	6,017	17,124	51,372	6,197	18,591
Total	**16**						**223,515**		**80,535**



THIRD FLOOR PLAN



SECOND FLOOR PLAN



FIRST FLOOR PLAN

BUILDING 3- 4 PLEX

LEGEND:

GROSS LIVING AREA

GARAGE/ UTILITY AREA

PORCH/ DECK AREA
(NOT INCLUDED IN BUILDING AREA CALCULATION)

GROSS LIVING AREA CALCULATION NOTES:
1. EXCLUDES 2” AIRGAP & UPPER LEVEL STAIR
2. EXCLUDES PORCH & DECK AREA

BUILDING AREA CALCULATION NOTES:
1. INCLUDES 2” AIRGAP & UPPER LEVEL STAIR
2. EXCLUDES PORCH & DECK AREA

SHEET A.33

375 DIANA AVENUE

IN MORGAN HILL, CA

FLOOR AREA DIAGRAM

N

0 8 16 32 48 FEET

DAHLIN GROUP ARCHITECTURE | PLANNING | INTERIORS

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PROJECT NO. 1005.013 | APRIL 2, 2025

VOP

DAHLIN

CS-1 CONTEMPORARY

PAINT COLORS

BODY COLOR #1
SHERWIN WILLIAMS
SW 6243
“DISTANCE”

BODY COLOR #2
SHERWIN WILLIAMS
SW 7005
“PURE WHITE”

ACCENT COLOR #1
SHERWIN WILLIAMS
SW 7674
“PEPPERCORN”

ACCENT COLOR #2
SHERWIN WILLIAMS
SW 6201
“THOUNDEROUS”

TRIM COLOR #1
SHERWIN WILLIAMS
SW 9131
“CORNWALL SLATE”

TRIM COLOR #2
SHERWIN WILLIAMS
SW 6461
“ISLE OF PINES”

ROOFING 1:
GAF ASPHALT SHINGLES OR EQUAL
TIMBERLINE SERIES
“CHARCOAL”

SIDING 1:
PREFINISHED HORIZ. SIDING
WOODTONE / RUSTIC SERIES
6.5” EXPOSURE
“RIVER ROCK”

CS-2 CONTEMPORARY

PAINT COLORS

BODY COLOR #1
SHERWIN WILLIAMS
SW 2860
“SAGE”

BODY COLOR #2
SHERWIN WILLIAMS
SW 7005
“PURE WHITE”

ACCENT COLOR #1
SHERWIN WILLIAMS
SW 6000
“SNOWFALL”

ACCENT COLOR #2
SHERWIN WILLIAMS
SW 6201
“THOUNDEROUS”

ACCENT COLOR #1
SHERWIN WILLIAMS
SW 6405
“FERVENT BRASS”

ACCENT COLOR #2
SHERWIN WILLIAMS
SW 7674
“PEPPERCORN”

COMP. SHINGLE ROOF
GAF ASPHALT SHINGLES OR EQUAL
TIMBERLINE SERIES
“CHARCOAL”

SIDING 1:
PREFINISHED HORIZ. SIDING
WOODTONE / RUSTIC SERIES
6.5” EXPOSURE
“STONE BLUE”

SHEET A.34

CS-3 FARMHOUSE

PAINT COLORS

BODY COLOR #1
SHERWIN WILLIAMS
SW 7658
“PURE WHITE”

BODY COLOR #2
SHERWIN WILLIAMS
SW 6182
“ETHEREAL WHITE”

ACCENT COLOR #1
SHERWIN WILLIAMS
SW 2816
“ROOKWOOD DARK GREEN”

ACCENT COLOR #2
SHERWIN WILLIAMS
SW 6200
“LINK GRAY”

COMP. SHINGLE ROOF
GAF ASPHALT SHINGLES OR EQUAL
TIMBERLINE SERIES
“CHARCOAL”

SIDING 2:
WOODTONE OR EQUAL
RUSTIC SERIES LAP SIDING
“CARIBU TRAILS”

SIDING 1:
WOODTONE OR EQUAL
RUSTIC SERIES LPANEL SIDING
BOARD & BATTEN
“WARM EXPRESSO”

MASONRY VENEER 1:
ELDORADO STONE
CUT COURSE STONE
“MADRONA”

CS-4 FARMHOUSE

PAINT COLORS

BODY COLOR #1
SHERWIN WILLIAMS
SW 7658
“PURE WHITE”

BODY COLOR #2
SHERWIN WILLIAMS
SW 6182
“ETHEREAL WHITE”

ACCENT COLOR #1
SHERWIN WILLIAMS
SW 7016
“MINDFUL GRAY”

ACCENT COLOR #2
SHERWIN WILLIAMS
SW 6062
“VINTAGE LEATHER”

COMP. SHINGLE ROOF
GAF ASPHALT SHINGLES OR EQUAL
TIMBERLINE SERIES
“CHARCOAL”

SIDING 2:
WOODTONE OR EQUAL
RUSTIC SERIES LAP SIDING
“CARIBU TRAILS”

SIDING 1:
WOODTONE OR EQUAL
RUSTIC SERIES LPANEL SIDING
BOARD & BATTEN
“WARM EXPRESSO”

MASONRY VENEER 1:
ELDORADO STONE
CUT COURSE STONE
“CANNONADE”

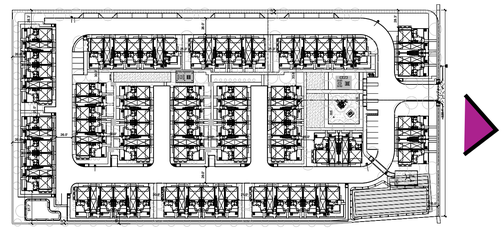
SHEET A.35

BUILDING 6 | BUILDING 13 | BUILDING 14 | BUILDING 15 | BUILDING 16

NOTE: LANDSCAPE ELEMENTS (TREES, FENCES, ETC.) SHOWN FOR GRAPHICAL REPRESENTATION ONLY. SEE LANDSCAPING DRAWINGS FOR MORE INFO.

BUILDING 15 | BUILDING 16 | BUILDING 1

NOTE: LANDSCAPE ELEMENTS (TREES, FENCES, ETC.) SHOWN FOR GRAPHICAL REPRESENTATION ONLY. SEE LANDSCAPING DRAWINGS FOR MORE INFO.



SITE PLAN KEY

SHEET A.36

375 DIANA AVENUE

IN MORGAN HILL, CA

STREETSCAPE DRAWINGS

SUB TITLE

N

0 10 20 40 60 FEET

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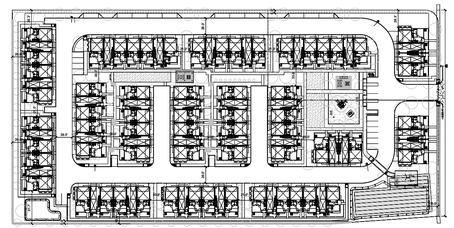
NOTE: LANDSCAPE ELEMENTS (TREES, FENCES, ETC.) SHOWN FOR GRAPHICAL REPRESENTATION ONLY. SEE LANDSCAPING DRAWINGS FOR MORE INFO.



SITE PLAN KEY

SHEET A.37

375 DIANA AVENUE

IN MORGAN HILL, CA

AERIAL

SUB TITLE

DAHLIN GROUP ARCHITECTURE | PLANNING | INTERIORS

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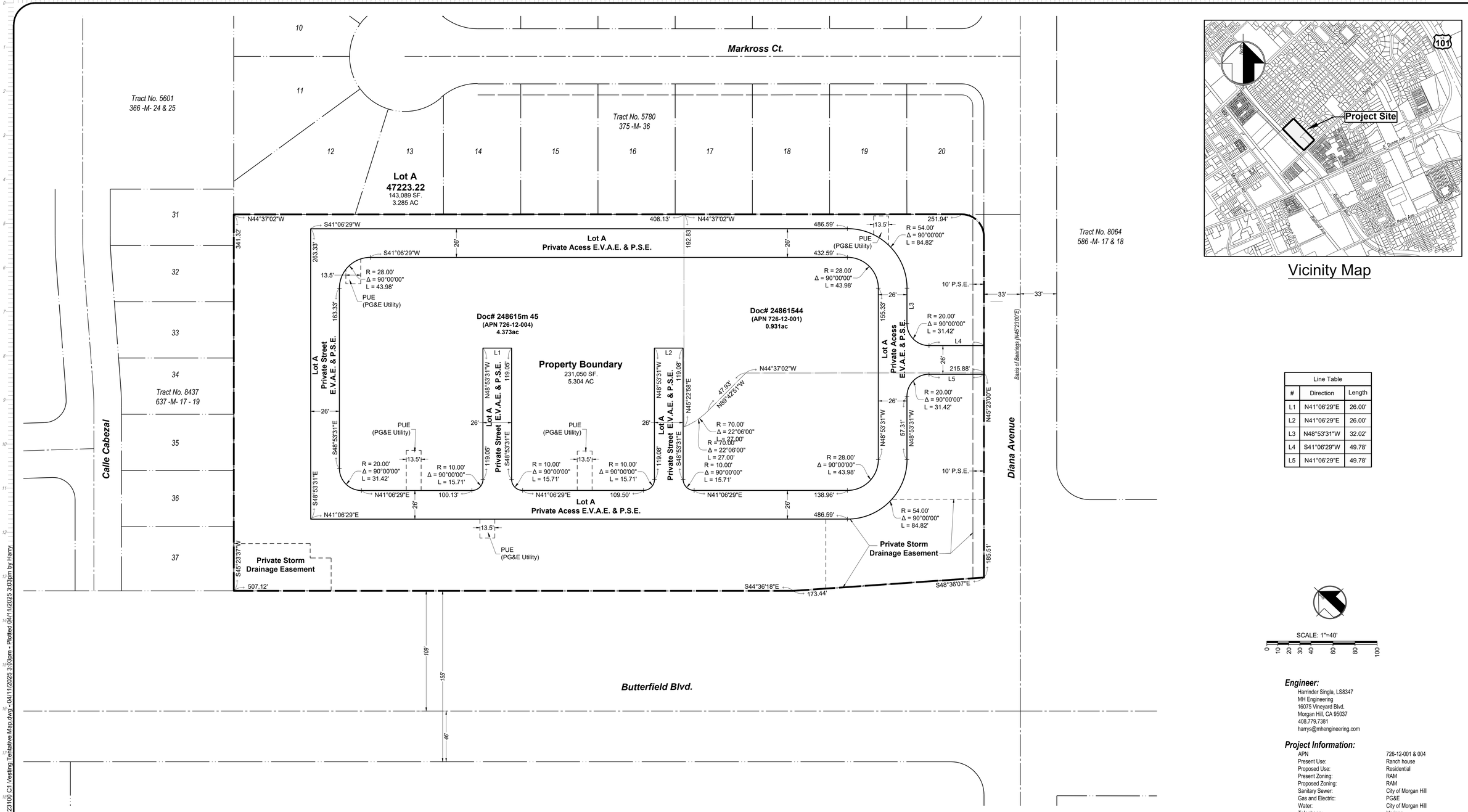
VOP DAHLIN



Vicinity Map

Line Table		
#	Direction	Length
L1	N41°06'29"E	26.00'
L2	N41°06'29"E	26.00'
L3	N48°53'31"W	32.02'
L4	S41°06'29"W	49.78'
L5	N41°06'29"E	49.78'

SCALE: 1"=40'

0 10 20 30 40 60 80 100

Basis of Bearings: Bearings shown on this map are based up on the centerline of Diana Avenue as found and monumented as North 45°23' East as shown on that certain Tract Map recorded at Book 375 of Map, Page 36, Santa Clara County Records.

Benchmark: Elevations shown on this map are based upon Santa Clara Valley Water Benchmark BM002, Brass disk on top of concrete curb; at back of sidewalk of northwest corner of intersection of Monterey Road and W. Dunne Avenue *Elevation*= 342.80' (NAVD '88); Northing 1870161, Easting 6226277

Engineer:

Harrinder Singla, LS8347
MH Engineering
16075 Vineyard Blvd,
Morgan Hill, CA 95037
408.779.7381
harrys@mhengineering.com

Project Information:

APN	726-12-001 & 004
Present Use:	Ranch house
Proposed Use:	Residential
Present Zoning:	RAM
Proposed Zoning:	RAM
Sanitary Sewer:	City of Morgan Hill
Gas and Electric:	PG&E
Water:	City of Morgan Hill
Telephone:	Verizon
Existing Improvements:	As Shown
Area:	5.304 ac

Applicant:

VALLEY OAK PARTNERS
734 THE ALAMEDA
SAN JOSE, CA 95126
510.673.2078

375 Diana Avenue

Vesting Tentative Map for Condominium Purposes: 93 Units

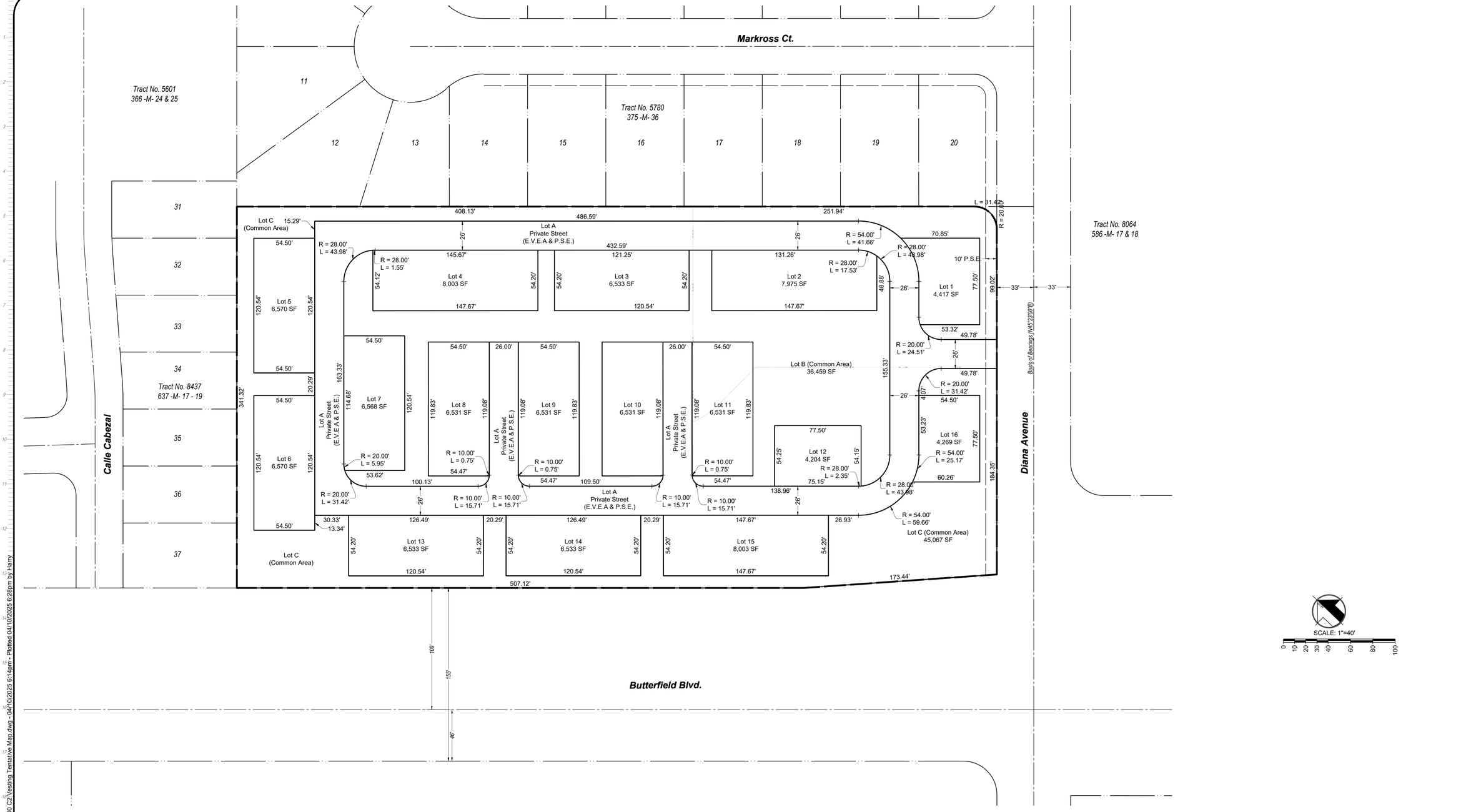
LICENSED LAND SURVEYOR HARINDER SINGLA No. 8347 STATE OF CALIFORNIA

MH engineering Co.
16075 Vineyard Boulevard Morgan Hill, CA 95037

DATE: 04/2025 DRAWN:RS CHECKED: HS

Sheet **C1** of **10**
223100

L:\Projects\Harry\223100-Valley Oak Partners SB330, Diana Ave\DWG\223100 C1 Vesting Tentative Map.dwg - 04/11/2025 3:03pm - Plotted 04/11/2025 3:03pm by Harry



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375 Diana Avenue

Vesting Tentative Map for Condominium Purposes: 93 Units

LICENSED LAND SURVEYOR HARINDER SINGH No. 8347 STATE OF CALIFORNIA

MH engineering Co.
16075 Vineyard Boulevard Morgan Hill, CA 95037

DATE: 04/2025 DRAWN:RS CHECKED: HS

Sheet **C2** of **10**

223100

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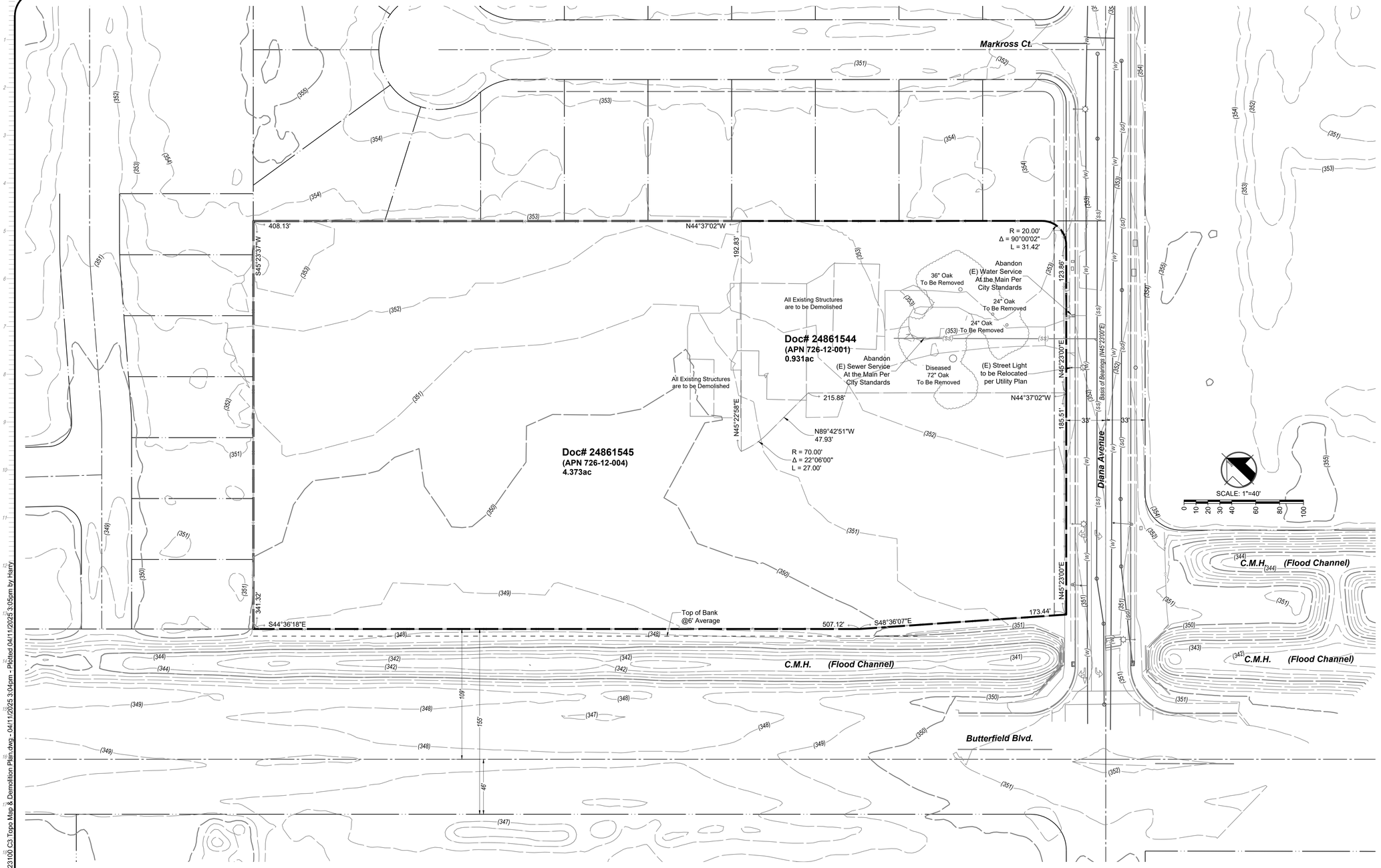

Legend

Proposed	Description	Existing
	Project Property Boundary	
	Property Line	
	Centerline	
	Easement, as noted	
	Curb and Gutter	
	Driveway Approach	
SD	Storm Drain	(sd)
SD	Perforated Storm Drain	(sd)
SS	Sanitary Sewer	(ss)
W	Water Main	(w)
F	Fire Service	(f)
E OH	Overhead Electric	(e) (oh)
T	Telephone	(t)
xx	Wood Fence	xx
100	Street Barricade	(100)
352	Major Contour	(99)
	Minor Contour	
	Benchmark	
	Monument, Type as shown	
#(A)	Section	
	Swale	(2.1%)
2.2%	Slope	
SD	Storm Drain Manhole	(sd)
	Curb Inlet	
	Drop Inlet	
SS	Sanitary Sewer Manhole	(ss)
	Fire Hydrant	
CO	Cleanout	
	Gate Valve	
	Utility Pole	
	Electrolier	
S	Sewer Service	S
W	Water Service	W
	AC Pavement	
	PCC walks/driveways	
	Structures	
	Bio-Retention Area	

** existing features are labeled in italics and parentesis, typical*

Abbreviations

AC	Asphalt Concrete	HP	High Point
BC	Beginning of Curve	INV	Invert
BVC	Beginning of Vertical Curve	JP	Joint Pole
BW	Back of Walk	LP	Low Point
℄	Centerline	Max	Maximum
CL D/W	Centerline Driveway	Min	Minimum
CMP	Corrugated Metal Pipe	NG	Natural Ground
CO	Clean Out	PB	Pull Box
DI	Drop Inlet	℗	Property Line
DIP	Ductile Iron Pipe	PSE	Public Service Easement
DWY	Driveway	PSDE	Private Storm Drain Easement
EC	End of Curve	PVI	Point of Vertical Intersection
EG	Existing Ground	PUE	Public Utility Easement
ELCT	Electrolier	RCP	Reinforced Concrete Pipe
EP	Edge of Pavement	R/W	Right of Way
ER	End of Return	SDMH	Storm Drain Manhole
EVC	End of Vertical Curve	SSMH	Sanitary Sewer Manhole
EX, EXST	Existing	Std	Standard
FC	Flush Curb	SW	Sidewalk
FF	Finish Floor	TBM	Temporary Benchmark
FG	Finish Grade	TC	Top of Curb
FL	Flowline	TWC	Top of Wedge Curb
GB	Grade Break	Typ	Typical

Engineer:

Harrinder Singla, LS8347
MH Engineering
16075 Vineyard Blvd.
Morgan Hill, CA 95037
408.779.7381
harrys@mhengineering.com

Project Information:

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Proposed Zoning:	RAM
Sanitary Sewer:	City of Morgan Hill
Gas and Electric:	PG&E
Water:	City of Morgan Hill
Telephone:	Verizon
Existing Improvements:	As Shown
Area:	5.304 ac

Applicant:

VALLEY OAK PARTNERS
734 THE ALAMEDA
SAN JOSE, CA 95126
510.673.2078

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375 Diana Avenue

Topographic Map & Demolition Plan

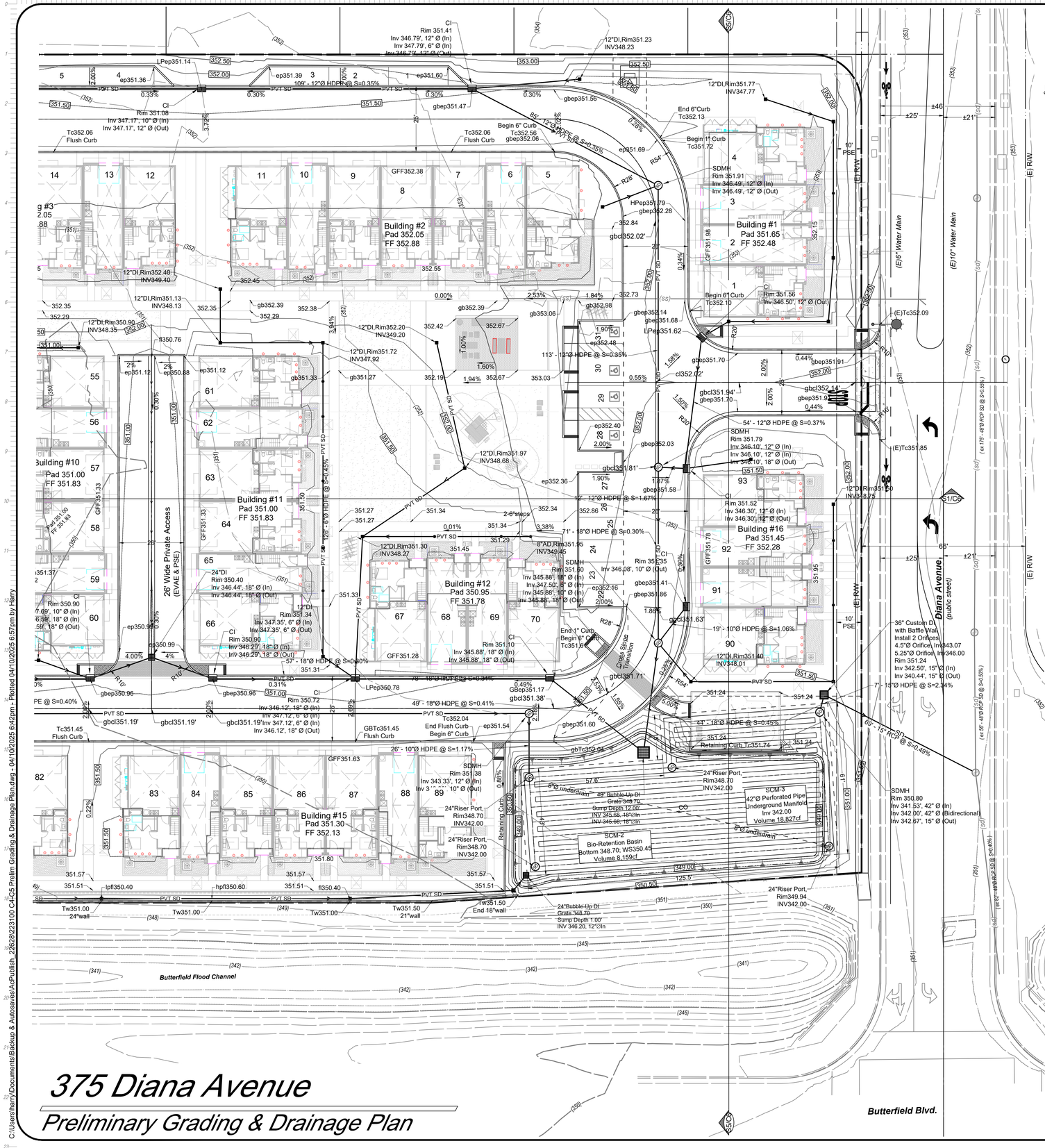
LICENSED LAND SURVEYOR HARINDER SINGLA No. 8347 STATE OF CALIFORNIA

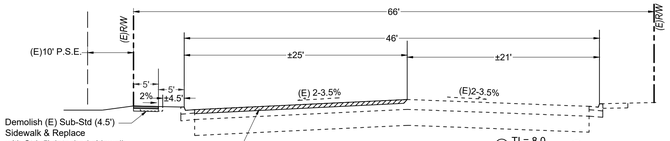
MH engineering Co.
16075 Vineyard Boulevard Morgan Hill, CA 95037

DATE: 04/2025 DRAWN:RS CHECKED: HS

Sheet **C3** of **10**
223100

L:\Projects\Harry\223100-Valley Oak Partners SB330, Diana Ave\DWG\223100 C3 Topo Map & Demolition Plan.dwg - 04/11/2025 3:04pm - Plotted 04/11/2025 3:05pm by Harry





Street Section-Diana Avenue

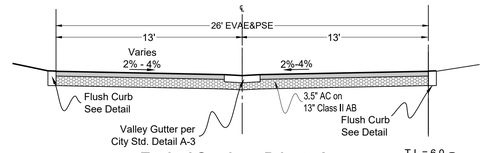
Looking Northeasterly — Not to Scale

(A) TI = 8.0, R = 18

(A) Pavement Section is based on the actual 'R' value obtained by the Soils Engineer. Pavement section may need to be further adjusted prior to base rock placement if final 'R' values were to result significantly different.

(B) Existing pavement shall be core drilled at several locations across entire frontage to verify section depth prior to AC overlay. City Engineer may require demolition of existing pavement, re-grade and re-pave for T.I. = 8.0, if the section is determined to be deficient from the minimum depth of 5"AC on 14"AB as currently determined by the Soils Engineer.

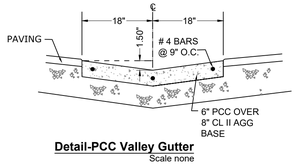
(C) Pavement Section for the onsite streets is based on an assumed 'R' value. Pavement section design will need to be updated when actual 'R' values are determined at the Improvement Plan stage.



Typical Section - Private Access

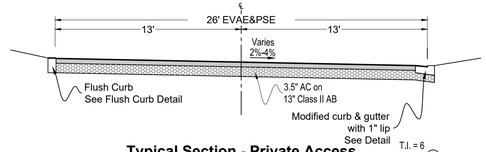
Fronting Buildings 8-11 — Not to Scale

T.I. = 6.0 (C), R = 5



Detail-PCC Valley Gutter

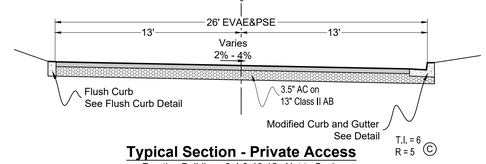
Scale none



Typical Section - Private Access

Fronting Buildings 2-4 & 5-7 — Not to Scale

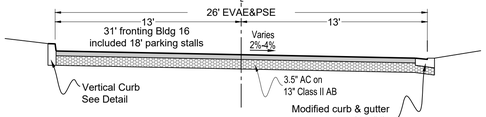
T.I. = 6, R = 5 (C)



Typical Section - Private Access

Fronting Buildings 2-4 & 13-15 — Not to Scale

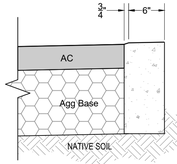
T.I. = 6, R = 5 (C)



Typical Section - Private Access

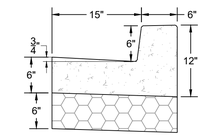
Fronting Buildings 1 & 16 — Not to Scale

T.I. = 6, R = 5 (C)



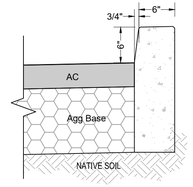
Flush Curb Detail

Not to Scale



Modified Curb and Gutter Detail

Not to Scale



Vertical Curb Detail

Not to Scale

375 Diana Avenue

Preliminary Grading & Drainage Plan

MH engineering Co.
16075 Vineyard Boulevard, Morgan Hill, CA 95037

DATE: 04/2025 DRAWN:RS CHECKED: HS

Sheet **C4** of **10**
223100

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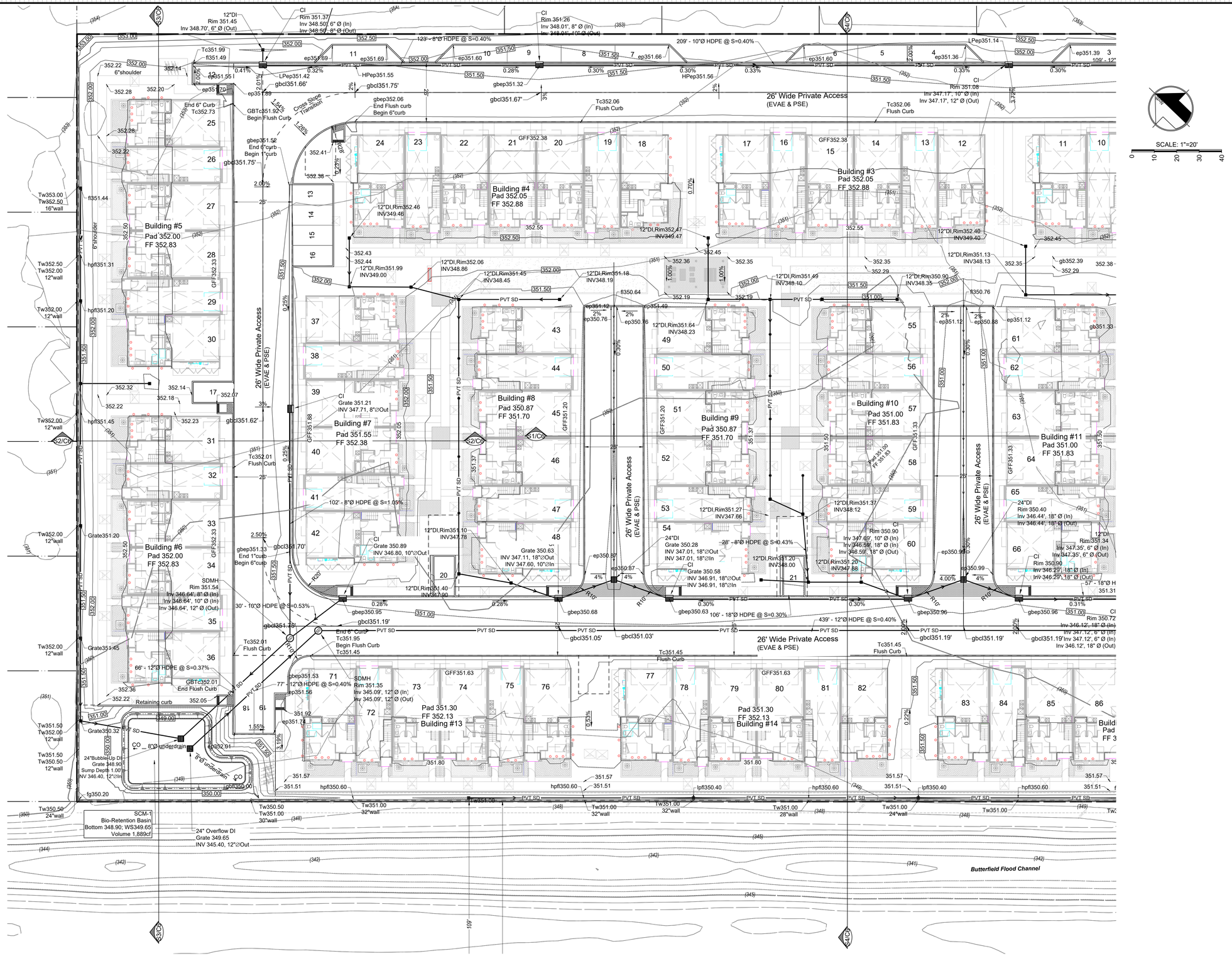


375 Diana Avenue

Preliminary Grading & Drainage Plan

MH engineering Co.
16075 Vineyard Boulevard Morgan Hill, CA 95037

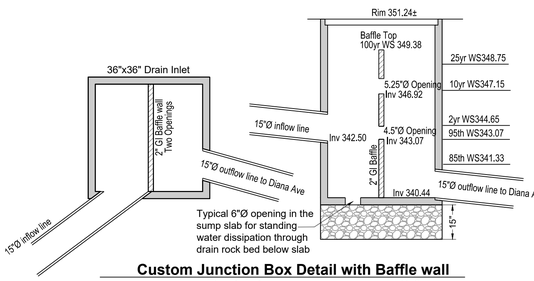
DATE: 04/2025 DRAWN:RS CHECKED: HS

Sheet **C5** of 10

223100

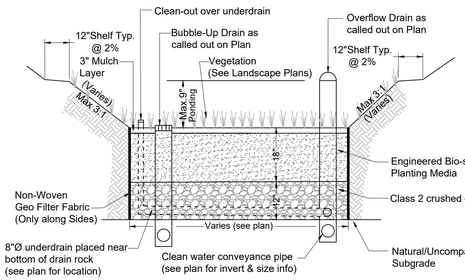
L:\Projects\Harry\223100-Valley Oak Partners SB330, Diana Ave\DWG\223100 C4-C5 Prelim Grading & Drainage Plan.dwg - 04/10/2025 6:39pm - Plotted 04/10/2025 6:40pm by Harry

Project Name/Number	23100
Application Submittal Date	12/4/2024
Project Location	Diana Avenue at Butterfield Blvd.
Project Phase	N/A
Project Type and Description	93 Unit Reisdential Condominimum Development on a RAM (Attached Medium) Zoned parcel
APN#	726-12-001, & 004
Total Project Area	232,043sf (5.327ac)
Total New Impervious Area	163,978sf (3.764ac)
Total Replaced Impervious Area (SF)	19,819sf
Out of Tract Run-on Diana Frontage Pavement (SF)	0
Total Pre-Project Impervious Area (SF)	19,819sf
Total Post-Project Impervious Area (SF)	163,978sf (3.764ac)
Net Impervious Area (SF)	163,978sf (3.764ac)
Watershed Management Zone	WMZ1
85th Design Storm	1.10 inch
95th Design Storm	1.75 inch
2 year Design Storm	2.65 inch
5 year Design Storm	3.48 inch
10 year Design Storm	4.17 inch
25 year Design Storm	5.24 inch
100 year Design Storm	6.50 inch



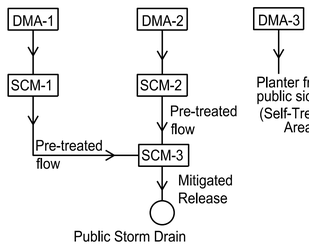
Custom Junction Box Detail with Baffle wall and Flow Restrictors

Not to Scale



Typ. Bio-Retention Basin (SCM-1 & 2)

Scale: None



Watershed Model Schematic

Scale: None

375 Diana Avenue

Preliminary Storm Water Management Plan

SCALE: 1"=30'

0 10 20 30 40 50 60

MH engineering Co.
16075 Vineyard Boulevard Morgan Hill, CA 95037

DATE: 04/2025 DRAWN:RS CHECKED: HS

Sheet **C6** of **10**

223100

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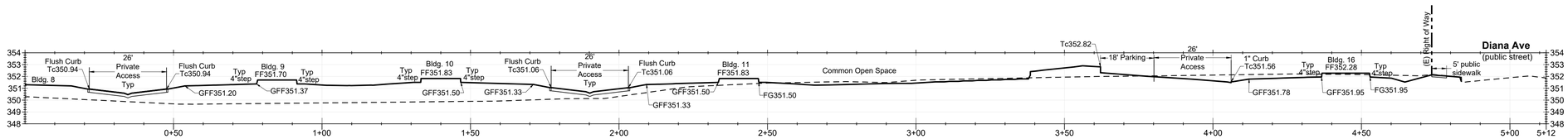
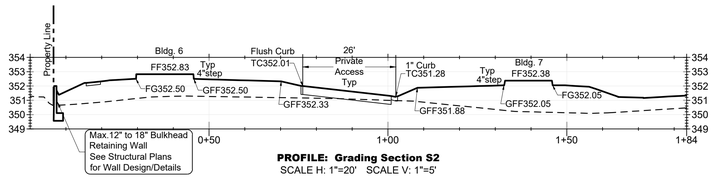
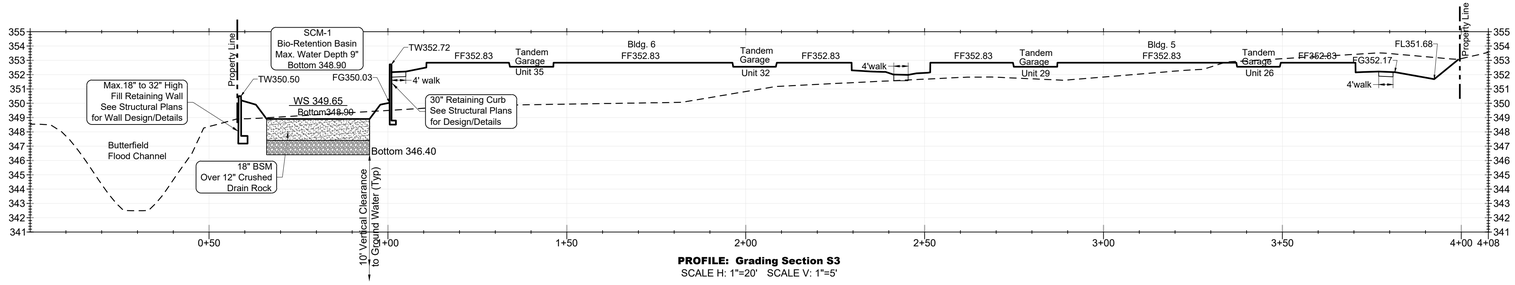


PROFILE: Grading Section S1
SCALE H: 1"=20' SCALE V: 1"=5'



PROFILE: Grading Section S2
SCALE H: 1"=20' SCALE V: 1"=5'

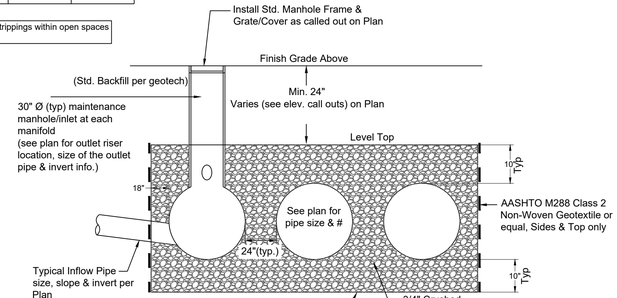


PROFILE: Grading Section S3
SCALE H: 1"=20' SCALE V: 1"=5'

Earthwork Summary----10" Slab Section		
Description	Cut (yd)	Fill (yd)
Strippings loss (3" depth) (5.30 ac)		2,138
Streets, Site & Basin grading (includes 12% compaction)	4,489	4,675
Bio-retention basin subexavation for soil media & drain rock backfill	585	
Trench Spoils (wet & dry)-estimate ONLY	1,800	
Foundations Excavation & Fine Grading	1,200	
Net volume	8,074	6,813

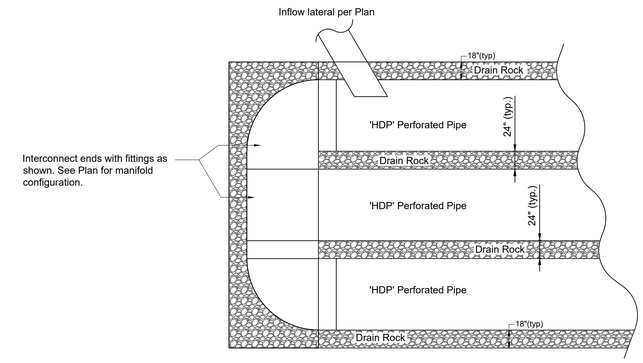
Estimated Import ±1,261 yd

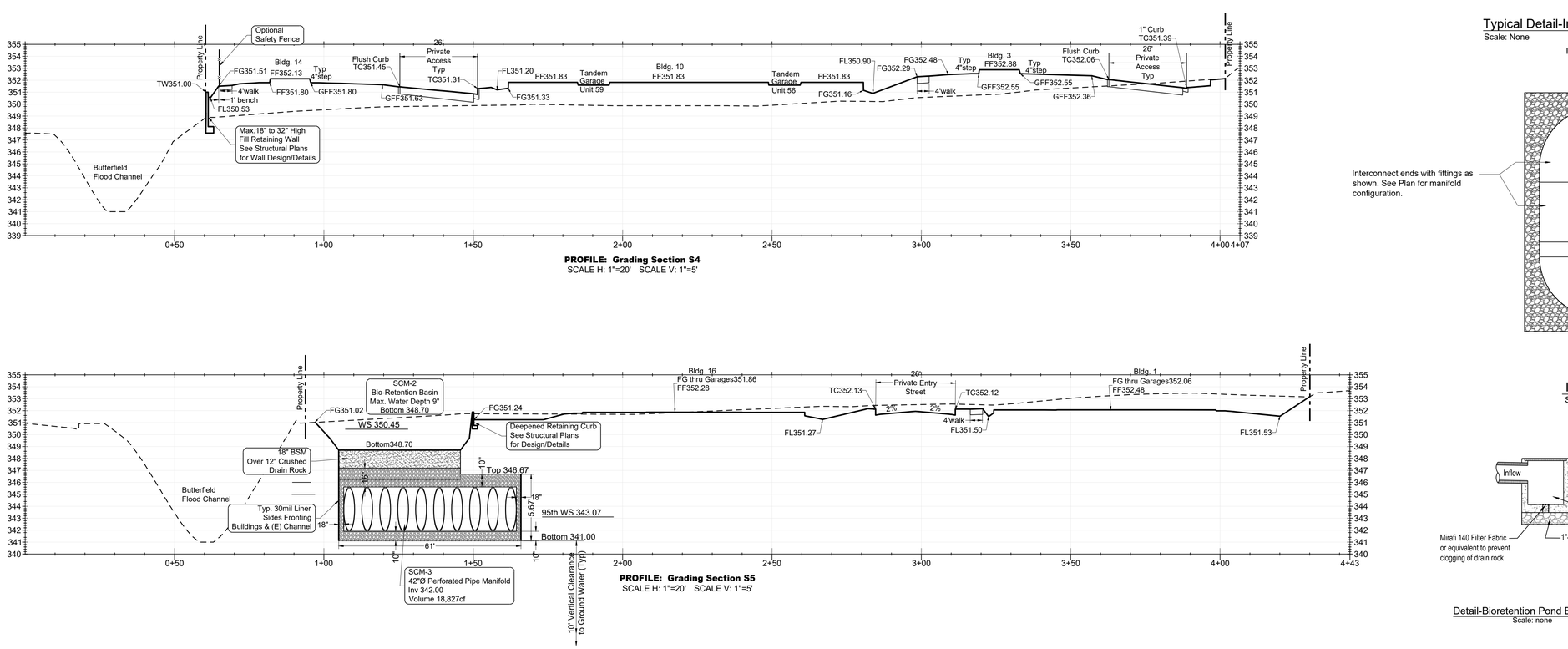
Note: it may be possible to dispose off strippings within open spaces south of the basin.



Typical Detail-Interconnected 'HDPE' Perforated Pipe Manifold

Scale: None



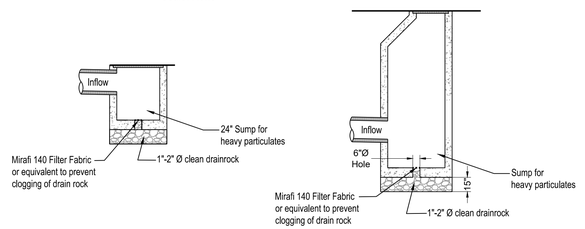


PROFILE: Grading Section S4
SCALE H: 1"=20' SCALE V: 1"=5'

PROFILE: Grading Section S5
SCALE H: 1"=20' SCALE V: 1"=5'

Typical Horizontal Layout
Interconnected 'HDPE' Perforated Pipe Manifold

Scale: None



Detail-Bioretention Pond Bubble Up
Scale: none

Detail-Storm Manhole/Inlet with a Sump
Scale: none

375 Diana Avenue

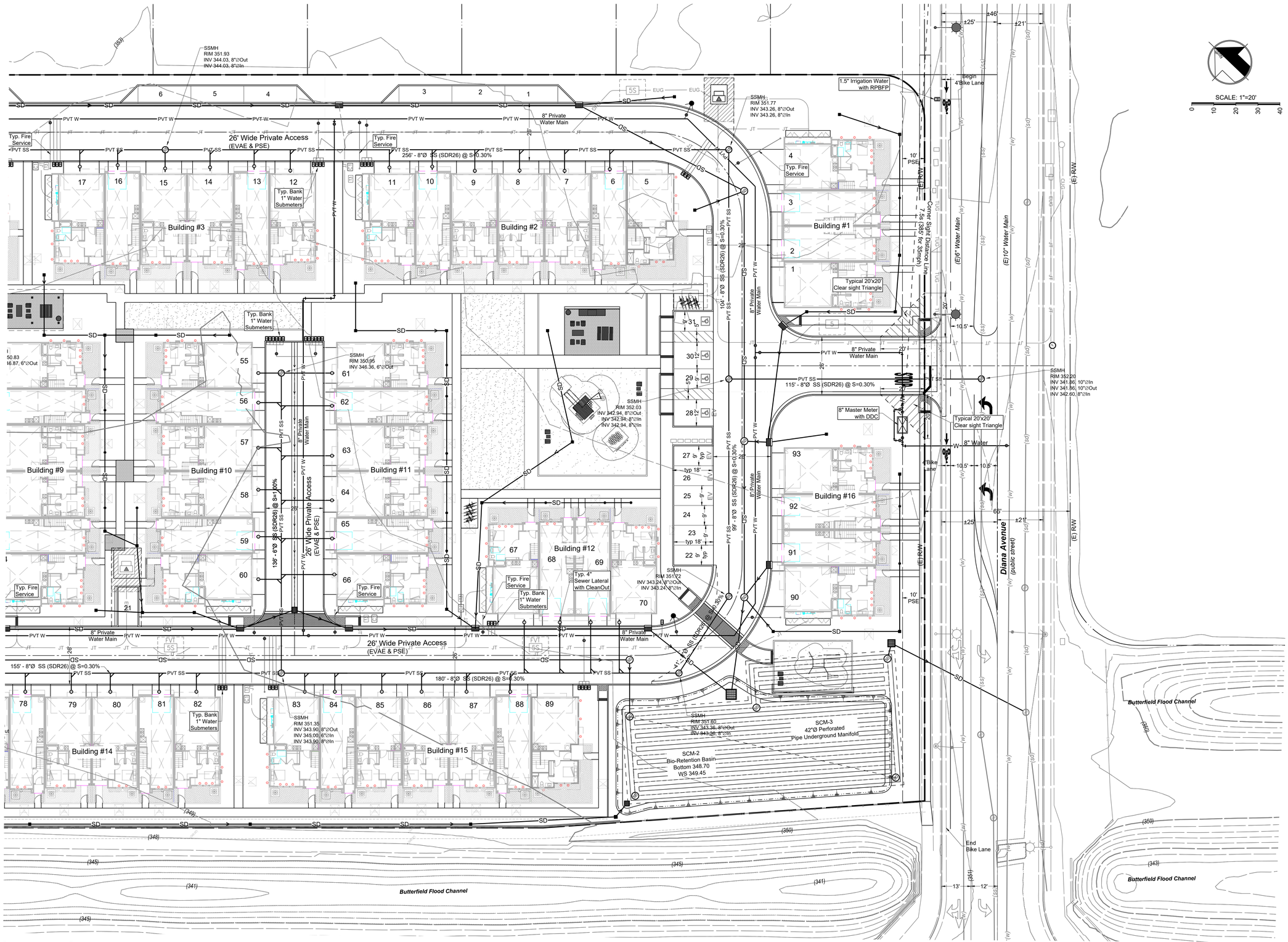
Preliminary Grading Sections

MH engineering Co.
16075 Vineyard Boulevard Morgan Hill, CA 95037

DATE: 04/2025 DRAWN:RS CHECKED: HS

Sheet **C7** of **10**
223100

L:\Projects\Harry\223100-Valley Oak Partners SB330, Diana Ave\DWG\223100 C7 Prelim Grading Sections.dwg - 04/10/2025 7:23pm - Plotted 04/10/2025 7:24pm by Harry



375 Diana Avenue

Preliminary Site Utility Plan

MH engineering Co.
16075 Vineyard Boulevard Morgan Hill, CA 95037

DATE: 04/2025 DRAWN:RS CHECKED: HS

Sheet **C8** of 10

223100

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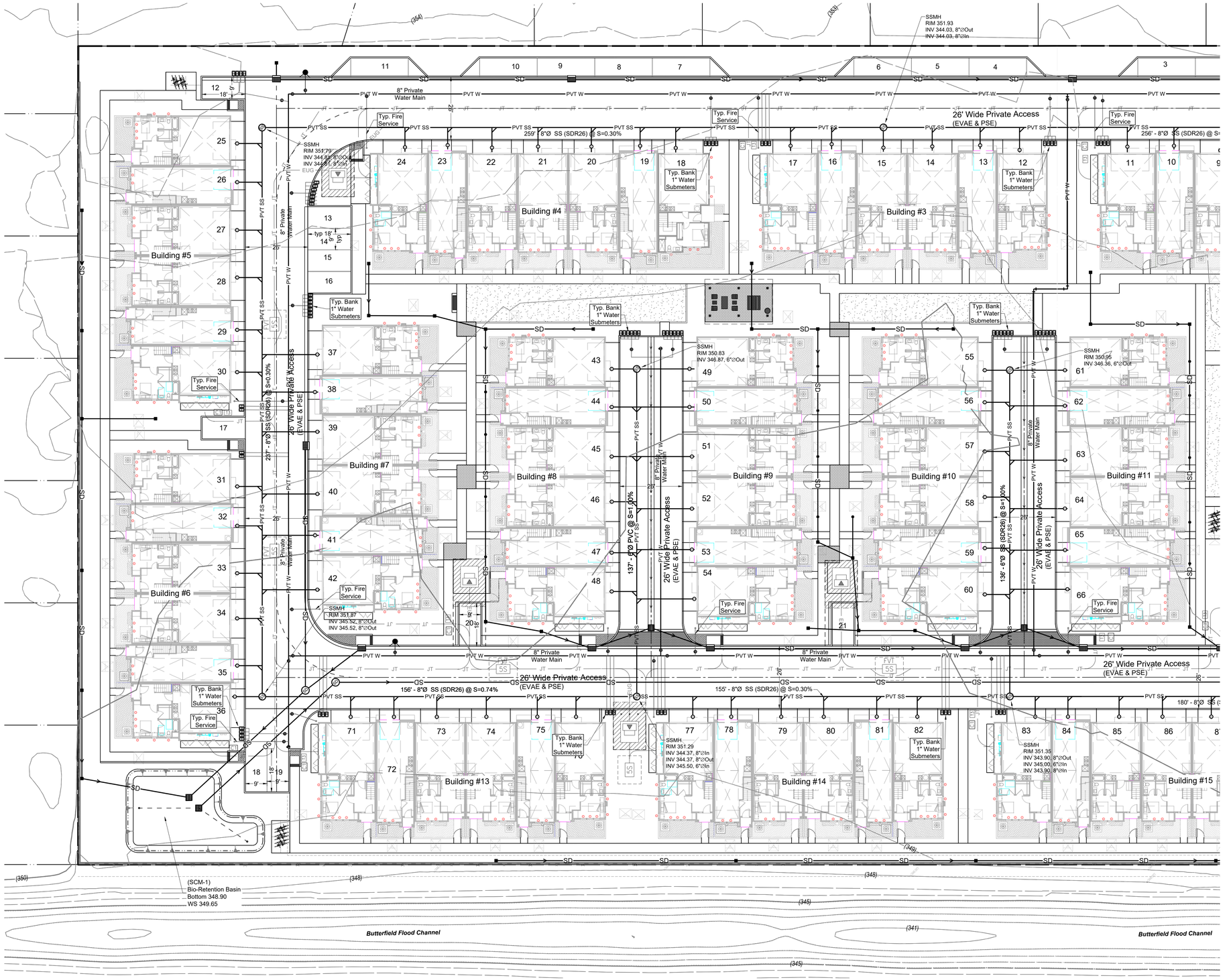

375 Diana Avenue

Preliminary Site Utility Plan

MH engineering Co.
16075 Vineyard Boulevard Morgan Hill, CA 95037

DATE: 04/2025 DRAWN:RS CHECKED: HS

Sheet **C9** of **10**
223100

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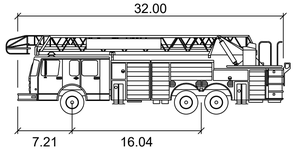
SCALE: 1"=30'

0 10 20 30 40 50 60



Pumper Fire Truck

		feet
Width	:	8.50
Track	:	8.13
Lock to Lock Time	:	6.0
Steering Angle	:	40.0

26' Wide Pr. Access
(EVAE & PSE)

26' Wide Pr. Access
(EVAE & PSE)

26' Wide Private Access
(EVAE & PSE)

26' Wide Pr. Access
(EVAE & PSE)

Pumper Fire Truck

142'

142'

Diana Avenue
(public street)

(E) R/W

65'
±25'
±46'
±21'

13'
12'

Butterfield Flood Channel

Butterfield Flood Channel

Butterfield Blvd.

375 Diana Avenue

Fire Truck Circulation Exhibit

MH engineering Co.
16075 Vineyard Boulevard Morgan Hill, CA 95037

DATE: 01/2025 DRAWN:RS CHECKED: HS

Sheet **C10** of **10**
223100

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NOTES:

No Slopes over 25% occur on this property.

After installation of landscaping on property, I agree to have an irrigation audit, landscape audit, irrigation schedule, and maintenance schedule conducted by a Certified Irrigation Auditor and submit it to the City for final project sign off.

Applicant Signature: _____

The developer will submit receipts and/or invoices for all compost and mulch purchases to Environmental Services Division after final construction.

Applicant Signature: _____

I have complied with the criteria of the ordinance and applied them for the efficient use of water in the landscape design plan.

Landscape Architect Signature: PAUL HADEN

REGISTERED LANDSCAPE ARCHITECT
PAUL HADEN
Signature
Exp. 2/28/26
Date
STATE OF CALIFORNIA

PROJECT INFORMATION:

PROJECT APPLICANT: VALLEY OAK PARTNERS LLC

TOTAL LANDSCAPE AREA: 58,427 SF

PROJECT TYPE: RESIDENTIAL TOWNHOUSES (MULTIFAMILY)

WATER SUPPLY / PURVEYOR: CITY OF MORGAN HILL

375 DIANA AVE - LANDCAPE COVER SHEET

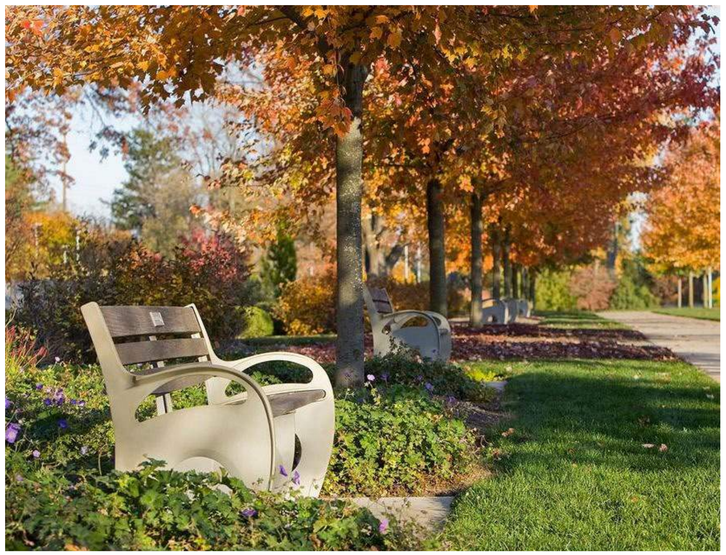
MORGAN HILL, CA

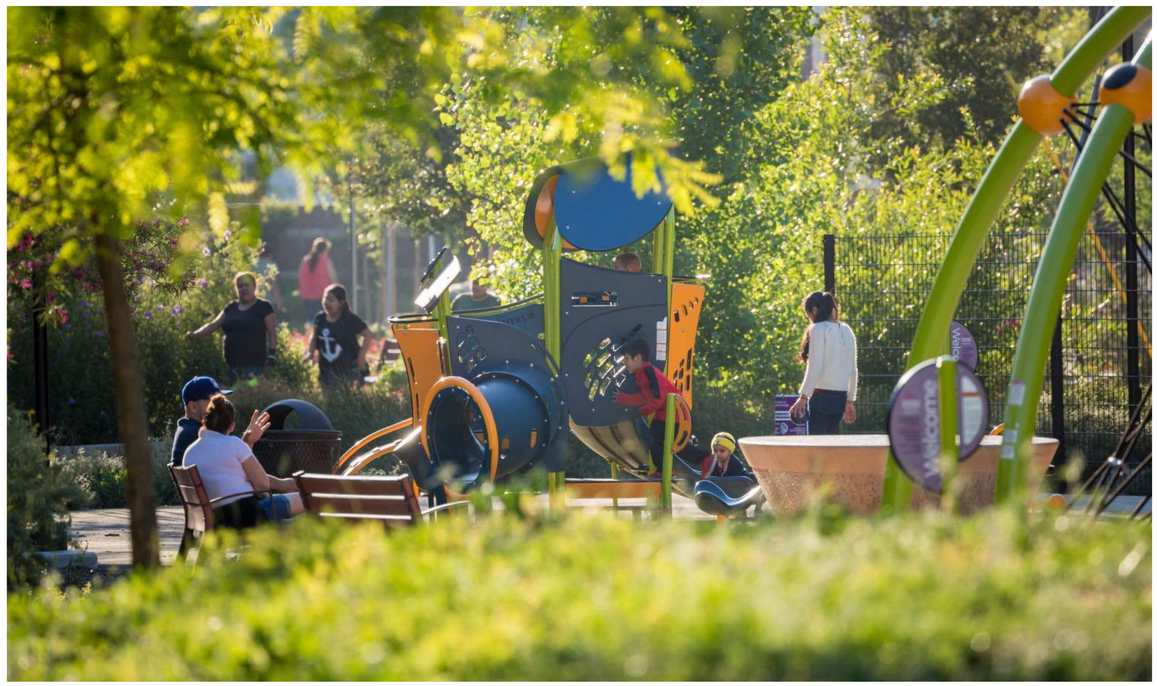
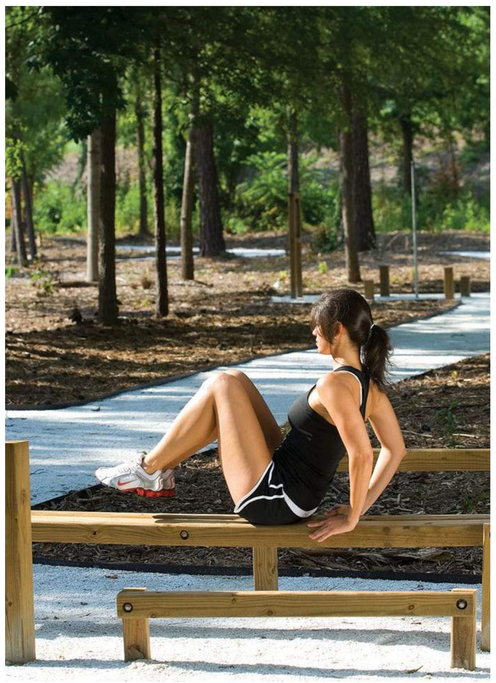
0 10' 20' 40'
Scale: 1"= 20'-0"

04.04.25

L-1

C2 Collaborative



375 DIANA AVE - CONCEPTUAL IMAGERY

MORGAN HILL, CA

04.04.25 L-2

C2 Collaborative

LEGEND

1. Picnic Area with Built-in Barbecue Island
2. Tot Lot - Small Playground
3. Outdoor Excercise Area
4. Bike Racks (11 Racks, 22 Spots Total)
5. Turf Lawn for Recreation / Gathering
6. Stormwater Basins
7. Subsurface Stormwater Storage
8. Picnic Area with Shade Structure
9. Private Patios
10. Parking
11. Sidewalk (4' min. width)
12. Building - per Architect
13. Asphalt Street - per Civil Engineer
14. Cluster Mailboxes
15. Enhanced Paving at Paseo
16. Transformer with Screening Shrubs
17. Waste and Recycling Receptacle
18. Property Line
19. Enhanced Paving at Crosswalks

NOTES:

-Waste and Recyling containers are to be stored in the garage spaces of units by homeowners. In addition to this, the project features two HOA maintained waste / recycling receptacles in the communtiy open space areas as well.

-All above ground utilities are to receive screening shrubs maintained at a height of equal to or greater than the utility.

375 DIANA AVE - CONCEPTUAL SITE PLAN

MORGAN HILL, CA

0 10' 20' 40'
Scale: 1" = 20'-0"

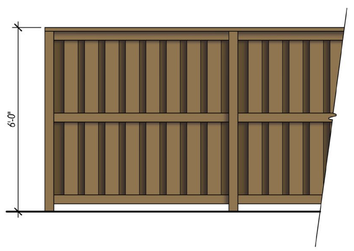
04.04.25

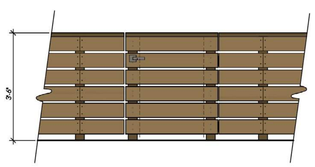
L-3

C2 Collaborative

LEGEND

- Retaining Wall (ht. per Civil)
- Perimeter Fence (6' ht.)
- Patio Fence/Gate (3'-6" ht)
- Barbecue Backdrop Wall (5'ht)





Perimeter Fence 1/2"=1'-0"
- -6' height
- -S4S Douglas Fir
- -Painted with Eggshell Finish

Patio Fence/Gate 1/2"=1'-0"
- -3'-6" height
- -S4S Douglas Fir
- -Painted with Eggshell Finish

375 DIANA AVE - CONCEPTUAL WALL AND FENCE PLAN

MORGAN HILL, CA

0 10' 20' 40'
Scale: 1"= 20'-0"

04.04.25

L-4

C2 Collaborative

TREE LEGEND

STREET TREES (DIANA AVE)

SCIENTIFIC NAME	COMMON NAME
Brachychiton populneus	Kurrajong
Lyonothamnus f. subsp. asplenifolius	Catalina Ironwood
Pistacia chinensis	Chinese Pistache
Rhus lancea	African Sumac
Ulmus parvifolia	Chinese Elm

*Species selection is Zone 2, 4'-6' planter from the City of Morgan Hill Master Street Tree Plan

STREET TREES (INTERNAL)

SCIENTIFIC NAME	COMMON NAME
Agonis flexuosa	Peppermint Tree
Acacia stenophylla	Shoestring Acacia
Albrizia julibrissin	Silk Tree
Arbutus 'Marina'	Marina Strawberry Tree
Brachychiton populneus	Kurrajong
Cassia leptophylla	Gold Medallion Tree
Grevillea robusta	Silk Oak
Lagerstroemia indica 'Muskogee'	Muskogee Crape Myrtle
Lyonothamnus f. subsp. asplenifolius	Catalina Ironwood
Pistacia chinensis	Chinese Pistache
Rhus lancea	African Sumac
Ulmus parvifolia	Chinese Elm

LARGE ACCENT TREES

SCIENTIFIC NAME	COMMON NAME
Acacia cultriformis	Knife Acacia
Albrizia julibrissin	Silk Tree
Arbutus 'Marina'	Marina Strawberry Tree
Brachychiton populneus	Kurrajong
Cassia leptophylla	Gold Medallion Tree
Cercis occidentalis	Western Redbud
Chilopsis linearis	Desert Willow
X Chitalpa t.	'Pink Dawn' Chitalpa
Grevillea robusta	Silk Oak
Lagerstroemia indica 'Muskogee'	Muskogee Crape Myrtle
Laurus nobilis	Bay Laurel
Melalueca quinquervia	Paperbark Tree
Olea europaea 'Swan Hill'	Olive
Pinus pinea	Italian Stone Pine
Prunus cerasifera 'Thundercloud'	Cherry Plum
Punica granatum	Pomegranate
Quercus Agrifolia	Coast Live Oak
Quercus lobata	Valley Oak

MEDIUM ACCENT TREES

SCIENTIFIC NAME	COMMON NAME
Acacia cultriformis	Knife Acacia
Acacia stenophylla	Shoestring Acacia
Arbutus 'Marina'	Marina Strawberry Tree
Cercis occidentalis	Western Redbud
Chilopsis linearis	Desert Willow
Cotinus coggygria	Smoke Tree
Lagerstroemia indica	Crape Myrtle
Laurus nobilis	Bay Laurel
Lyonothamnus f. subsp. asplenifolius	Catalina Ironwood
Melalueca quinquervia	Paperbark Tree
Olea europaea 'Swan Hill'	Olive
Prunus cerasifera 'Thundercloud'	Cherry Plum
Punica granatum	Pomegranate
Rhus lancea	African Sumac

SCREENING TREES

SCIENTIFIC NAME	COMMON NAME
Agonis flexuosa	Peppermint Tree
Arbutus 'Marina'	Marina Strawberry Tree
Cercis occidentalis	Western Redbud
Chilopsis linearis	Desert Willow
Cotinus coggygria	Smoke Tree
Cupressus sempervirens	Italian Cypress
Lagerstroemia indica 'Natchez'	Natchez Crape Myrtle
Laurus nobilis	Bay Laurel
Lyonothamnus f. subsp. asplenifolius	Catalina Ironwood
Melalueca quinquervia	Paperbark Tree
Pinus halepensis	Aleppo pine
Rhaphiolepis i. 'Majestic Beauty'	Majestic Beauty India Hawthorn
Rhus lancea	African Sumac

PLANTING NOTES:

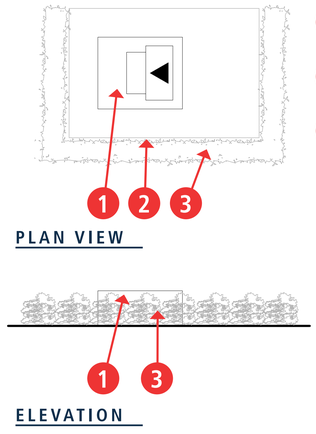
-Proposed planting is to comply with City of Morgan Hill Water Conservation and Landscape Ordinance Chapter 18.148 of the Morgan Hill Municipal Code and the requirements of Chapter 18.64 (Landscaping) of the Morgan Hill Municipal Code.

-A minimum 3" layer of mulch shall be applied on all exposed soil surfaces of planting areas except in turf areas, creeping or rooting groundcovers, or direct seeding applications where mulch is contraindicated. To provide habitat for beneficial insects and other wildlife, up to five percent of the landscape area may be left without mulch. Designated insect habitat must be included in the landscape design plan as such.

-Organic mulch materials made from recycled or post-consumer shall take precedence over inorganic materials or virgin forest products unless the recycled post-consumer organic products are not locally available. Organic mulches are not required where prohibited by local fuel modification plan guidelines or other applicable local ordinances. Types of mulch not allowed include: bark mulch, gorilla hair, shredded cedar, or other virgin materials.

-For Landscape installations, composts at a rate of a minimum of four cubic yards per one thousand square feet of permeable area shall be incorporated to a depth of six inches into the soil. Soils with greater than six percent organic matter in the top six inches of soil are excempt from adding compost and tilling.

TYPICAL UTILITY SCREENING



1. Utility (Transformer, AC, etc.)
2. Clear Workzone
3. Planting Screen (5 gal. minimum)

SHRUB AND GROUNDCOVER LEGEND

SHRUB AND GROUNDCOVER

SCIENTIFIC NAME	COMMON NAME
Acacia redolens	Prostrate Acacia
Agave spp.	Agave
Aloe spp.	Aloe
Arctostaphylos e. 'Bert Johnson	Burt Johnson Manzanita
Bouteloea gracilis	Blue Grama
Callistemon viminilis 'Little John'	Little John Bottlebrush
Carex tumulicola	Berkeley Sedge
Carissa spp.	Natal Plum
Ceanothus 'Julia Phelps'	Julia Phelps Ceanothus
Ceanothus 'Yankee Point'	Yankee Point Ceanthous
Chondropetalum tectorum	Small Cape Reed
Cistus 'Sunset'	Magenta Rockrose
Cotoneaster dammeri 'Lowfast'	Bearberry Cotoneaster
Crassula spp.	Jade Plant
Dasyliron spp.	Desert Spoon
Dietes bicolor	Fortnight Lily
Festuca mairei	Maire's Fescue
Grevillea spp.	Spider Flower
Hesperaloe parviflora	Yucca
Heteromeles arbutifolia	Toyon
Ilex vomitoria	Yaupon
Iris douglasiana	Douglas' Iris
Juncus patens	California Grey Rush
Lavandula ssp.	Lavender
Leucophyllum spp.	Barometer Bush
Leymus condensatus 'Canyon Prince'	Canyon Prince Wild Rye
Lomandra longifolia	Dwarf Mat Rush
Myoporum p. 'Putah Creek'	Creeping Myoporum
Myrtus communis	True Myrtle
Olea europaea 'Montra'	Little Ollie Dwarf Olive
Pittosporum tobira variegata	Vairegated Mock Orange
Phormium tenax	New Zealand Flax
Prunus caroliniana 'Bright n Tight'	Bright N Tight Carolina Laurel
Rhaphiolepis spp.	Indian Hawthorn
Rosmarinus officinalis	Rosemary
Salvia 'Bees Bliss'	Bee's Bliss Sage
Senecio serpens	Blue Chalksticks
Westringia spp.	Coast Rosemary

VINES/ESPALIERS

SCIENTIFIC NAME	COMMON NAME
Bougainvillea spp.	Bougainvillea
Macfadyena unguis-cati	Cat's Claw
Parthenocissus tricuspidata	Boston Ivy
Rosa 'Cecile Bruner'	Cecile Brunner Rose
Rosa banksiae	Lady Banks Rose
Vitis 'Roger's Red'	Roger's Red Grape Vine

BIORETENTION BASINS

SCIENTIFIC NAME	COMMON NAME
Achillea millefolium californica	Yarrow
Baccharis pilularis	Coyote Brush
Carex divulsa	Berkeley Sedge
Chondropetalum tectorum	Small Cape Rush
Eschscholzia californica	California Poppy
Iris douglasiana	Douglas Iris
Leymus condensatus 'Canyon Prince'	Canyon Prince Wild Rye
Juncus patens 'Elk Blue'	Elk Blue Californai Gray Rush
Muhlenbergia rigens	Deer Grass
Salvia spathacea	Hummingbird Sage

*Species selection based on Central Coast Low Impact Development Initiative's bioretention plant list.

TURF

SOD

Hybrid Bermuda / Tiff Tuff Turf - by West Coast Turf

375 DIANA AVE - CONCEPTUAL PLANT PALETTE

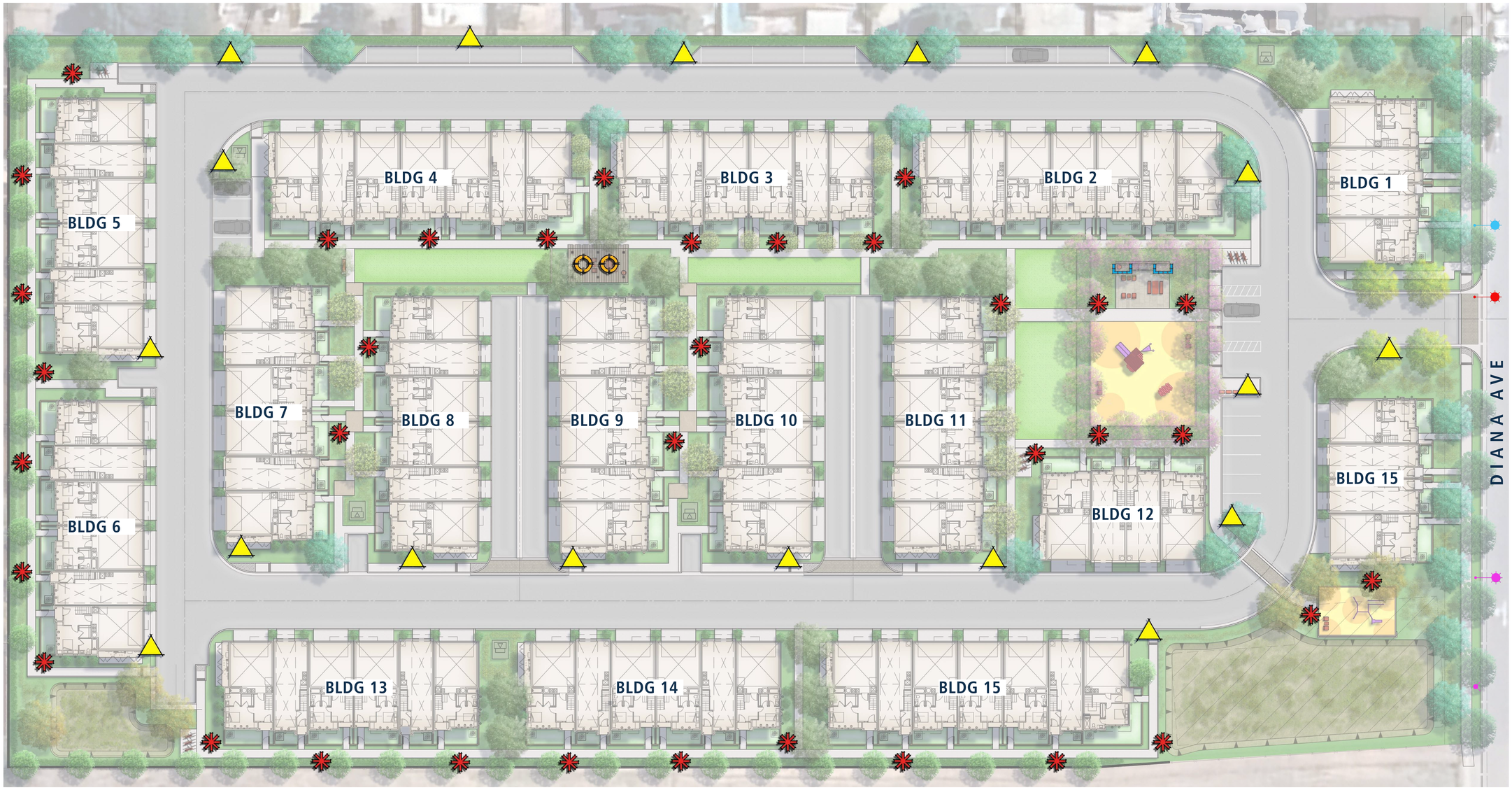
MORGAN HILL, CA

0 10' 20' 40'
Scale: 1" = 20'-0"

04.04.25

L-5

C2 Collaborative



LEGEND

BOLLARD LIGHT
MODEL: BOLLARD CLIO
MANUF: CYCLONE

OVERHEAD STREET LIGHT
MODEL: PASEO POST TOP
MANUF: CYCLONE

WALL LIGHT
MODEL: VK
MANUF: FX LUMINAIRE

DOWN LIGHT
MODEL: VE
MANUF: FX LUMINAIRE

DIANA AVE UTILITIES

- Existing Parkway Utilities to Remain
- Existing Parkway Utilities to be Removed
- Proposed Parkway Utilities

375 DIANA AVE - CONCEPTUAL LIGHTING PLAN

MORGAN HILL, CA

0 10' 20' 40'
Scale: 1"= 20'-0"

04.04.25

L-6

C2 Collaborative

Project Name: 375 Diana Ave, Morgan Hill CA

Date: July 26th, 2024

WATER EFFICIENT WORK SHEET

Maximum Applied Water Allowance (MAWA)

Total MAWA = (Eto x 0.55 x LA in Sq.ft. x 0.62)+(Eto x 1.0 x SLA in Sq.ft. x 0.62)= Gallons per year for LA + SLA

Hydrozone:	Eto:	KL	LA Sq. Ft.	Conversion	SLA Sq. Ft.	MAWA
Landscaped Area	49.5	0.55	58,427	0.62	0	986,219

MAWA= Maximum Applied Water Allowance (gallons per year)
Eto= Reference Evapotranspiration from Appendix C (inches per year)
0.55= Evapotraspiration Adjustment Factor (ETAF) (For residential project)
1.0= ETAF for Special Landscaped Area
LA= Landscaped Area includes Special Landscape Area (square feet)
0.62= Conversion Factor (to gallons per square foot)
0.45= the additional ET adjustment Factor for Special Landscape Area (1.0- 0.55= 0.45)
SLA= Special Landscape Area (square feet)

Applicant to fill in boxes below:

Eto (Reference Evapotranspiration from Appendix C inches per year)	**49.5**
Landscaped Area includes Special Landscape Area (square feet)	**58,427**
Special Landscape Area (square feet)	**0**

Estimated Annual Water Use:

Total EAWU = (Eto x KL x LA in Sq.ft. / IE)= Gallons per Year

Hydrozone:	Eto:	KL	Sq. Ft.	Conversion	IE	EAWU
Low Water Use Shrubs (Drip)	49.5	0.2	53,621	0.62	0.81	406,328
Medium Water Use Shrubs (Drip)	49.5	0.5	-	0.62	0.81	-
Warm Season Turf (Rotor)	49.5	0.7	4,806	0.62	0.73	141,435
High (Water Feature)	49.5	1.0	-	0.62	1.00	-
Total EAWU:			58,427			547,763

EAWU= Estimated Applied Water Use (gallons per year)
Eto= Reference Evapotranspiration from Appendix C (inches per year)
Kl= Landscape Coefficient
LA= Landscaped Area (square feet)
0.62= Conversion Factor (to gallons per square foot)
IE= Irrigation Efficiency= IME X DU (See definication in Appendix E for exmaplne IE percentages)
IME= Irrigation Management Efficiency (90%)
DU= Distribution Uniformity of Irrigation Head
Kl= Ks x Kc x Kmc
Ks= species factor (range 1.0- 0.9) (see WUCOLS list for values)
Kd= density factor (range 0.5- 1.3) (see WUCOLS list for density value)
Kmc= microclimatic factor (range 0.5- 1.4) (see WUCOLS)

Table A- PF (Plant Factor)

Cool Season Turf= 0.8	
Warm Season Turf= 0.7	
High Water Use Plants= 0.7	(can be between 0.7-0.9)
Moderate Water Use Plants= 0.5	(can be between 0.4-0.6)
Low Water Use Plants= 0.2	(can be between 0.1-0.3)
Very Low Water Use Plants= 0.1	

IE (Irrigation Efficiency)- Appendix E

Pop-up Stream Rotor= 0.73
Rotor Head= 0.76
Microspray= 0.76
Bubblers= 0.77
Drip Emitters= 0.81
Subsurface Irrigation= 0.81

LEGEND

- Warm Season Turf (High Water Use)
- Low Water Use
- 1.5” Irrigation Meter POC with Back-flow Preventer

NOTE: Refer to Civil Engineer’s Preliminary Site Utility Plan for additional POC information.

375 DIANA AVE - HYDROZONE AND IRRIGATION POC MAP

MORGAN HILL, CA

0 10’ 20’ 40’
Scale: 1”= 20’-0”

04.04.25 L-7

C2 Collaborative

VALLEY OAK PARTNERS
DIANA AVENUE
MORGAN HILL SANTA CLARA COUNTY CALIFORNIA

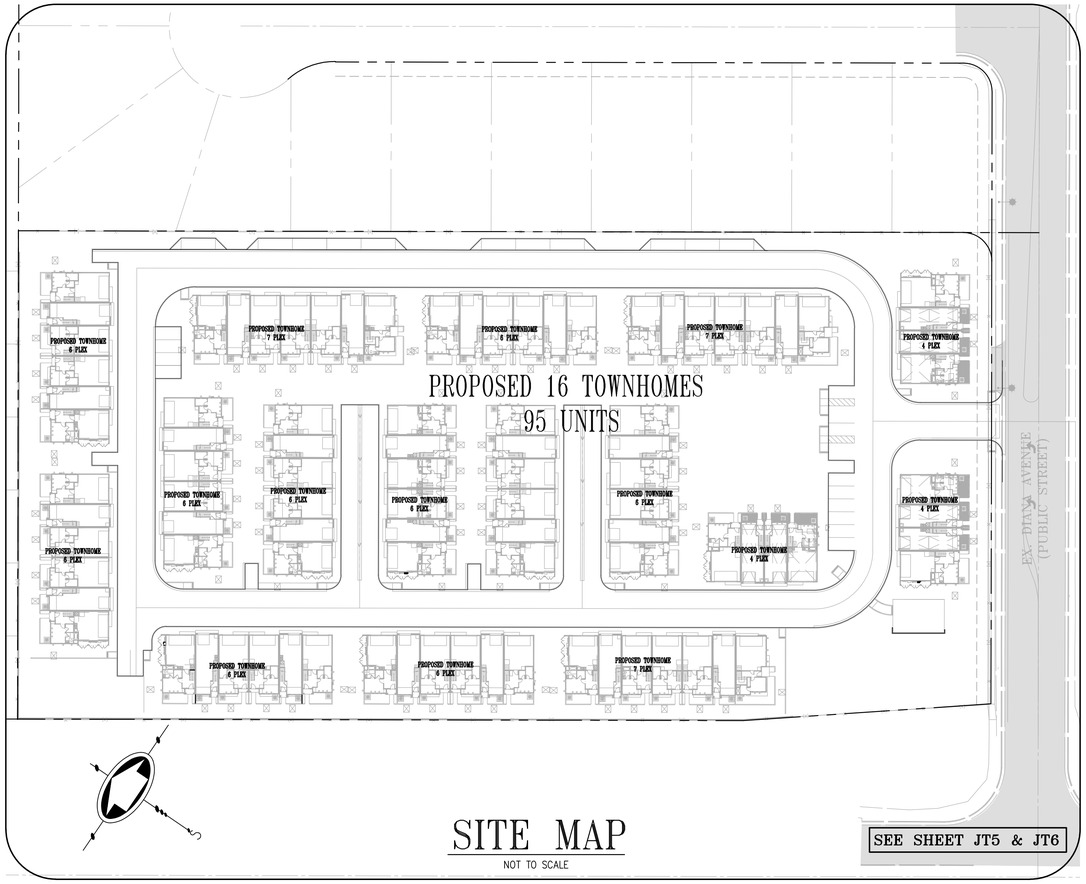
VICINITY MAP
NOT TO SCALE

SHEET INDEX

SHEET NO.	DESCRIPTION
JT1	JOINT TRENCH COMPOSITE TITLE SHEET
JT2	JOINT TRENCH GENERAL NOTES AND DETAILS
JT3	JOINT TRENCH DETAILS
JT4	JOINT TRENCH SECTIONS AND DETAILS
JT5 - JT6	JOINT TRENCH COMPOSITE PLAN

2306 L.F. OF JOINT TRENCH AND
SHALL BE INSTALLED WITH THIS JOINT TRENCH PLAN SET

16 TOWNHOME BUILDINGS (95 UNITS TOTAL)
16 NEW SERVICE COMPLETIONS (ELECTRIC, TELEPHONE &CATV)



SITE MAP
NOT TO SCALE

LEGEND

- JT — PROPOSED JOINT TRENCH
- SVC — PROPOSED JOINT TRENCH SERVICE
- EX JT — EXISTING JOINT TRENCH
- GAS — PROPOSED GAS
- EX GAS — EXISTING GAS
- ESL — EXISTING STREET LIGHT CONDUIT
- ECUG — EXISTING UNDERGROUND CATV LINES
- EEUG — EXISTING UNDERGROUND ELECTRIC LINES
- EUUG — EXISTING UNDERGROUND UTILITY LINES
- ETUG — EXISTING UNDERGROUND TELEPHONE LINES
- EUOH — EXISTING OVERHEAD UTILITY LINES
- ECOH — EXISTING OVERHEAD CATV LINES
- ETOH — EXISTING OVERHEAD TELEPHONE LINES
- EEOH — EXISTING OVERHEAD ELECTRIC LINES
- CUG — PROPOSED UNDERGROUND CATV LINES
- EUG — PROPOSED UNDERGROUND ELECTRIC LINES
- TUG — PROPOSED UNDERGROUND TELEPHONE LINES
- UOH — PROPOSED OVERHEAD UTILITY LINES
- DESIGNATES UTILITY LINES TO BE REMOVED
- EXISTING PRIMARY SPLICE BOX
- EXISTING SECONDARY SPLICE BOX
- PROPOSED 90"x106" PG&E PAD MOUNT TRANSFORMER
- 6 — PROPOSED 4'x6'6"x5' PG&E SUBSURFACE SPLICE BOX.
- FVT 5S — PROPOSED 3'x5'x4'6" PG&E SUBSURFACE SPLICE BOX.
- 5 — PROPOSED 3'x5'x3'6" PG&E SUBSURFACE SPLICE BOX.
- C1 — PROPOSED 24"x36"x14" CATV SPLICE BOX (B40)
- T3 — PROPOSED 17"x30"x24"/34" TELEPHONE SERVICE BOX
- X — PG&E SKETCH LOCATION NUMBER

TARRAR UTILITY REP.:	KHALID TARRAR	JOB NO. 224027	PHONE NO. (925) 240-2595
DEVELOPER:	JEFF AGUILAR	JOB NO. 224027	PHONE NO. (510)673-2078
PG&E ELECTRIC COORDINATOR:	-	JOB NO. -	PHONE NO. -
PG&E GAS COORDINATOR:	-	JOB NO. -	PHONE NO. -
TELEPHONE REP.:	FRONTIER	JOB NO. 224027	PHONE NO. (408)202-6409
CABLE T.V. REP.:	SPECTRUM-TONY	JOB NO. 224027	PHONE NO. (408)438-1529

FILES STATUS

DESCRIPTION:	BY:	DATE:	STATUS:
CIVIL PLANS (ELECTRONIC FILE)	MH ENGINEERING	02/15/2024	R
ARCHITECTURAL PLANS (ELECTRONIC FILE)	C2 COLLABORATIVE	02/19/2024	R
LANDSCAPE PLANS (ELECTRONIC FILE)	XXXX	XX-XX-XXXX	XXXX
GAS DESIGN	TARRAR UTILITY CONSULTANTS	XX-XX-XXXX	XXXX
ELECTRIC DESIGN	TARRAR UTILITY CONSULTANTS	XX-XX-XXXX	XXXX
TELEPHONE INTENT REPLY	FRONTIER	03-07-2024	R
CATV INTENT REPLY	SPECTRUM	03-14-2024	R
STREET LIGHT PLANS – PUBLIC	XXXX	XX-XX-XXXX	XXXX
STREET LIGHT PLANS – PRIVATE	XXXX	XX-XX-XXXX	XXXX
SOILS REPORT	XXXX	XX-XX-XXXX	XXXX

A = APPROVED • **ANS** = APPROVED NOT SIGNED • **NA** = NOT APPROVED• **F** = FIRST SUBMITTAL • **SS** = SECOND SUBMITTAL • **R** = RECEIVED

TARRAR UTILITY CONSULTANTS
APPROVED FOR SUBMITTAL
NICK DELGADO
QUALIFIED APPLICANT DESIGN ENGINEER

DESIGN CHANGE COMPONENT
ANY CHANGES TO THIS DESIGN
MUST BE APPROVED BY
ADD ADE NAME / PH# HERE
PG&E GAS ADE

COMPOSITE DRAWING BY DEVELOPER

Approved _____ _____
Telephone representative Date

Approved _____ _____
CATV representative Date

SUBSTRUCTURE VERIFICATION STAMP

DEVELOPER NOTE AND SIGN

ALL PG&E ENCLOSURES AND BOXES HAVE BEEN SET TO GRADE ACCORDING TO GRADE STAKES PROVIDED BY DEVELOPERS ENGINEER. ALL COSTS TO RELOCATE OR READJUST BOXES AT A LATER DATE WILL BE BILLED TO THE DEVELOPER. PLEASE HAVE YOUR JOB SUPT. VERIFY THE CORRECT GRADE OF ALL ENCLOSURES AND BOXES, AND SIGN AND DATE DRAWING.

THANK YOU

SIGNED _____

DATE: _____

813 First Street
Brentwood, CA 94513
(925) 240-2595
(925) 240-7013 fax
www.tarrar.com

TARRAR UTILITY CONSULTANTS

- Planning
- Design
- Estimating
- Joint Trench
- Street Lighting
- Fiber Optic
- T-24
- PG&E Gas Design
- PG&E Elec Design
- M.E.P. Design
- Cost Analysis
- Due Diligence

JOINT TRENCH COMPOSITE TITLE SHEET
VALLEY OAK PARTNERS
DIANA AVENUE
MORGAN HILL CALIFORNIA

NO.	REVISIONS	BY	DATE

DATE: FEBRUARY 2024 | DATE LAST WORKED ON: 04/04/2025
SCALE: NOT TO SCALE | DRAWN: LGR | CHECKED: ND
JOB NO.: 224027 | PRELIMINARY NOT FOR CONSTRUCTION
INTENT TO CONSTRUCT

811 CALL BEFORE YOU DIG UNDERGROUND SERVICE ALERT

REGISTERED PROFESSIONAL ENGINEER ABHULLAH Exp. 9-30-26 CIVIL STATE OF CALIFORNIA

SHEET JT1 OF JT6 SHEETS

PROJECT NOTES:

1. FIELD ADJUST SERVICES TO MINIMIZE INTERFERENCE WITH EXISTING FACILITIES (TYPICAL).
2. CONTRACTOR SHALL PERFORM ALL TRENCHING, EXCAVATING, BACKFILLING AND OTHER WORK AS SHOWN OR NOTED ON PLANS, AND AS SPECIFIED ON UTILITY BID DOCUMENTS.
3. FIELD ADJUST SPLICE BOXES TO KEEP CLEAR OF SIDEWALK, DRIVEWAYS AND EXISTING FACILITIES (TYPICAL).
4. A 3 FOOT LEVEL WORKING AREA MUST BE MAINTAINED AROUND ALL ELECTRIC ENCLOSURES. PRIOR TO ENERGIZING THE SYSTEM, THE ELECTRIC UTILITY COMPANY INSPECTOR WILL DETERMINE IF RETAINING WALLS ARE REQUIRED TO MEET MINIMUM CLEARANCE BETWEEN ENCLOSURES AND THE TOPS OR TOES OF SLOPES. IF RETAINING WALLS ARE REQUIRED, THE DEVELOPER AND/OR CONTRACTOR SHALL OBTAIN THE NECESSARY PERMITS FROM THE CITY/COUNTY BUILDING DEPARTMENT PRIOR TO WALL CONSTRUCTION.
5. TRANSITION TO VAULTS FROM TRENCH NOT SHOWN, SEE TRANSITION DETAIL SHEET JT3 (TYPICAL).
6. CONTRACTOR SHALL PLACE ALL UTILITY SPLICE BOXES, ENCLOSURES & CONDUIT IN PROPER RELATIONSHIP TO FINAL GRADE (SHOWN SCHEMATICALLY).
7. ALL PG&E, TELEPHONE, CABLE T.V. AND FIBER OPTIC BOXES AND JOINT TRENCH FACILITIES ARE TO MAINTAIN A MINIMUM OF 3' SEPARATION FROM SEWER, WATER LATERALS AND DRIVEWAYS.
8. CONTRACTOR SHALL COORDINATE ALL CONNECTIONS BETWEEN PROPOSED AND EXISTING FACILITIES AS DIRECTED BY THE RESPECTIVE UTILITY COMPANY INSPECTOR. UTILITY COMPANY PERSONNEL SHALL MAKE ALL "HOT TIE-INS"; THE CONTRACTOR IS PROHIBITED FROM WORKING IN ANY ENERGIZED FACILITIES.
9. THE CONTRACTOR SHALL OBTAIN THE APPROPRIATE STREET EXCAVATION AND ENCROACHMENT PERMIT(S) FROM THE CITY/COUNTY PRIOR TO STARTING WORK IN THE PUBLIC STREET AREA.
10. FIELD LOCATE JOINT TRENCH FACILITIES TO KEEP CLEAR OF SERVICE LATERALS. SERVICE LATERALS TO BE ROUTED TO AVOID SPLICE BOX (ADDITIONAL P.U.E MAY BE REQUIRED).
11. RESPECTIVE UTILITY COMPANY TO OBTAIN CITY APPROVAL OF ALL ABOVE GROUND EQUIPMENT.
12. UNLESS OTHERWISE SHOWN ON THE PLANS, NATURAL BENDS SHALL BE USED FOR ALL CONDUIT EXCEPT STREET LIGHT CONDUIT.
13. INCIDENTAL TRENCHING TO SPLICE BOXES NOT SHOWN (TYPICAL). CONTRACTOR TO PROVIDE ADDITIONAL TRENCHING AS REQUIRED FOR CONDUIT ROUTING TO SPLICE BOXES AND CABINETS (TYPICAL).
14. ALL CONDUITS SHALL ENTER OR EXIT PERPENDICULAR TO BOX WALLS.
15. ALL CONDUITS MUST BE MANDREL TESTED AND APPROVED.
16. OFFSET SPLICE BOXES TO ROUTE TELEPHONE/FIBER OPTIC CONDUIT AS NEEDED (TYPICAL).
17. PULL ROPES SHALL BE PLACED IN ALL EMPTY CONDUITS AS REQUIRED BY EACH UTILITY COMPANY.
18. ALL PG&E SPLICE BOXES ADJACENT TO TRANSFORMER SHALL BE 26" IN DEPTH (TYPICAL).
19. ALL CONDUITS NOT ENTERING SPLICE BOXES OR ENCLOSURES SHALL BE CAPPED.
20. COORDINATE TIE-IN WITH UTILITY COMPANY AS REQUIRED.
21. THE STREET LIGHT SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH THE "MATERIAL AND LABOR RECAP" AND LIGHT SCHEDULE AS SHOWN ON THESE PLANS.
22. ALL EXISTING DUCTS TO BE USED IN THESE PLANS SHALL BE "VERIFIED" BY PULLING A MANDREL THROUGH THE ENTIRE EXISTING LENGTH PRIOR TO CONNECTION.
23. EDGE OF SPLICE BOXES & PEDESTALS SHALL BE 5' FROM EDGE OF FIRE HYDRANT AND 3' FROM STREET LIGHT (TYPICAL). CONTRACTOR TO AVOID DISTURBING FIRE HYDRANT THRUST BLOCK.
24. ALL UTILITY SUBSTRUCTURES SHALL BE INSTALLED IN ACCORDANCE WITH THE "MATERIAL AND LABOR RECAP" SHOWN ON THESE PLANS
25. MAINTAIN 3' CLEARANCE AND LEVEL AREA AROUND PRIMARY SPLICE BOXES & XFMRS.
26. DUE TO UNCERTAINTIES OF THE EXACT LOCATION OF EXISTING FACILITIES, FIELD LOCATION OF PROPOSED FACILITIES MAY BE REQUIRED. CONFIRM WITH VARIOUS UTILITIES FOR EXACT PLACEMENT.
27. FOR CLARITY – BOXES/PEDESTALS ARE SHOWN AT LARGER SIZE THAN ACTUAL. FIELD ADJUST TO KEEP CLEAR OF DRIVEWAYS (TYPICAL).
28. ALL SERVICE FACILITIES SHALL BE EXTENDED TO EITHER THE PROPERTY LINE OR TO POSITION SHOWN ON THE PLANS, AND THEN CAPPED, BURIED AND LOCATION STAKED.
29. THESE PLANS WERE PREPARED UTILIZING PLANS RECEIVED FROM MH ENGINEERING (408)779-7381

ABBREVIATION LIST

B/C	BACK OF CURB	H.P.S.	HIGH PRESSURE SODIUM	R/T	RETAINING WALL
B/W	BACK OF WALK	IRR.	IRRIGATION CONTROLLER	R/W	RIGHT OF WAY
BTU	BRITISH TERM UNITS	J.T.	JOINT TRENCH	SCH.	SCHEDULE
CB	CATCH BASIN	KV	KILO-VOLTS	SD	STORM DRAIN
℄	CENTERLINE	LE	LANDSCAPE EASEMENT	SHT.	SHEET
CAT.	CATALOG	LF	LINEAR FOOT/FEET	S/W	SIDE WALK
C OR CATV	CABLE TELEVISION	MH	MANHOLE	SS	SANITARY SEWER
CFH	CUBIC FEET PER HOUR	MIN.	MINIMUM	SSE	SANITARY SEWER EASEMENT
C.I.P.	CAPITOL IMPROVEMENT PROJECT	MPOE	MINIMUM POINT OF ENTRY	ST. LT.-S/L	STREET LIGHT
CL	CENTER LINE	N.T.S.	NOT TO SCALE	SUBD'V	SUBDIVISION
CU	COPPER	O.D.	OUTER DIAMETER	Sqft.	SQUARE FOOTAGE
E	ELECTRIC	O.H.	OVER HEAD	T	TELEPHONE
EP	EDGE OF PAVEMENT	PIEUE	PRIVATE INGRESS, EGRESS, AND UTILITY EASEMENT	TUC	TARRAR UTILITY CONSULTANTS
EVAE	EMERGENCY VEHICLE ACCESS EASEMENT			TYP.	TYPICAL
EX.	EXISTING	℄	PROPERTY LINE	T/S	TRAFFIC SIGNAL
F/C	FACE OF CURB	P.S.	POWER SUPPLY	U.G.	UNDERGROUND
FH	FIRE HYDRANT	PROJ.	PROJECT	U.O.N.	UNLESS OTHERWISE NOTED
FUT.	FUTURE	PSDE	PRIVATE STORM DRAIN EASEMENT	V	VOLT
F.O.	FIBER OPTIC	PSE	PUBLIC SERVICE EASEMENT	W	WATT
G	GAS	PVAW	PRIVATE VEHICLE ACCESS WAY	WT	WATER
GALV.	GALVANIZE	P.V.C.	POLY VINYL CHLORIDE	W/	WITH
G.E.	GENERAL ELECTRIC	PwiE	PUBLIC WATER LINE EASEMENT	W/O	WITHOUT
GRD.	GROUND	PWR	POWER	WLE	WATER LINE EASEMENT
H.O.A.	HOME OWNERS ASSOCIATION	PUE	PUBLIC UTILITY EASEMENT	XFMR	TRANSFORMER

JOINT TRENCH AND UTILITY BOX LOCATION

THIS AREA RESERVED FOR JOINT TRENCH SECTIONS TO BE PLACED AT A LATER TIME

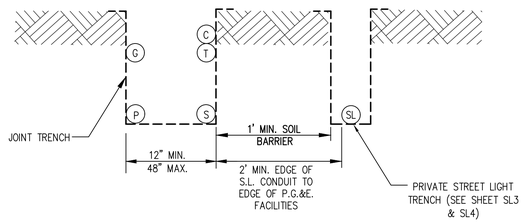
JOINT TRENCH STREET SECTIONS

NOT TO SCALE
NOTE: SEE PLANS FOR CONFIGURATIONS AND ARRANGEMENTS.
* UNLESS OTHERWISE SHOWN

WITHIN ROADWAY SECTION
(95% RELATIVE COMPACTION FOR THE TOP 6"
BELOW ROAD SUBGRADE AND 90% BELOW THAT)

PRIVATE STREET LIGHT TRENCH LOCATION ADJACENT TO JOINT TRENCH

PRIVATE STREET LIGHT SECTION DETAIL



GENERAL NOTES:

1. ALL JOINT TRENCH CONSTRUCTION WORK SHALL BE IN ACCORDANCE WITH PG&E UTILITY OPERATIONS UO STANDARD S5453.
2. ALL WORK SHALL BE SUBJECT TO THE INSPECTION AND SATISFACTION OF ALL PARTICIPATING UTILITIES AND CITY INSPECTORS.
3. BACKFILL SELECTION SHALL BE SUBJECT TO THE APPROVAL OF THE RESPECTIVE UTILITY COMPANIES, THE SOILS ENGINEER AND THE CITY AND/OR COUNTY WHERE THE PROJECT IS LOCATED. CONSULT PARTICIPATING UTILITIES, SOILS ENGINEER, AND THE CITY FOR APPROVED BACKFILL MATERIAL. COMPACTION TO MEET LOCAL AGENCIES REQUIREMENTS.
4. THE BOTTOM OF THE TRENCH SHALL BE CLEARED OF ROCKS AND OTHER HARD SURFACES. DISTRIBUTION TRENCHES WITHOUT TELEPHONE CONDUIT DO NOT REQUIRE BEDDING MATERIAL. SERVICE TRENCHES WITHOUT TELEPHONE CONDUIT REQUIRE 2" SAND BEDDING AS A PAD ON WHICH UTILITY FACILITIES CAN REST. SERVICE TRENCHES CONTAINING TELEPHONE CONDUIT ONLY REQUIRE A 1" SAND BEDDING. ALL OTHER TRENCHES CONTAINING TELEPHONE CONDUIT REQUIRE A 3" SAND BEDDING. REFER TO PG&E GREEN BOOK PUBLICATION S5453, EXHIBIT B AND AT&T SPEC95 "AT&T SPECIFICATIONS" TRENCHING AND CONDUIT GUIDE FOR FURTHER INFORMATION.
5. THE CONTRACTOR SHALL BE RESPONSIBLE TO REPLACE PAVEMENT AND/OR SIDEWALK WHERE REMOVED OR DAMAGED AS A RESULT OF ITS OPERATION (UNLESS OTHERWISE NOTED). REPLACEMENT OF PAVEMENT AND/OR SIDEWALK TO BE PER CITY SPECIFICATIONS.
6. THE CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE AND NOTIFY ALL PARTICIPATING UTILITY INSTALLATIONS.
7. THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ANY FIELD CHANGES MADE WITHOUT FIRST NOTIFYING TARRAR UTILITY CONSULTANTS.
8. **IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE EXISTENCE AND/OR PRECISE LOCATION OF ALL UNDERGROUND FACILITIES PRIOR TO THE START OF CONSTRUCTION. TARRAR UTILITY CONSULTANTS MAKES NO WARRANTY WHATSOEVER THAT THE EXISTING UNDERGROUND UTILITIES AND/OR STRUCTURES DEPICTED ON THE PLANS HAVE BEEN ACCURATELY LOCATED OR THAT THERE ARE NO OTHER UNDERGROUND UTILITIES AND STRUCTURES IN ADDITION TO WHAT HAS BEEN SHOWN. CALL U.S.A. A MINIMUM OF 48 HOURS PRIOR TO STARTING CONSTRUCTION. FOR CALIFORNIA NORTH, (KERN COUNTY AND NORTHERLY, AND NEVADA) CALL (800)227-2600. FOR CALIFORNIA SOUTH, (SAN BERNARDINO COUNTY AND SOUTHERLY) CALL (800)422-4133.**
9. CONTRACTOR SHALL COMPLY WITH ALL STATE, COUNTY AND CITY LAWS AND ORDINANCES AND WITH THE REGULATIONS OF THE DEPARTMENT OF INDUSTRIAL RELATIONS, O.S.H.A. AND ANY OTHER GOVERNMENTAL AGENCY RELATING TO THE SAFETY AND CHARACTER OF WORK, EQUIPMENT AND LABOR PERSONNEL.
10. THE DRAWINGS AND SPECIFICATIONS SHALL BE CONSIDERED TO BE COMPLEMENTARY TO EACH OTHER. ANYTHING SHOWN ON THE DRAWINGS AND NOT MENTIONED IN THE SPECIFICATIONS, OR MENTIONED IN THE SPECIFICATIONS AND NOT SHOWN ON THE DRAWINGS, SHALL BE OF LIKE EFFECT AS IF SHOWN ON OR MENTIONED IN BOTH. IF DISCREPANCY IS FOUND, NOTIFY TARRAR UTILITY CONSULTANTS PRIOR TO STARTING WORK.
11. TRENCH AND CONDUIT LAYOUTS ARE SHOWN SCHEMATICALLY.
12. TRENCHING OR SUBSTRUCTURE EXCAVATION MAY NECESSITATE OPERATION OVER, UNDER, OR ADJACENT TO OTHER UNDERGROUND UTILITIES (STORM, SEWER, WATER, ETC...). THE CONTRACTOR IS RESPONSIBLE TO LOCATE, PROSPECT, EXPOSE AND PROTECT ALL ADJACENT OR CROSSING UNDERGROUND UTILITIES. THIS WORK TO PROTECT THOSE UTILITIES IS NOT CONSIDERED AS EXTRA WORK. IT IS THE CONTRACTOR'S RESPONSIBILITY TO REVIEW IMPROVEMENT PLANS, IN CONJUNCTION WITH THIS PLAN, AND BID THE WORK ACCORDINGLY.
13. THE QUANTITIES SHOWN ON THESE PLANS ARE ONLY ESTIMATES OF WHAT WILL ACTUALLY BE REQUIRED FOR THE CONSTRUCTION OF THE OVERALL PROJECT. FINAL QUANTITIES MAY VARY ACCORDING TO CHANGES, ADDITIONS, DELETIONS OR OMISSIONS ON THE ORIGINAL PLAN.
14. VERIFY ALL SUBSTRUCTURE EXCAVATION DIMENSIONS WITH SUPPLIER(S) BEFORE BIDDING.
15. TARRAR UTILITY CONSULTANTS ASSUMES NO RESPONSIBILITY FOR ANY VARIANCE BETWEEN THESE PLANS AND THE ACTUAL FIELD CONDITIONS. THE CONTRACTOR SHOULD REVIEW THE PROJECT SITE PRIOR TO SUBMITTING ITS BID.
16. THE CONTRACTOR IS REQUIRED TO EXCAVATE BELL HOLE(S) AT TIE-IN LOCATIONS AS DIRECTED BY PARTICIPATING UTILITY.
17. CONTRACTOR WILL COMPLY WITH ALL LAWS, ORDINANCES AND REGULATIONS. CONTRACTOR SHALL BE FAMILIAR WITH O.S.H.A. INDUSTRIAL ORDERS AND SHALL CONDUCT HIS WORK ACCORDINGLY. WHEN WORKING ENERGIZED EQUIPMENT, THE UTILITY OWNER SHALL BE NOTIFIED TO SUPPLY THE APPROPRIATE MAN POWER AND SAFETY PRECAUTIONS AS NEEDED. THE CONTRACTOR IS RESPONSIBLE FOR PUBLIC SAFETY AND TRAFFIC CONTROL MEASURES.
18. THE CONTRACTOR IS RESPONSIBLE TO PROVIDE AS-BUILT DRAWINGS AFTER INSTALLATION OF PG&E'S GAS AND ELECTRIC SYSTEMS (PRIOR TO "HOT TIE-INS").
19. THE CITY INSPECTOR SHALL BE NOTIFIED TWO WORKING DAYS PRIOR TO COMMENCEMENT OF WORK. COORDINATE WITH THE INSPECTOR ANY SERVICES TO BE ABANDONED.
20. THE CONTRACTOR IS TO VERIFY THE RIGHT OF WAY, PUBLIC UTILITY EASEMENT AND/OR PUBLIC SERVICE EASEMENT ACQUISITION WITH THE APPLICANT PRIOR TO CONSTRUCTION WITHIN AREAS OF QUESTION.
21. PG&E'S GENERAL TERM AND CONDITIONS FOR GAS AND ELECTRIC EXTENSION AND SERVICE CONSTRUCTION BY "APPLICANT" (EFFECTIVE 07/1/95) TO BE UTILIZED FOR ALL TRENCHING, BACKFILLING, AND INSTALLATION WORK.
22. IN THE EVENT OF DISPUTES OR DISAGREEMENT OVER ANY INSTALLATIONS, DESIGNS, PLANS OR DRAWINGS, THE SPECIFICATIONS AND REQUIREMENTS OF THE INDIVIDUAL UTILITY COMPANIES AND THEIR INSPECTORS SHALL TAKE PRECEDENCE. IN CASE OF DISCREPANCIES WITHIN THE DRAWINGS AND SPECIFICATIONS HEREIN, THE CONTRACTOR SHALL CONSULT TARRAR UTILITY CONSULTANTS FOR INTERPRETATION BEFORE WORK IS STARTED.
23. TARRAR UTILITY CONSULTANTS HEREIN, ASSUMES NO RESPONSIBILITY WHATSOEVER FOR THE QUALITY, QUANTITY OR TIMING OF WORK TO BE PERFORMED BY THE CONTRACTOR, UTILITY COMPANY CONSTRUCTION CREWS, OR OTHER SUB-CONTRACTOR OF DEVELOPER.
24. ALL TRENCHING, BACKFILLING AND INSTALLATION WORK IS TO BE IN ACCORDANCE WITH THE STANDARD PRACTICES AND SPECIFICATIONS OF EACH UTILITY COMPANY PARTICIPATING IN THE UTILITY TRENCHES WITHIN THE PROJECT.
25. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING POINTS OF ACCESS THAT ARE AGREEABLE TO ADJACENT LAND USES AND TENANTS AT ALL TIMES.
26. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ASCERTAINING WHAT INSPECTIONS WILL BE REQUIRED FOR APPROVAL OF THE WORK AND FOR COORDINATING ALL SUCH INSPECTIONS. THE CONTRACTOR SHALL GIVE AT LEAST 48 HOURS PRIOR NOTICE TO THE CITY, SOILS ENGINEER, UTILITY COMPANIES OR ANY OTHER INDIVIDUALS OR PUBLIC AGENCIES, THAT THE WORK IS READY FOR INSPECTION.
27. THE CONTRACTOR SHALL NOTIFY DEVELOPER 48 HOURS PRIOR TO THE NEED FOR SURVEY STAKING. THE CONTRACTOR IS RESPONSIBLE FOR THE PRESERVATION OF ALL CONSTRUCTION STAKING SET BY THE DEVELOPER'S SURVEYORS AND WILL BE BACK CHARGED FOR ANY RE-STAKING THAT IS REQUIRED. ANY EXTRA CONSTRUCTION STAKING NECESSITATED SOLELY BY THE CONTRACTOR'S NEGLIGENCE WILL BE CHARGED TO AND PAID FOR BY THE CONTRACTOR.
28. ALL TRANSFORMERS AND TRANSFORMER PADS ARE TO BE INSTALLED PER PG&E SPECIFICATIONS. PROTECTIVE BOLLARDS ARE TO BE PLACED WHERE NEEDED.
29. THE CONTRACTOR SHALL MAKE HIMSELF FAMILIAR WITH THE PROJECT IMPROVEMENT PLANS AND CONDUCT HIS WORK ACCORDINGLY.
30. KEEP ALL BOXES AND PEDESTALS WITHIN PUBLIC UTILITY EASEMENTS OR RIGHT OF WAY. AS SHOWN.
31. ALL SAND BACKFILL MUST HAVE TESTING OF PH LEVEL AS WELL AS SAND EQUIVALENT. SEE CITY OF MORGAN HILL REQUIREMENTS.
32. THE PROPOSED CONSTRUCTION OPERATION MAY TAKE PLACE AT OR NEAR FENCE LINES, PROPERTY LINES AND PROPERTY IMPROVEMENTS PRIOR TO CONSTRUCTION, CONTRACTOR SHALL BE RESPONSIBLE FOR IDENTIFYING THESE AREAS AND FOR MAINTAINING THESE AREAS AND FACILITIES AT ALL TIMES DURING THE CONSTRUCTION OPERATION.
33. THE CONTRACTOR ASSUMES SOLE AND COMPLETE RESPONSIBILITY FOR THE SITE CONDITION AND SHALL DEFEND AND HOLD THE DEVELOPER AND TARRAR UTILITY CONSULTANTS HARMLESS FROM ANY ALLEGED CLAIMS OR LIABILITIES, EXCEPT THOSE ARISING FROM SOLE NEGLIGENCE OF THE DEVELOPER OR TARRAR UTILITY CONSULTANTS.
34. THE APPROXIMATE LOCATIONS OF ALL EXISTING UTILITY COMPANY UNDERGROUND LINES, POLES BOXES, ETC., WERE OBTAINED FROM A REVIEW OF AVAILABLE UTILITY COMPANY RECORDS, REPRESENTATIONS OF UTILITY COMPANY PERSONNAL, OR FIELD OBSERVATIONS. NEITHER THE DEVELOPER NOR TARRAR UTILITY CONSULTANTS ASSUME ANY RESPONSIBILITY FOR VARIANCES BETWEEN THESE PLANS AND THE ACTUAL FIELD CONDITIONS. NO EXTRA PAYMENT WILL BE MADE TO THE CONTRACTOR FOR ANY ADDITIONAL TRENCHING, BOX EXCAVATIONS, MATERIALS, ETC., THAT MAY BE REQUIRED TO COMPLETE THIS PROJECT IN THE EVENT AN EXISTING TIE-IN POINT SUBSTRUCTURE IS EITHER NON-EXISTING OR IS NOT SHOWN ON THE PLANS IN ITS ACTUAL FIELD POSITION. IT IS THE CONTRACTOR'S OBLIGATION AND RESPONSIBILITY TO SAFELY LOCATE ALL EXISTING UNDERGROUND FACILITIES BY SURFACE MARKING AND/OR HAND EXCAVATION PRIOR TO STARTING CONSTRUCTION.
35. "DEVELOPER AND/OR CONTRACTOR IS RESPONSIBLE TO OBTAIN A CITY OF MORGAN HILL ENCROACHMENT PERMIT FOR ALL WORK DONE IN THE PUBLIC RIGHT OF WAY. DEVELOPER AND/OR CONTRACTOR IS ALSO RESPONSIBLE TO PROVIDE JOINT TRENCH PLANS TO THE CITY OF MORGAN HILL AT THE TIME OF APPLICATION FOR THE ENCROACHMENT PERMIT."

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JOINT TRENCH GENERAL NOTES AND DETAILS

VALLEY OAK PARTNERS
DIANA AVENUE
MORGAN HILL CALIFORNIA

NO.	REVISIONS	BY	DATE

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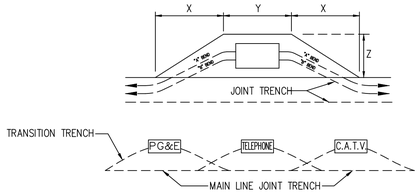
811 CALL BEFORE YOU DIG UNDERGROUND SERVICE ALERT

REGISTERED PROFESSIONAL ENGINEER ISAAM BIN ABDULLAH CIVIL EXP. 06/30/2026 STATE OF CALIFORNIA

SHEET JT2 OF JT6 SHEETS

JOINT TRENCH TRANSITION

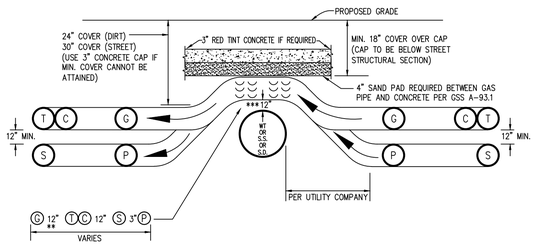


BEND	PRIMARY BOX SIZE	DISTANCE (when conduit enters box) "X"	"Y"	"Z"	NOTES
"A"	3' x 5'	24'	7'	5'	BEND IS 60° RADIUS WITH AN ANGLE OF 10 DEG. USE 2-5 COUPLINGS WITH 1-5' CONDUIT SECTION FOR EACH BEND SHOWN.
	4'-6" x 8'-6"	24'	11'	7'	
"B"	3' x 5'	32'	7'	5'	BEND IS 30° RADIUS WITH AN ANGLE OF 15 DEG. USE 3-5 COUPLINGS WITH 2-2 1/2" CONDUIT SECTION FOR EACH BEND SHOWN.
	4'-6" x 8'-6"	32'	11'	7'	

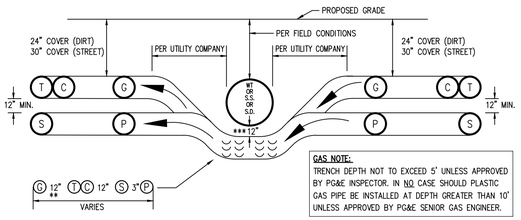
NOTE:

1. CONTRACTOR TO EXCAVATE TRANSITIONS FROM MAIN-LINE TRENCH TO VAULTS AS REQUIRED BY EACH UTILITY.
2. TRANSITIONS NOT SHOWN ON COMPOSITE DRAWING FOR CLARITY.
3. CONTRACTOR TO INCLUDE COST OF TRANSITIONS IN VAULT EXCAVATION COST.

DETAIL 1 N.T.S. JT3 — TYPICAL PRIMARY BOX EXCAVATION USING CONDUIT



JOINT TRENCH OVER WATER, SANITARY SEWER OR STORM DRAIN
CHOICE 1 (PREFERRED METHOD)



GAS NOTE:
TRENCH DEPTH NOT TO EXCEED 5' UNLESS APPROVED BY PG&E INSPECTOR. IN NO CASE SHOULD PLASTIC GAS PIPE BE INSTALLED AT DEPTH GREATER THAN 10' UNLESS APPROVED BY PG&E SENIOR GAS ENGINEER.

JOINT TRENCH UNDER WATER, SANITARY SEWER OR STORM DRAIN
CHOICE 2 (OPTIONAL METHOD)

* SEE MINIMUM COVER & CLEARANCE CHART

** WITH MUTUAL AGREEMENT, WHEN 4" O.D. OR SMALLER GAS PIPE IS INSTALLED SEPARATION MAY BE REDUCED TO NOT LESS THAN 6" BETWEEN GAS AND COMMUNICATION DUCTS (TELEPHONE & CATV).

*** 6" MINIMUM REQUIRED BY PG&E-ADDITIONAL CLEARANCE MAYBE REQUIRED BY CITY OR COUNTY

DETAIL 2 N.T.S. JT3 — OVER UNDER DETAILS

CONSTRUCTION LABOR AND MATERIAL RESPONSIBILITY

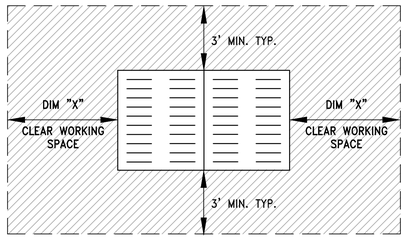
	PUBLIC UTILITY SYSTEM (JOINT TRENCH) PG&E ELECTRIC	PG&E GAS	TELEPHONE	C.A.T.V.	CONTRACTOR
TRENCHING: EXCAVATE, BACKFILL AND COMPACT.					●
GAS MATERIAL: FURNISH.		○			
INSTALL.		○			●
ELECTRIC CABLE: FURNISH.	○				
INSTALL.	○				●
ELECTRIC CONDUIT: FURNISH.	○				
INSTALL.	○				●
ELECTRIC SPLICE BOXES: EXCAVATE.	○				
FURNISH.	○				
INSTALL.	○				●
ELECTRIC TRMR. ENCLS.: EXCAVATE.					●
FURNISH.					●
INSTALL.					●
ELECTRIC EQUIP. ENCLS.: EXCAVATE.					●
FURNISH.					●
INSTALL.					●
ELECTRIC TRMR. PADS: GRADE.					●
FURNISH.					●
INSTALL.					●
ELECTRIC SWITCH PADS: GRADE.	○	○			
FURNISH.	○	○			
INSTALL.	○	○			
TELEPHONE CONDUIT: FURNISH.			○		
INSTALL.			○		●
TELEPHONE CABLE: FURNISH.			●		
INSTALL.			●		
TELEPHONE SPLICE BOX: EXCAVATE.			●		
FURNISH.			●		
INSTALL.			●		
TELEPHONE INTER. PADS: GRADE.			○		
FURNISH.			○		
INSTALL.			○		
C.A.T.V. CONDUITS: FURNISH.				●	
INSTALL.				●	
C.A.T.V. SPLICE BOXES: EXCAVATE.				●	
FURNISH.				●	
INSTALL.				●	

	STREET LIGHTING SYSTEM (PRIVATE) PG&E	CONTRACTOR
WIRE: FURNISH.	○	
INSTALL.	○	●
CONDUIT: FURNISH.	○	
INSTALL.	○	●
BASES: FURNISH.	○	
INSTALL.	○	●
LUMINAIRES: FURNISH.	○	
INSTALL.	○	●
SPLICE BOXES: FURNISH.	○	
INSTALL.	○	●
EXCAVATE.		●
POLES & ARMS: FURNISH.	○	
INSTALL.	○	●

SCHEDULE: LS2A
INSTALL IN JOINT TRENCH: NO/YES
INSTALL IN SEPARATE TRENCH: YES/NO
CONDUIT SIZE: 1 1/2"
CONDUIT TYPE: SCH. 40
WIRE SIZE: #8 TYPE: CU

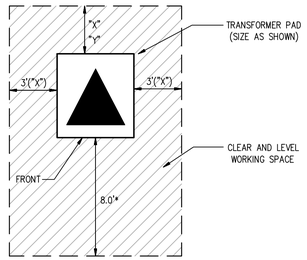
ADDITIONAL NOTES:
DEVELOPER TO SUPPLY AND INSTALL GAS & ELECTRIC FACILITIES UNDER THE COMPETITIVE BIDDING PROVISIONS OF PG&E GREEN BOOK RULES 15, 16 AND 20.

● DESIGNATES THE WORK TO BE PERFORMED BY THE CONTRACTOR AND EACH UTILITY COMPANY.



DIM "X"
3' MIN. 3'0" x 5'0" ENCLOSURES
4' MIN. 4' x 6'6" x 5'0" ENCLOSURES
5' MIN. 4'6" x 8'6" x 6'0" ENCLOSURES
(OR EASEMENT REQUIRED)

DETAIL 3 N.T.S. JT3 — PG&E ENCLOSURE CLEARANCES



"X"= 3' MIN. CLEARANCE FROM COMBUSTIBLE WALL

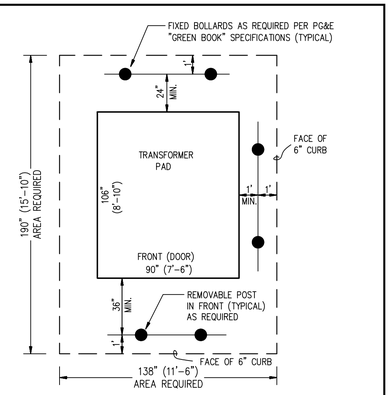
"Y"= 2' MIN. CLEARANCE FROM NON-COMBUSTIBLE WALL

* MINIMUM 9' (COMMERCIAL/HIGH DENSITY) FROM FACE OF CURB

* MINIMUM 3' (RESIDENTIAL/LOW DENSITY) FROM FACE OF CURB

** MINIMUM 4' FROM ANY DOORWAY

DETAIL 4 N.T.S. JT3 — PG&E PAD MOUNT TRANSFORMER DETAIL



DETAIL 5 N.T.S. JT3 — PG&E STYLE IIE TRANSFORMER DETAIL (PHYSICAL PROTECTION REQUIREMENTS IN PARKING LOT, TRAVELED WAY, ETC. ...)

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JOINT TRENCH DETAILS
VALLEY OAK PARTNERS
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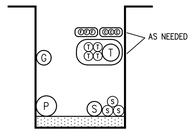
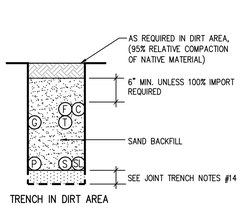
REGISTERED PROFESSIONAL ENGINEER — NASIM ULLAH — No. 46346 — EXP. 12/31/2025 — CIVIL — STATE OF CALIFORNIA

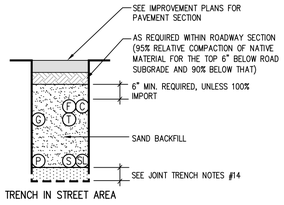
SHEET JT3 OF JT6 SHEETS

JOINT TRENCH MINIMUM COVER AND CLEARANCES
MINIMUM SEPARATION FROM

	UTILITY	G	T	TD	C	S	P	SL	SLP	F	FE	MINIMUM COVER
G	(GAS)*	–	12"	12"	12"	6"	12"	12"	6"	12"	12"	24"; 30" IN STREET
T	(TELEPHONE) DUCT	12"	–	1"	1"	12"	12"	12"	12"	1"	12"	24"; 30" IN STREET
TD	(TELEPHONE) DIRECT BURY	12"	1"	–	1"	12"	12"	12"	12"	1"	12"	24"; 30" IN STREET
C	(CABLE T.V.)	12"	1"	1"	–	12"	12"	12"	12"	1"	12"	24"; 30" IN STREET
S	(ELECT. SECONDARY)	6"	12"	12"	12"	1.5"	2"	12"	1.5"	12"	12"	24"; 30" IN STREET
P	(ELECT. PRIMARY)	12"	12"	12"	12"	2"	2"	2"	2"	12"	12"	36"; 36" IN STREET
SL	(PUBLIC AND PRIVATE-STREET LIGHT)**	12"	12"	12"	12"	12"	12"	–	12"	12"	12"	24"; 30" IN STREET
SLP	(PG&E-STREET LIGHT)	6"	12"	12"	12"	1.5"	2"	12"	1.5"	12"	12"	24"; 30" IN STREET
FE	(FOREIGN ELECTRIC SOURCES, NON PG&E)	12"	12"	12"	12"	12"	12"	12"	12"	12"	–	24"; 30" IN STREET
F	(FIBER OPTIC)	12"	1"	1"	1"	12"	12"	12"	12"	–	12"	24"; 30" IN STREET







LEGEND

- MEETS UTILITY TRENCH ALLOTMENT
- EXCEEDS UTILITY TRENCH ALLOTMENT
- (G) GAS
- (P) ELECTRIC PRIMARY
- (S) ELECTRIC SECONDARY
- (T) TELEPHONE (BROADBAND)
- (C) CATV (BROADBAND)
- (SL) STREET LIGHT (PUBLIC OR PRIVATE)
- (SLP) STREET LIGHT (PG&E)
- (FE) FOREIGN ELECTRIC
- (F) FIBER OPTIC

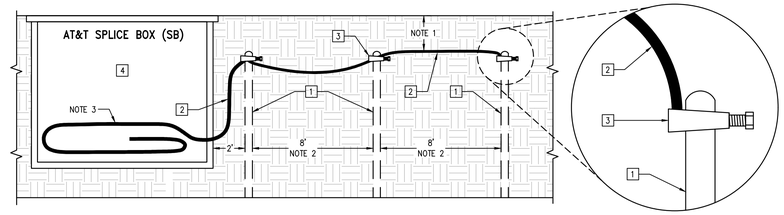
JOINT TRENCH NOTES:

1. TRENCH COVER & CLEARANCES SHOWN ARE MINIMUMS ONLY AND MAY REQUIRE ALTERATIONS TO SUIT FIELD CONDITIONS.
2. IT IS RECOMMENDED THAT ALL FACILITIES ARE TO BE A MINIMUM OF 12" BELOW SUB-BASE DISTURBANCE.
3. * WITH MUTUAL AGREEMENT FROM PARTICIPATING UTILITIES, WHEN 4" O.D. OR SMALLER GAS PIPE IS INSTALLED, SEPARATION MAY BE REDUCED TO NOT LESS THAN 6" BETWEEN GAS AND COMMUNICATION DUCTS (TELEPHONE, C.A.T.V. & FIBER OPTIC).
4. * WHERE 6" GAS MAIN IS LOCATED IN THE JOINT TRENCH A 18" MINIMUM SEPARATION FROM GAS MAIN TO ALL UTILITIES WILL BE REQUIRED.
5. ** WITH MUTUAL AGREEMENT FROM PARTICIPATING UTILITIES, STREET LIGHT SEPARATION MAY BE REDUCED TO 0" BETWEEN STREET LIGHT AND COMMUNICATION DUCTS (TELEPHONE, C.A.T.V. & FIBER OPTIC).
6. TRENCH CONFIGURATIONS SHOWN ARE FOR INSTALLATION WHERE EACH OCCUPANT IS UTILIZING HIS ENTIRE SPACE ALLOCATION. OTHER CONFIGURATIONS OR REDUCED DIMENSIONS MAY BE USED, PROVIDED THAT MINIMUM COVER AND CLEARANCES ARE MAINTAINED.
7. THE CONTRACTOR IS TO ADJUST TRENCH DEPTHS AT ALL JOINT TRENCH LATERAL CROSSINGS TO MAINTAIN REQUIRED CLEARANCES BETWEEN ALL PARTICIPATING UTILITIES.
8. TRENCH SECTIONS ARE SHOWN SCHEMATICALLY AND INDICATE AREAS OF OCCUPANCY ONLY; THEY DO NOT REFLECT SIZE OR QUANTITY OF FACILITIES TO BE INSTALLED.
9. TRENCH FOOTAGES PER SECTION ARE APPROXIMATE. SECTIONS ARE DESIGNED TO ACCOMMODATE ALL REQUIRED FACILITIES AS INDICATED ON EACH TRENCH PARTICIPANT'S CONSTRUCTION DRAWINGS.
10. THE CONTRACTOR SHALL VERIFY TRENCH FOOTAGES FOR ACCURACY PRIOR TO EXCAVATION AND TAKE NECESSARY PRECAUTION CROSSING WATER AND SEWER FACILITIES.
11. THE CONTRACTOR SHALL REFER TO THE COMPOSITE, CONDUIT, AND/OR EACH RESPECTIVE UTILITY INSTALLATION PLAN FOR THE NECESSARY CONDUIT CABLE AND/OR PIPE TO BE INSTALLED IN THIS PROJECT.
12. TYPE "M2" TRENCH SHALL BE INSTALLED AFTER CURB AND GUTTER INSTALLATION. CONTRACTOR SHALL COORDINATE ADDITIONAL MOVE-INS NECESSARY TO COMPLETE THE SERVICES TO THE DWELLING UNITS WITH THE DEVELOPER, ALL AGENCIES AND THE UTILITY COMPANIES. THE COST OF THESE MOVE-INS SHALL BE INCLUDED IN THE CONTRACTOR'S UNIT PRICE FOR TRENCHING.
13. THE AVERAGE TRENCH DEPTHS SHOWN ARE BASED ON THE MINIMUM UTILITY COMPANY REQUIREMENTS FOR DEPTH AND SEPARATION. CONTRACTOR SHALL ADJUST TRENCH WIDTH & DEPTH AS REQUIRED TO ADEQUATELY CLEAR EXISTING UNDERGROUND FACILITIES AND MAINTAIN MINIMUM UTILITY CLEARANCES. ALL TRENCHES OVER 60" DEEP MUST COMPLY WITH OSHA REQUIREMENTS. (SEE THE JOINT TRENCH MINIMUM COVER AND CLEARANCE TABLE)
14. CONTRACTOR SHALL USE SAND BEDDING AND SHADING AS REQUIRED BY THE UTILITY COMPANIES. THE BOTTOM OF THE TRENCH SHALL BE CLEARED OF ROCKS AND OTHER HARD SURFACES. DISTRIBUTION TRENCHES WITHOUT TELEPHONE CONDUIT DO NOT REQUIRE BEDDING MATERIAL. SERVICE TRENCHES WITHOUT TELEPHONE CONDUIT REQUIRE 2" SAND BEDDING AS A PAD ON WHICH UTILITY FACILITIES CAN REST. SERVICE TRENCHES CONTAINING TELEPHONE CONDUIT ONLY REQUIRE A 1" SAND BEDDING. ALL OTHER TRENCHES CONTAINING TELEPHONE CONDUIT REQUIRE A 3" SAND BEDDING. REFER TO PG&E GREEN BOOK PUBLICATION S5453, EXHIBIT B AND AT&T SPEC95 "AT&T SPECIFICATIONS" TRENCHING AND CONDUIT GUIDE FOR FURTHER INFORMATION.
15. ALL TRENCHING AND BACKFILLING TO BE DONE IN ACCORDANCE WITH THE CITY OF MORGAN HILL ENGINEERING STANDARDS AND SPECIFICATIONS.
16. ALL PG&E, TELEPHONE, CABLE, AND FIBER OPTIC BOXES AND JOINT TRENCH FACILITIES ARE TO MAINTAIN A MINIMUM OF 3' SEPARATION FROM SEWER AND WATER LATERALS AND DRIVEWAYS. ALL UTILITY VAULTS, BOXES, PEDESTALS, ETC. MUST MAINTAIN A 5' MINIMUM CLEARANCE FROM FIRE HYDRANTS, AND 3' MINIMUM FROM STREETLIGHTS.

JOINT TRENCH OCCUPANCY GUIDE

TRENCH SECTION	A*	B*	C*	D*	E*	F*	G*	H*	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W
GAS	X	X	X		X				X	X	X		X	X	X		X			X			
TELEPHONE	X	X		X		X			X	X		X	X	X		X		X			X		
CABLE T.V.	X		X	X			X		X		X	X	X		X	X			X			X	
ELECTRIC SEC.	X	X	X	X	X	X	X	X					X	X	X	X	X	X	X					X
ELECTRIC PRI.	X	X	X	X	X	X	X	X															
FIBER OPTICS	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	

*THESE SECTIONS MAY OR MAY NOT CONTAIN SECONDARY



LEGEND

1. 8' LENGTH x 5/8" DIAMETER GROUND ROD POLES
2. BARE CONTINUOUS SOLID NUMBER 6 AWG. WIRE
3. GROUND CLAMP
4. TELEPHONE SPLICE BOX

NOTES

1. MINIMUM DEPTH = 12 INCHES
2. GROUND BEDS MAY BE PLACED IN ANY CONFIGURATION AS LONG AS THE 8 FOOT SEPARATION BETWEEN GROUND RODS IS MAINTAINED AND THE 2 FOOT SEPARATION FROM THE SB WALL IS NOT ENCROACHED UPON.
3. BARE #6 GROUND WIRE TO ENTER THROUGH SIDEWALL OR BOTTOM OF SB AND WRAP SB ONCE.

DETAIL 1 / N.T.S. JT4 — AT&T AERIAL AND BURIED GROUND BED DESIGN

*CHARTER CATV AND FRONTIER TELEPHONE WILL BE IN TRENCH BOTH CAN HAVE BROADBAND

THIS AREA RESERVED FOR JOINT TRENCH SECTIONS TO BE PLACED AT A LATER TIME

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JOINT TRENCH SECTIONS AND DETAILS
VALLEY OAK PARTNERS
DIANA AVENUE
MORGAN HILL CALIFORNIA

NO.	REVISIONS	BY	DATE

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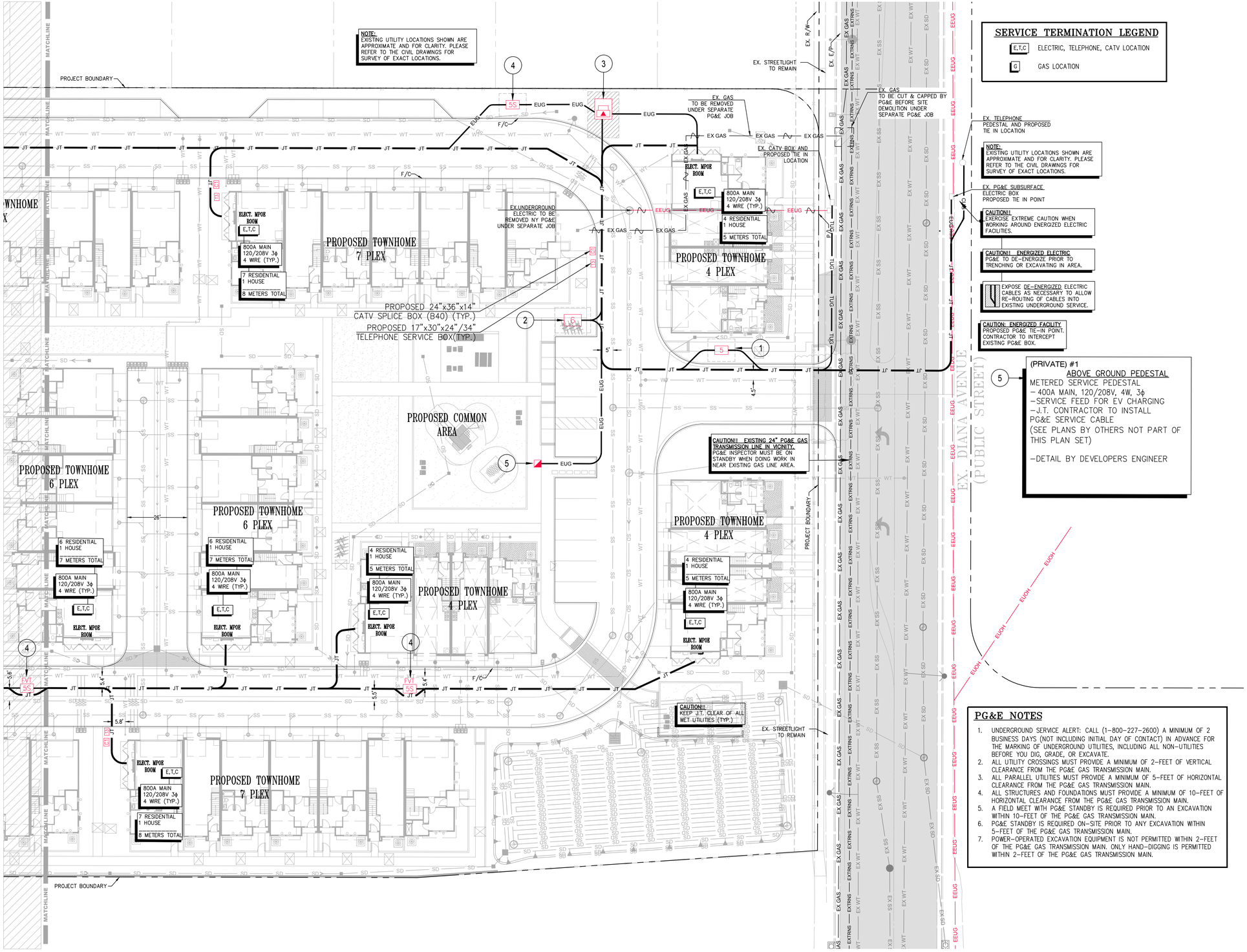
811 CALL BEFORE YOU DIG — UNDERGROUND SERVICE ALERT

REGISTERED PROFESSIONAL ENGINEER — FAIZ S. BHUILLAH — No. 46 — Exp. 06/30/25 — CIVIL — STATE OF CALIFORNIA

SHEET JT4 OF JT6 SHEETS



SERVICE TERMINATION LEGEND

E,T,C	ELECTRIC, TELEPHONE, CATV LOCATION
G	GAS LOCATION

CAUTION !! CAUTION !! CAUTION !!
EX. JOINT TRENCH AND EX. GAS AND ALL OTHER UTILITY LOCATIONS ARE SHOWN BASED UPON INFORMATION PROVIDED BY OTHERS AND FIELD OBSERVATION. JOINT TRENCH CONTRACTOR TO VERIFY EXACT LOCATION OF ALL EXISTING FACILITIES PRIOR OF ANY JOINT TRENCH CONSTRUCTION. POTHOLE IF NECESSARY. CONTACT U.S.A. DIG ALERT 2 WORKING DAYS IN ADVANCE.

CONTRACTOR WILL COMPLY WITH ALL LAWS, ORDINANCES AND REGULATIONS. CONTRACTOR SHALL BE FAMILIAR WITH O.S.H.A. INDUSTRIAL ORDERS AND SHALL CONDUCT HIS WORK ACCORDINGLY. WHEN WORKING AROUND ENERGIZED EQUIPMENT, THE UTILITY OWNER SHALL BE NOTIFIED TO SUPPLY THE APPROPRIATE MAN POWER AND SAFETY PRECAUTIONS AS NEEDED. THE CONTRACTOR IS RESPONSIBLE FOR PUBLIC SAFETY AND TRAFFIC CONTROL MEASURES.

EX. TELEPHONE PEDESTAL AND PROPOSED TIE IN LOCATION

NOTE:
EXISTING UTILITY LOCATIONS SHOWN ARE APPROXIMATE AND FOR CLARITY. PLEASE REFER TO THE CIVIL DRAWINGS FOR SURVEY OF EXACT LOCATIONS.

EX. PG&E SUBSURFACE ELECTRIC BOX PROPOSED TIE IN POINT

CAUTION!!
EXERCISE EXTREME CAUTION WHEN WORKING AROUND ENERGIZED ELECTRIC FACILITIES.

CAUTION!! ENERGIZED ELECTRIC
PG&E TO DE-ENERGIZE PRIOR TO TRENCHING OR EXCAVATING IN AREA.

EXPOSE DE-ENERGIZED ELECTRIC CABLES AS NECESSARY TO ALLOW RE-ROUTING OF CABLES INTO EXISTING UNDERGROUND SERVICE.

CAUTION: ENERGIZED FACILITY
PROPOSED PG&E TIE-IN POINT. CONTRACTOR TO INTERCEPT EXISTING PG&E BOX.

(5) (PRIVATE) #1
ABOVE GROUND PEDESTAL
METERED SERVICE PEDESTAL
– 400A MAIN, 120/208V, 4W, 3ϕ
–SERVICE FEED FOR EV CHARGING
–J.T. CONTRACTOR TO INSTALL PG&E SERVICE CABLE
(SEE PLANS BY OTHERS NOT PART OF THIS PLAN SET)
–DETAIL BY DEVELOPERS ENGINEER

JOINT TRENCH OCCUPANCY GUIDE

TRENCH SECTION	A*	B*	C*	D*	E*	F*	G*	H*	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W
GAS	X	X	X		X				X	X	X		X	X	X		X			X			
TELEPHONE	X	X		X		X			X	X		X	X	X		X		X			X		
CABLE T.V.	X		X	X			X		X		X	X	X	X			X		X				X
ELECTRIC SEC.	X	X	X	X	X	X	X	X					X	X	X	X	X	X	X				X
ELECTRIC PRI.	X	X	X	X	X	X	X	X															

*THESE SECTIONS MAY OR MAY NOT CONTAIN SECONDARY

(1) STA. XX+XX — PROPOSED 3'x5'x3'6" — X — JT3 | JT3 — SEE DETAIL
PG&E F.V.T. SUBSURFACE SPLICE BOX. SEE PROJECT NOTES #3, 5, & 25 ON SHEET JT2. MAINTAIN 3' LONG SIDE AND 3' SHORT SIDE CLEAR LEVEL WORK SPACE AROUND BOX.

(2) STA. XX+XX — PROPOSED 3'x5'x3'6" — X — JT3 | JT3 — SEE DETAIL
PG&E F.V.T. SUBSURFACE SPLICE BOX. SEE PROJECT NOTES #3, 5, & 25 ON SHEET JT2. MAINTAIN 3' LONG SIDE AND 3' SHORT SIDE CLEAR LEVEL WORK SPACE AROUND BOX.

(3) PROPOSED PG&E 3ϕ — PAD MOUNT TRANSFORMER — X — JT3 | JT3 — SEE DETAIL
PAD SIZE–90"x106", CABINET SIZE–89"x90"x96". SEE PROJ. NOTES #12, 14, 28 & 30 (TYP.) IF 9' CLEARANCE FROM PAD EDGE TO F/C CANNOT BE MET, BARRIER POSTS MAY BE REQUIRED, AT THE DIRECTION OF THE PG&E INSPECTOR. (TYP.)

(4) STA. XX+XX — PROPOSED 3'x5'x3'6" — X — JT3 | JT3 — SEE DETAIL
PG&E F.V.T. SUBSURFACE SPLICE BOX. SEE PROJECT NOTES #3, 5, & 25 ON SHEET JT2. MAINTAIN 3' LONG SIDE AND 3' SHORT SIDE CLEAR LEVEL WORK SPACE AROUND BOX.

PG&E NOTES

1. UNDERGROUND SERVICE ALERT: CALL (1–800–227–2600) A MINIMUM OF 2 BUSINESS DAYS (NOT INCLUDING INITIAL DAY OF CONTACT) IN ADVANCE FOR THE MARKING OF UNDERGROUND UTILITIES, INCLUDING ALL NON–UTILITIES BEFORE YOU DIG, GRADE, OR EXCAVATE.
2. ALL UTILITY CROSSINGS MUST PROVIDE A MINIMUM OF 2–FEET OF VERTICAL CLEARANCE FROM THE PG&E GAS TRANSMISSION MAIN.
3. ALL PARALLEL UTILITIES MUST PROVIDE A MINIMUM OF 5–FEET OF HORIZONTAL CLEARANCE FROM THE PG&E GAS TRANSMISSION MAIN.
4. ALL STRUCTURES AND FOUNDATIONS MUST PROVIDE A MINIMUM OF 10–FEET OF HORIZONTAL CLEARANCE FROM THE PG&E GAS TRANSMISSION MAIN.
5. A FIELD MEET WITH PG&E STANDBY IS REQUIRED PRIOR TO AN EXCAVATION WITHIN 10–FEET OF THE PG&E GAS TRANSMISSION MAIN.
6. PG&E STANDBY IS REQUIRED ON–SITE PRIOR TO ANY EXCAVATION WITHIN 5–FEET OF THE PG&E GAS TRANSMISSION MAIN.
7. POWER–OPERATED EXCAVATION EQUIPMENT IS NOT PERMITTED WITHIN 2–FEET OF THE PG&E GAS TRANSMISSION MAIN. ONLY HAND–DIGGING IS PERMITTED WITHIN 2–FEET OF THE PG&E GAS TRANSMISSION MAIN.

0 10 20 40
SCALE: 1" = 20'

813 First Street
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(925) 240-7013 fax
www.tarrar.com

TARRAR UTILITY CONSULTANTS

- Planning
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- Fiber Optic
- T-24
- PG&E Gas Design
- PG&E Elec Design
- M.E.P. Design
- Cost Analysis
- Due Diligence

JOINT TRENCH COMPOSITE PLAN
VALLEY OAK PARTNERS
DIANA AVENUE
MORGAN HILL CALIFORNIA

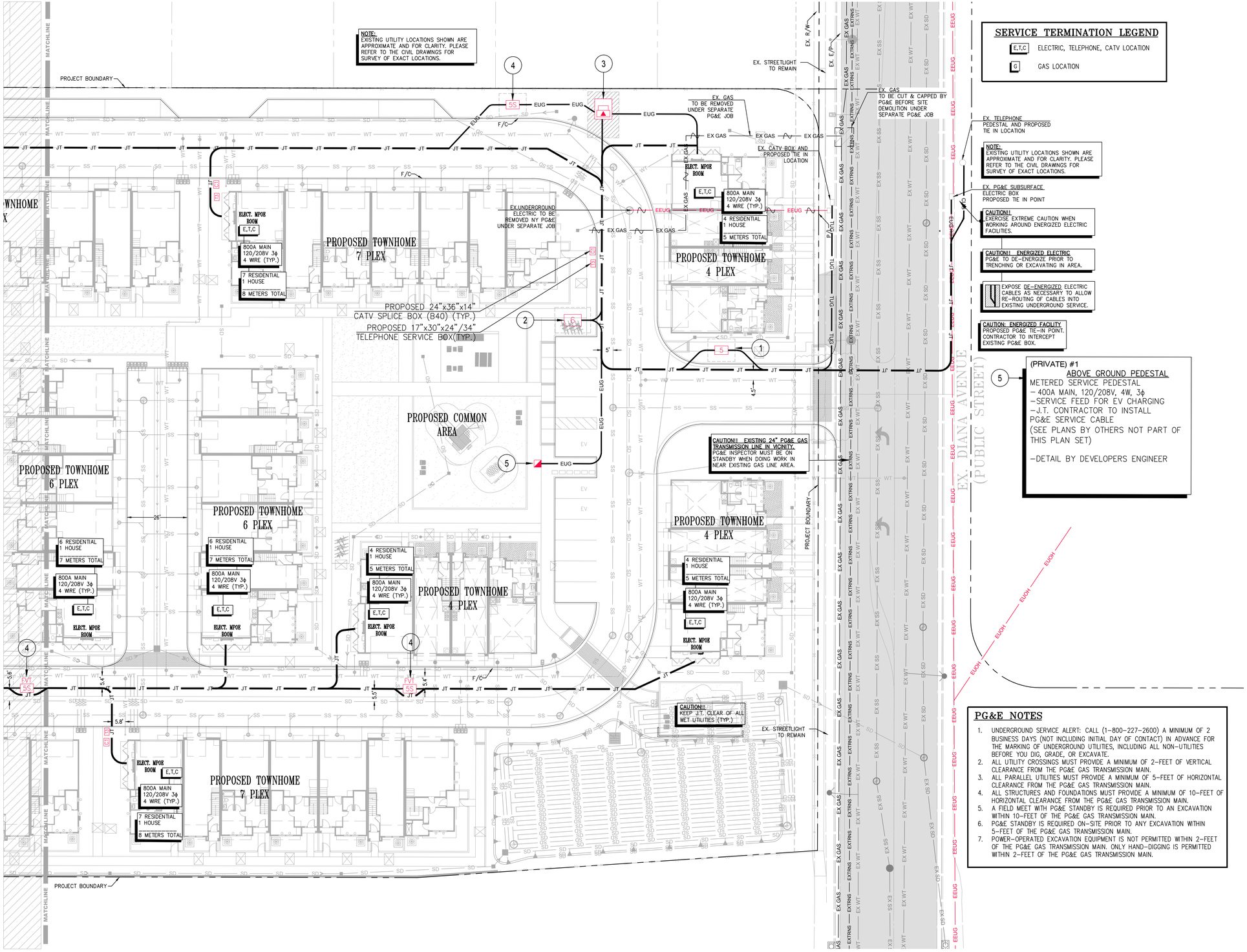
NO.	REVISIONS	BY	DATE

DATE: FEBRUARY 2024 | DATE LAST WORKED ON: 4/2/2025
SCALE: 1:20 | DRAWN: LGR | CHECKED: ND
JOB NO.: 224027
PRELIMINARY NOT FOR CONSTRUCTION
INTENT TO CONSTRUCT

811 CALL BEFORE YOU DIG — USA — UNDERGROUND SERVICE ALERT

REGISTERED PROFESSIONAL ENGINEER — SAMUEL M. LAM — No. 56446 — Exp. 06/30/2025 — CIVIL — STATE OF CALIFORNIA

SHEET JT5 OF JT6 SHEETS



SERVICE TERMINATION LEGEND

E,T,C	ELECTRIC, TELEPHONE, CATV LOCATION
G	GAS LOCATION

CAUTION !! CAUTION !! CAUTION !!
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JOINT TRENCH OCCUPANCY GUIDE

TRENCH SECTION	A*	B*	C*	D*	E*	F*	G*	H*	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W
GAS	X	X	X		X				X	X	X		X	X	X		X			X			
TELEPHONE	X	X		X		X			X	X		X	X	X		X		X			X		
CABLE T.V.	X		X	X			X		X		X	X	X	X			X		X				X
ELECTRIC SEC.	X	X	X	X	X	X	X	X					X	X	X	X	X	X	X				X
ELECTRIC PRI.	X	X	X	X	X	X	X	X															

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1. STA. XX+XX — PROPOSED 3'x5'x3'6" — X — JT3 | JT3 — SEE DETAIL
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JOINT TRENCH COMPOSITE PLAN
VALLEY OAK PARTNERS
DIANA AVENUE
MORGAN HILL CALIFORNIA

NO.	REVISIONS	BY	DATE

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REGISTERED PROFESSIONAL ENGINEER — SAIMUALAAI — No. 94346 — Exp. 06/30/2026 — CIVIL — STATE OF CALIFORNIA

SHEET JT5 OF JT6 SHEETS

VALLEY OAK PARTNERS, LLC
375 DIANA AVENUE
MORGAN HILL SANTA CLARA COUNTY CALIFORNIA

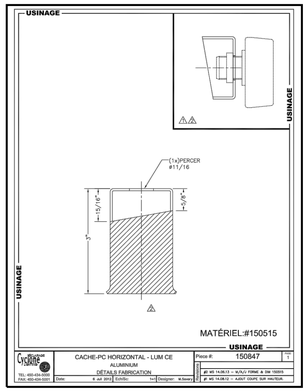
LUMINAIRE SPECIFICATIONS:
CATALOG NO.: CE21T4B–FGC–3MHS–60W–4K–120–F2AP–DJP–SQ–PC–BK–TX–CP6114
LENS MAT'L: CLEAR TEMPERED GLASS (FGC)
IES CLASSIFIC: TYPE III (3MHS)
WATTAGE: 60 WATTS
LIGHT SOURCE: LED – 4000K (WHITE)
LINE VOLTAGE: 120 VOLT WITH A 0–10 VOLTS DIMMING.
DRIVER: MOUNTED ON A QUICK RELEASE TRAY.
ALL COMPONENTS SHALL HAVE QUICK CONNECTORS.
IP66: WEATHERPROOF LUMINAIRE WITH "V" GROOVE SILICONE GASKET.

POLE SPECIFICATIONS:
CATALOG NO.: PA40–12–BK–TX
MATERIAL: 4" ROUND, ALUMINUM TUBING
POLE HEIGHT: 12'–0" (3.7m)
ANCHOR BOLTS: (4) 3/4" x 20" FULLY GALVANIZED
BOLT CIRCLE: 10" (25cm)

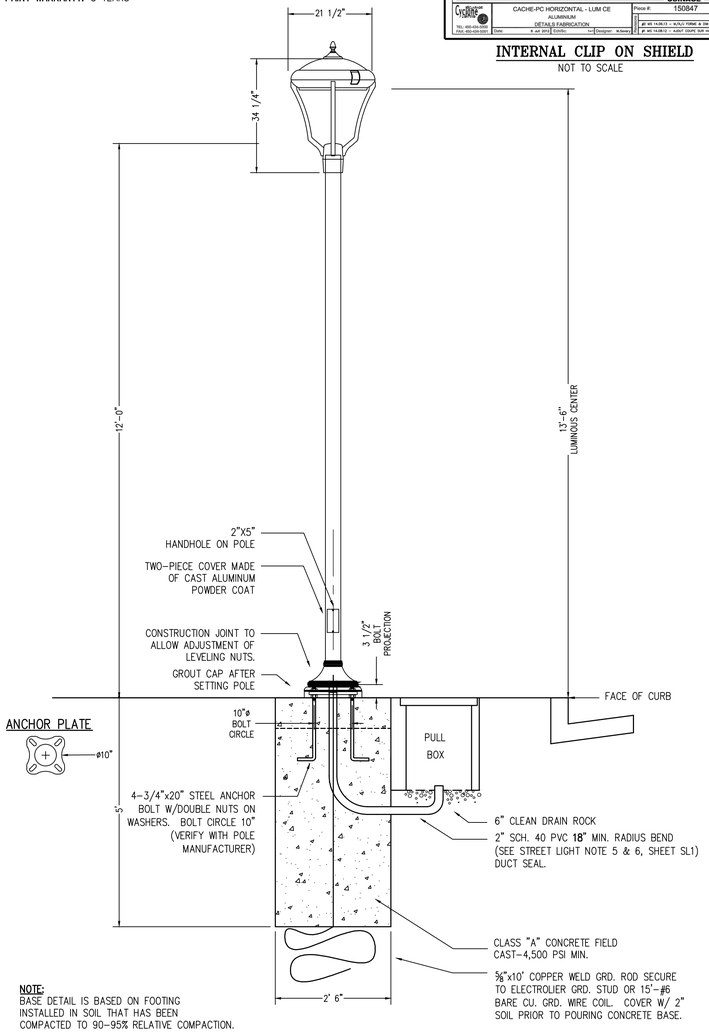
BASE COVER SPECIFICATIONS:
CATALOG NO.: BD11–BK–TX
MATERIAL: TWO–PIECE COVER MADE OF CAST ALUMINUM

ALL NON ELECTRICAL HARDWARE SHALL BE STAINLESS STEEL

COLOR & FINISH: RAL9005 TEXTURED POWDER COAT (BK–TX).
PAINT WARRANTY: 5 YEARS



INTERNAL CLIP ON SHIELD
NOT TO SCALE



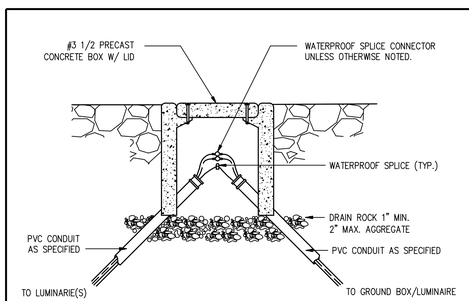
NOTE:
BASE DETAIL IS BASED ON FOOTING INSTALLED IN SOIL THAT HAS BEEN COMPACTED TO 90–95% RELATIVE COMPACTION.

MANUFACTURE REP.:
HOLOPHANE
PHILIP E. HEINZ
(925) 984–1540

1 / SL1 PRIVATE STREET LIGHT, POST TOP DETAIL
NOT TO SCALE

LEGEND

ESL	EXISTING STREET LIGHT CONDUIT
SL	PROPOSED STREET LIGHT CONDUIT
X'(XX"S.L. COND.)	STREET LIGHTING CONDUIT LABEL, X' INDICATES CONDUIT LENGTH, (XX"S.L. COND.) INDICATES CONDUIT SIZE
X'(XX)	STREET LIGHTING WIRE LABEL, X' INDICATES WIRE LENGTH, (XX) INDICATES WIRE TYPE.
(2W)	2–#8 CU. WIRE (SEE NOTE 15)
(3W)	3–#8 CU. WIRE (SEE NOTE 15)
(3WG)	2–#8 CU. WIRE & 1–#8 BARE CU. GROUND (UNLESS OTHERWISE NOTED); SEE NOTE 15 & GROUNDING DETAIL
(4WG)	3–#8 CU. WIRE & 1–#8 BARE CU. GROUND (UNLESS OTHERWISE NOTED); SEE NOTE 15 & GROUNDING DETAIL
	STREET LIGHTING PULL BOX STATE TYPE #3 1/2, 10" x 17" x 12"
	STREET LIGHTING GROUND BOX STATE TYPE #5, 13" x 24" x 12"
	PROPOSED PRIVATE STREET LIGHT, POST TOP
	EXISTING STREET LIGHT, POST TOP
	EXISTING STREET LIGHT, SINGLE ARM
(X)	CIRCUIT NUMBER/PHASE (SEE ELECTRIC SOURCE DETAILS)
(XXXX)	POLE NUMBER
POS	STREET LIGHT POINT OF SERVICE
F/C	FACE OF CURB



2 / SL1 STREET LIGHTING PULL BOX DETAIL
NOT TO SCALE

CONSTRUCTION LABOR AND MATERIAL RESPONSIBILITY

STREET LIGHTING SYSTEM (PRIVATE)

	P.G.&E.	CONTRACTOR
WIRE:		
FURNISH	○	●
INSTALL	○	●
CONDUIT:		
FURNISH	○	●
INSTALL	○	●
BASES:		
FURNISH	○	●
INSTALL	○	●
LUMINAIRES:		
FURNISH	○	●
INSTALL	○	●
SPLICE BOXES:		
FURNISH	○	●
INSTALL	○	●
EXCAVATE	○	●
POLES & ARMS:		
FURNISH	○	●
INSTALL	○	●

SCHEDULE: LS3
INSTALL IN JOINT TRENCH: NO
INSTALL IN SEPARATE TRENCH: YES
CONDUIT SIZE: 2"
CONDUIT TYPE: SCH. 40
WIRE SIZE: VARIES TYPE: CU

ADDITIONAL NOTES:
–PRIVATE LIGHTS TO BE MAINTAINED BY H.O.A (HOMEOWNER ASSOCIATION) UPON TRACT ACCEPTANCE.

STREET LIGHTING NOTES

1. ALL MATERIAL AND WORKMANSHIP SHALL FULLY CONFORM WITH THE NATIONAL ELECTRIC CODE AND STANDARD SPECIFICATIONS AND DETAILS OF THE CITY OF CONCORD.
2. THE ELECTRICAL CONTRACTOR SHALL INSTALL THE UNDERGROUND SERVICE FROM THE LUMINAIRE TO H.O.A. SERVICE POINT AND TERMINATE CONDUIT AND WIRES AT BOX AS DIRECTED BY THE CITY.
3. KEEP STREET LIGHTS A MINIMUM OF 3 FEET AWAY FROM THE EDGE OF DRIVEWAYS, SEWER AND WATER LATERALS AND 5 FEET AWAY FROM FIRE HYDRANTS & CATCH BASINS.
4. TWO OR MORE STREET LIGHTS ON THE SAME CIRCUIT SHALL BE WIRED TO BALANCE THE LOAD. (SEE WIRING DIAGRAM), UNLESS OTHERWISE NOTED.
5. CONDUIT AND FITTINGS: ALL CONDUIT AND FITTINGS SHALL BE U.L. APPROVED SCHEDULE 40 P.V.C., USE MINIMUM 2" SCH. 40 P.V.C. CONDUIT AND FITTINGS BELOW GRADE, UNLESS OTHERWISE NOTED OR REQUIRED. MINIMUM RADIUS BENDS SHALL BE 18". FOR ABOVE GROUND INSTALLATION USE METALLIC RIGID STEEL CONDUIT. PROVIDE PULL WIRE IN EMPTY CONDUITS. ALL CROSSINGS TO BE PERPENDICULAR TO STREET.
6. CONDUIT DEPTH: 24" UNDER SIDEWALK; 24" UNDER PLANTER STRIP; 30" UNDER PAVEMENT.
7. CABLE: CABLE SHALL BE U.L. A.W.G. NO. 8, 7–STRAND SOFT COPPER, TYPE THW OR THWN WITH MINIMUM OF 3/64" (40 MIL) POLYVINYL CHLORIDE INSULATION, UNLESS OTHERWISE NOTED. U.L. LISTED 600 VOLT, NO. 10 IN POLE MAY BE USED (40 MIL INSULATION).
8. SPLICE BOXES: SPLICE BOXES SHALL BE NO. 3–1/2 STATE TYPE WITH LID AND BRASS HOLD DOWN BOLTS, UNLESS OTHERWISE NOTED. LIDS TO BE INSCRIBED 'STREET LIGHTING'. SPLICE BOXES SHALL NOT BE MORE THAN 200 FEET APART ON LONG RUNS. SPLICE BOXES TO BE SET ON A CONCRETE FOOTING WHEN SUBJECT TO TRAFFIC LOAD.
9. FUSES: EACH POLE SHALL BE FUSED WITH WATERPROOF IN–LINE FUSE HOLDERS AT EACH ADJACENT BOX WITH 5 AMP FUSE. FOR DUPLEX LIGHTS, EACH LUMINAIRE SHALL BE FUSED SEPARATELY.
10. SPLICING: ALL SPLICES SHALL BE MADE IN HAND HOLES OR SPLICE BOXES ONLY. SPLICES SHALL BE MADE WITH "STACK –ON" CRIMP JOINTS, "SCOTCH LOCK" FASTENERS, OR APPROVED EQUAL. ON SPLICES MADE BELOW GRADE, WRAP WITH MOISTURE PROOF INSULATION THICKNESS.
11. POLE NUMBERS: OBTAIN AND PLACE POLE NUMBERS ON ALL STREET LIGHT STANDARDS AS REQUIRED. COORDINATE WITH PG&E AND/OR CITY FOR THEIR REQUIREMENTS.
12. TRENCH: CONDUIT CANNOT BE PLACED IN JOINT TRENCH. THE CONDUIT LAYOUT IS SHOWN SCHEMATICALLY. SEE COMPOSITE DRAWING FOR TRENCH AND BOX LOCATIONS. ANY INCIDENTAL TRENCHING NOT PROVIDED BY TRENCHING AGENT IS CONTRACTOR'S RESPONSIBILITY.
13. THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ANY FIELD CHANGES MADE WITHOUT FIRST NOTIFYING TARRAR UTILITY CONSULTANTS.
14. TARRAR UTILITY CONSULTANTS ASSUMES NO RESPONSIBILITY FOR ANY VARIANCE BETWEEN THESE PLANS AND THE ACTUAL FIELD CONDITIONS. CONTRACTOR SHOULD REVIEW PROJECT SITE PRIOR TO SUBMITTING ITS BID.
15. CONTRACTOR TO CONSULT WITH LOCAL AGENCIES FOR THEIR CIRCUIT GROUNDING REQUIREMENTS. IF GROUND WIRE IS REQUIRED IN CONDUIT, INSTALL ACCORDINGLY.
16. LEGEND SYMBOLS ARE SHOWN IN STREET AREA FOR CLARITY. INSTALL BEHIND CURB AND/OR SIDEWALK PER THE CITY SPECIFICATIONS KEEP CLEAR OF DRIVEWAYS AND PATHWAYS (TYPICAL).
17. CENTERLINE OF STREET LIGHTS SHALL BE LOCATED ON THE LOT LINE UNLESS OTHERWISE NOTED ON THESE PLANS.
18. ANY CHANGES OR MODIFICATIONS TO PROPOSED STREET LIGHT LOCATIONS SHALL BE APPROVED, IN WRITING, BY THE CITY PRIOR TO INSTALLATION.
19. SET ALL STREET LIGHTS TO ULTIMATE FINISHED GRADE. CONSULT WITH CITY FOR PROPER PHYSICAL PROTECTION AND/OR SIGNING AND STRIPING ADJACENT TO ANY STREET LIGHTS INSTALLED IN THEIR ULTIMATE LOCATIONS THAT ARE NOT PROTECTED BY A VERTICAL CURB. BERM AND COMPACT EARTH TO FINISHED GRADE A MINIMUM OF 5' AROUND STREET LIGHT BASES AT THESE LOCATIONS.
20. CONTACT U.S.A. (2) FULL WORKING DAYS PRIOR TO STARTING WORK IF EXISTING UTILITIES CONFLICT WITH POLE LOCATION, FIELD ADJUST TO CLEAR EXISTING UTILITIES A MINIMUM OF 3'–0".
21. STREET LIGHT CONDUIT BENDS SHALL HAVE A MINIMUM 18" RADIUS. UNLESS OTHERWISE SHOWN ON THE PLANS, NO BEND SHALL BE INSTALLED IN THE STREET LIGHT SYSTEM WITHOUT PRIOR APPROVAL OF THE CITY INSPECTOR.
22. ALL BOXES ARE TO BE INSTALLED WITHIN THE R/W AND/OR P.U.E. AREA.

FOR REVIEW ONLY

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STREET LIGHTING GENERAL NOTES AND DETAILS
VALLEY OAK PARTNERS, LLC
375 DIANA AVE
MORGAN HILL CALIFORNIA

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SHEET SL1 OF SL4 SHEETS

1	PRIVATE STREET LIGHT, POST TOP DETAIL
SL1	NOT TO SCALE

ARC1 LED

Architectural Wall Luminaire

Catalog Number: ARC1 LED P2 30K

Notes

Type

Hit the Tab key or mouse over the page to see all interactive elements.

Specifications

Depth (D1): 6.5"
Depth (D2): 4.75"
Height: 5"
Width: 11"
Weight: (without options) 7 lbs

Introduction

The Lithonia Lighting ARC LED wall-mounted luminaires provide both architectural styling and visually comfortable illumination while providing the high energy savings and low initial costs for quick financial payback.

ARC1 delivers up to 3,000 lumens with a soft, non-pixelated light source, creating a visually comfortable environment. The compact size of ARC1, with its integrated emergency battery backup option, is ideal for over-the-door applications.

ARC LED Family Overview

Luminaire	Standard EM, 0°C	Cold EM, -20°C	Approximate Lumens (4000K)				
			P1	P2	P3	P4	P5
ARC1 LED	4W	--	1,500	2,000	3,000	--	--
ARC2 LED	4W	8W	1,500	2,000	3,000	4,000	6,500

Ordering Information

EXAMPLE: ARC1 LED P2 40K MVOLT PE DDBXD

Series	Package	Color Temperature	Voltage	Options		Finish	
ARC1 LED	P1 1,500 Lumens	30K 3000K	MVOLT	E4WH	Emergency battery backup, CEC compliant (4W, 0°C min)[1]	DDBXD	Dark bronze
	P2 2,000 Lumens	40K 4000K	347[1]	PE	Button type photocell for dusk-to-dawn operation	DBLXD	Black
	P3 3,000 Lumens	50K 5000K		DMG	0-10V dimming wires pulled outside fixture (for use with an external control, ordered separately)[2]	DNAXD	Natural aluminum
				SPDXKV	6kV surge protection	DWHXD	White
				FAO	Field adjustable light output device. Allows for easy adjustment to the desired light levels, from 20% to 100%[2]	DSSXD	Sandstone
				LDS18	18" Fixture leads	DDBTXD	Textured dark bronze
						DBLBXD	Textured black
						DNATXD	Textured natural aluminum
						DWHGXD	Textured white
						DSSTXD	Textured sandstone

Accessories
Ordered and shipped separately.
W38RW DDBXD U — Surface - mounted back box (specify finish)

NOTES
1 347V not available with E4WH.
2 FAO not available with DMG.

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Performance Data

Lumen Output

Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of the configurations shown, within the tolerances allowed by Lighting Facts. Contact factory for performance data on any configurations not shown here.

Performance Package	System Watts	30K (3000K, 80 CRI)					40K (4000K, 80 CRI)					50K (5000K, 80 CRI)				
		Lumens	LPW	B	U	G	Lumens	LPW	B	U	G	Lumens	LPW	B	U	G
P1	11W	1,376	127	0	0	0	1,454	134	0	0	0	1,464	135	0	0	0
P2	17W	2,035	121	1	0	1	2,151	128	1	0	1	2,165	129	1	0	1
P3	25W	2,859	117	1	0	1	3,021	123	1	0	1	3,041	124	1	0	1

Electrical Load

Performance Package	System Watts	Current (A)				
		120V	208V	240V	277V	347V
P1	11W	0.111	0.061	0.053	0.047	0.045
P2	17W	0.139	0.081	0.071	0.063	0.060
P3	25W	0.208	0.122	0.108	0.097	0.081

Lumen Output in Emergency Mode (4000K, 80 CRI)

Option	Lumens
E4WH	620

Lumen Ambient Temperature (LAT) Multipliers

Use these factors to determine relative lumen output for average ambient temperatures from 0-40°C (32-104°F).

Ambient		Lumen Multiplier
0°C	32°F	1.04
10°C	50°F	1.02
20°C	68°F	1.01
25°C	77°F	1.00
30°C	86°F	0.99
40°C	104°F	0.97

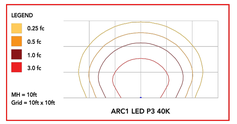
Projected LED Lumen Maintenance

Data references the extrapolated performance projections for the platforms noted in a 25°C ambient, based on 10,000 hours of LED testing (tested per IESNA LM-80-08 and projected per IESNA TM-21-11). To calculate L|F, use the lumen maintenance factor that corresponds to the desired number of operating hours below. For other lumen maintenance values, contact factory.

Operating Hours	0	25,000	50,000	100,000
Lumen Maintenance Factor	0.97	>0.96	>0.95	>0.91

Photometric Diagrams

To see complete photometric reports or download .ies files for this product, visit the Lithonia Lighting ARC LED homepage. Tested in accordance with IESNA LM-79 and LM-80 standards.



ARC1 LED P3 40K

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FOR REVIEW ONLY

813 First Street
Brentwood, CA 94513
(925) 240-2595
(925) 240-7013 fax
www.tarrar.com

TARRAR UTILITY CONSULTANTS

- Planning
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- Estimating
- Joint Trench
- Street Lighting
- Fiber Optic
- T-24
- PG&E Gas Design
- PG&E Elec Design
- M.E.P. Design
- Cost Analysis
- Due Diligence

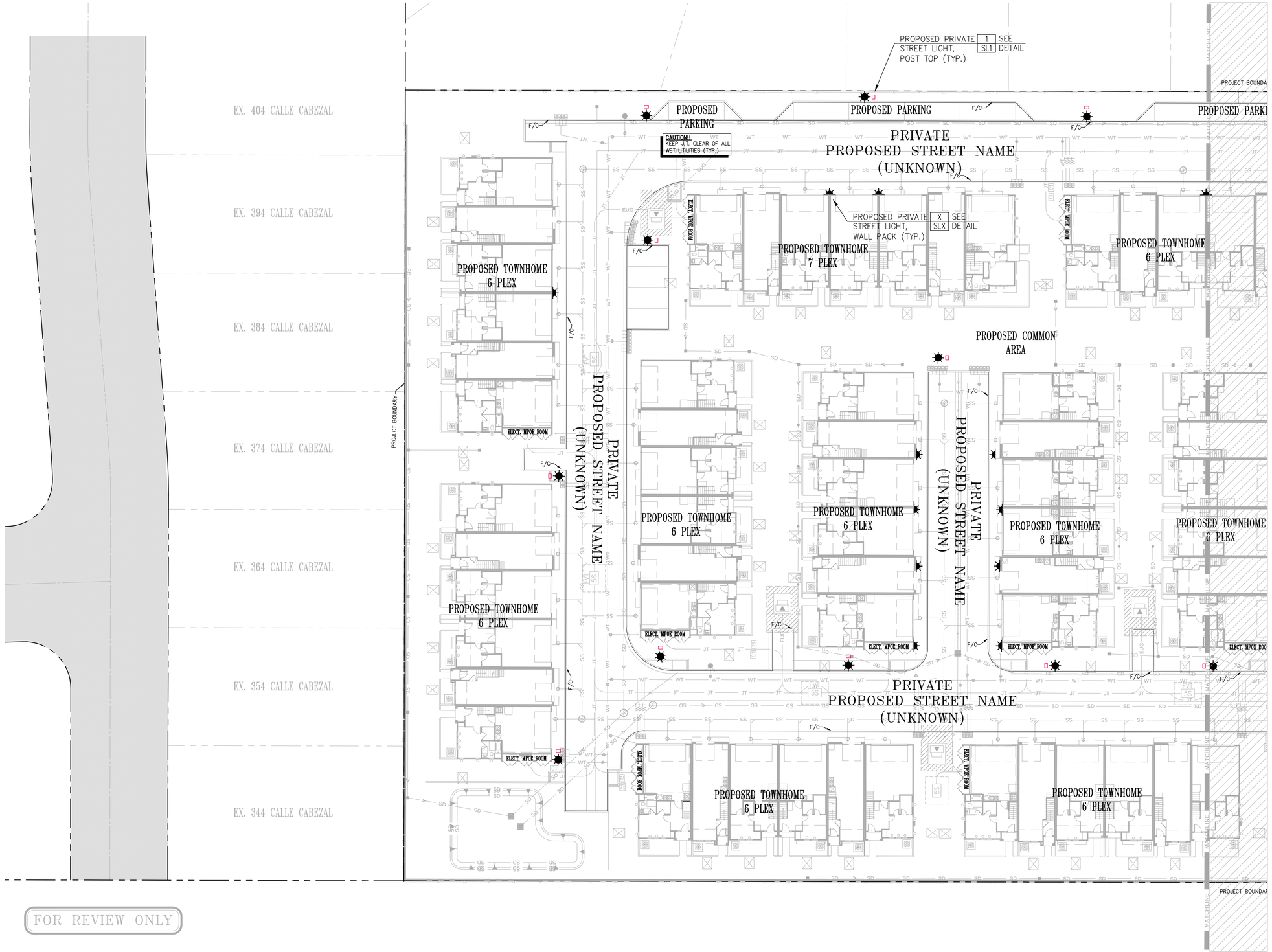
STREET LIGHTING GENERAL NOTES AND DETAILS
VALLEY OAK PARTNERS, LLC
375 DIANA AVE
MORGAN HILL CALIFORNIA

NO.	REVISIONS	BY	DATE

DATE: FEB 2024 | DATE LAST WORKED ON: 04/04/2025
SCALE: NOT TO SCALE | DRAWN: MC | CHECKED: SM
JOB NO.: 224027 | PRELIMINARY NOT FOR CONSTRUCTION
INTENT TO CONSTRUCT

811 CALL BEFORE YOU DIG UNDERGROUND SERVICE ALERT

SHEET SL2 OF SL4 SHEETS



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- PG&E Elec Design
- M.E.P. Design
- Cost Analysis
- Due Diligence

STREET LIGHTING SITE PLAN

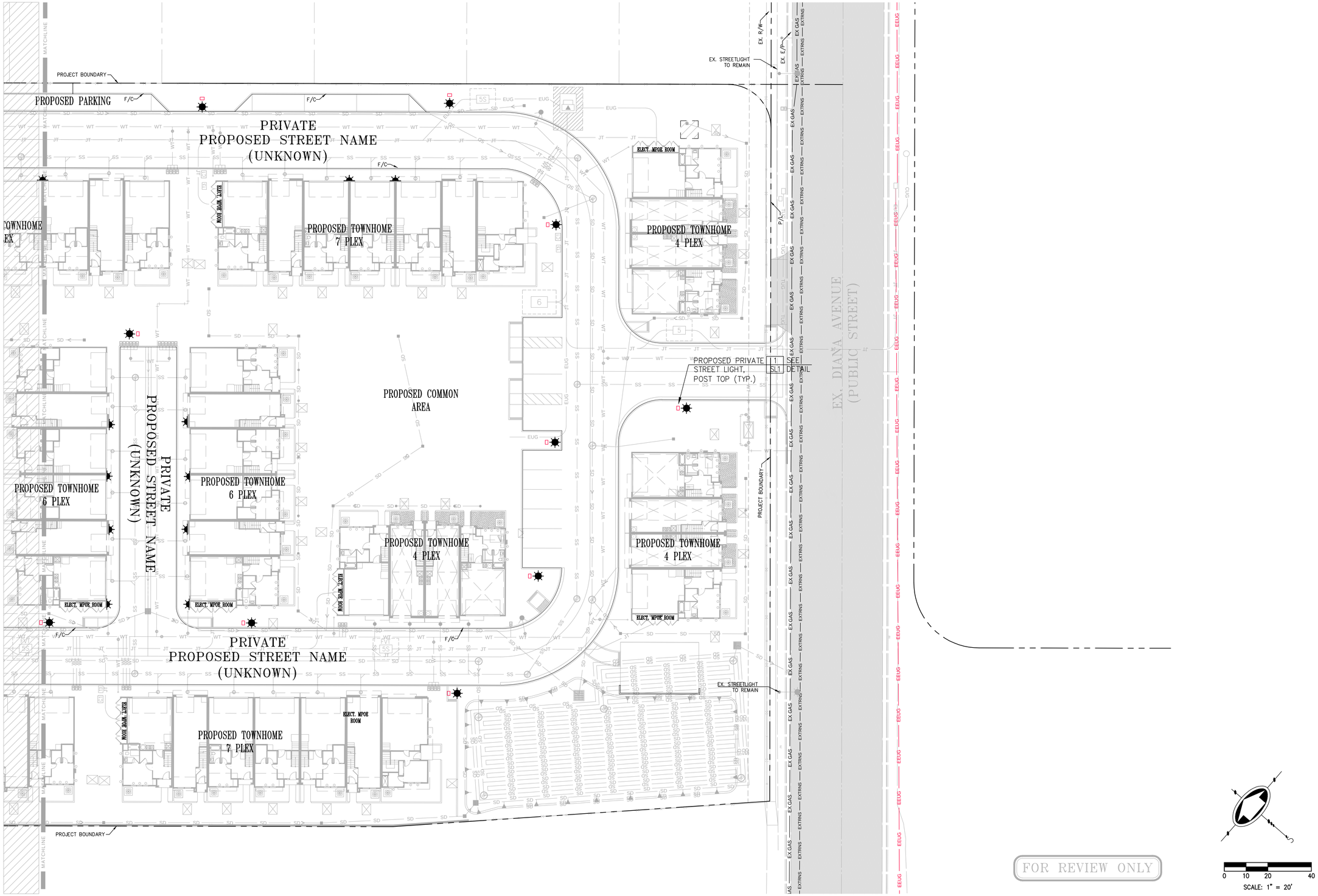
VALLEY OAK PARTNERS, LLC
DIANA AVENUE
MORGAN HILL CALIFORNIA

NO.	REVISIONS	BY	DATE

DATE: FEBRUARY 2024 | DATE LAST WORKED ON: 4/4/2025
SCALE: 1:20 | DRAWN: MC | CHECKED: SM
JOB NO.: 224027
PRELIMINARY NOT FOR CONSTRUCTION
INTENT TO CONSTRUCT

811 CALL BEFORE YOU DIG UNDERGROUND SERVICE ALERT

SHEET SL3 OF SL4 SHEETS



FOR REVIEW ONLY

0 10 20 40
SCALE: 1" = 20'

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- PG&E Elec Design
- M.E.P. Design
- Cost Analysis
- Due Diligence

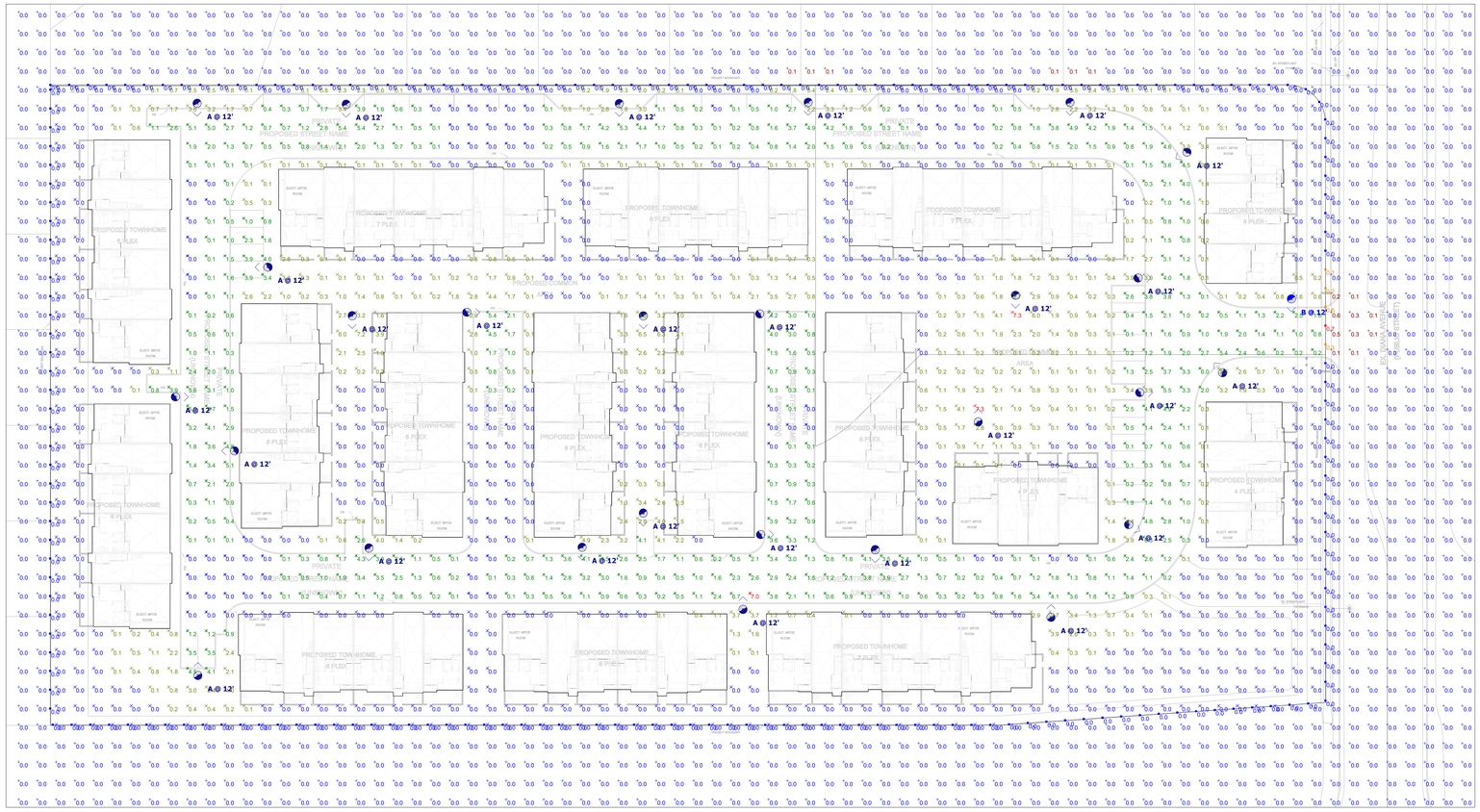
STREET LIGHTING SITE PLAN
VALLEY OAK PARTNERS, LLC
DIANA AVENUE
MORGAN HILL CALIFORNIA

NO.	REVISIONS	BY	DATE

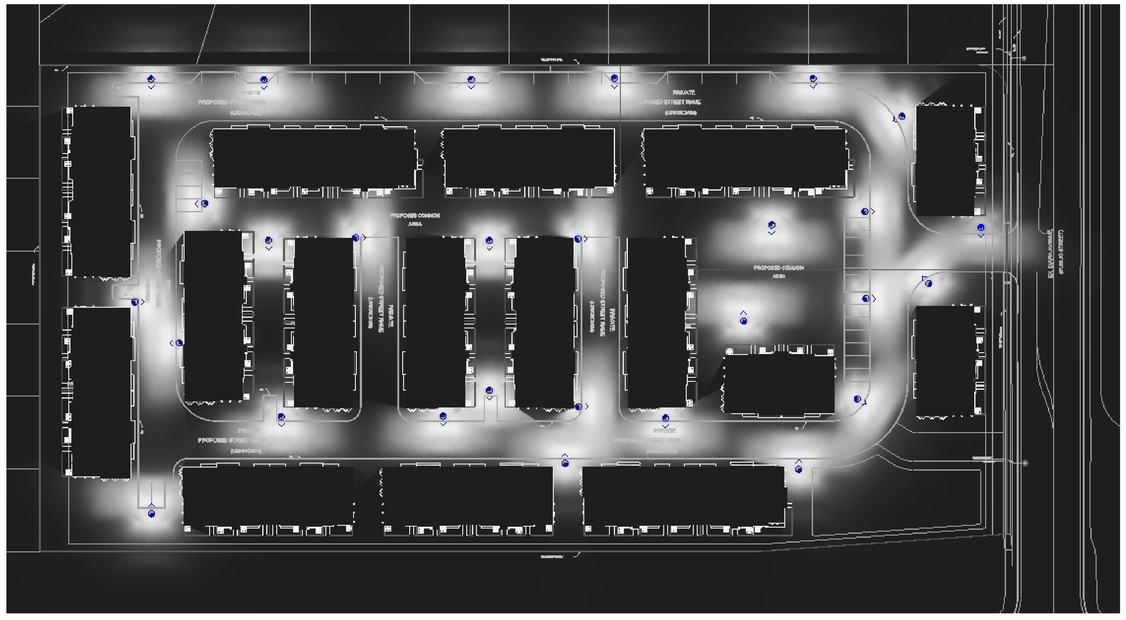
DATE: FEBRUARY 2024 | DATE LAST WORKED ON: 04/04/2025
SCALE: 1:20 | DRAWN: MC | CHECKED: SM
JOB NO.: 224027
PRELIMINARY NOT FOR CONSTRUCTION
INTENT TO CONSTRUCT

811 CALL BEFORE YOU DIG UNDERGROUND SERVICE ALERT

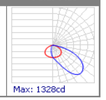
SHEET SL4 OF SL4 SHEETS



Plan View
Scale - 1" = 30ft

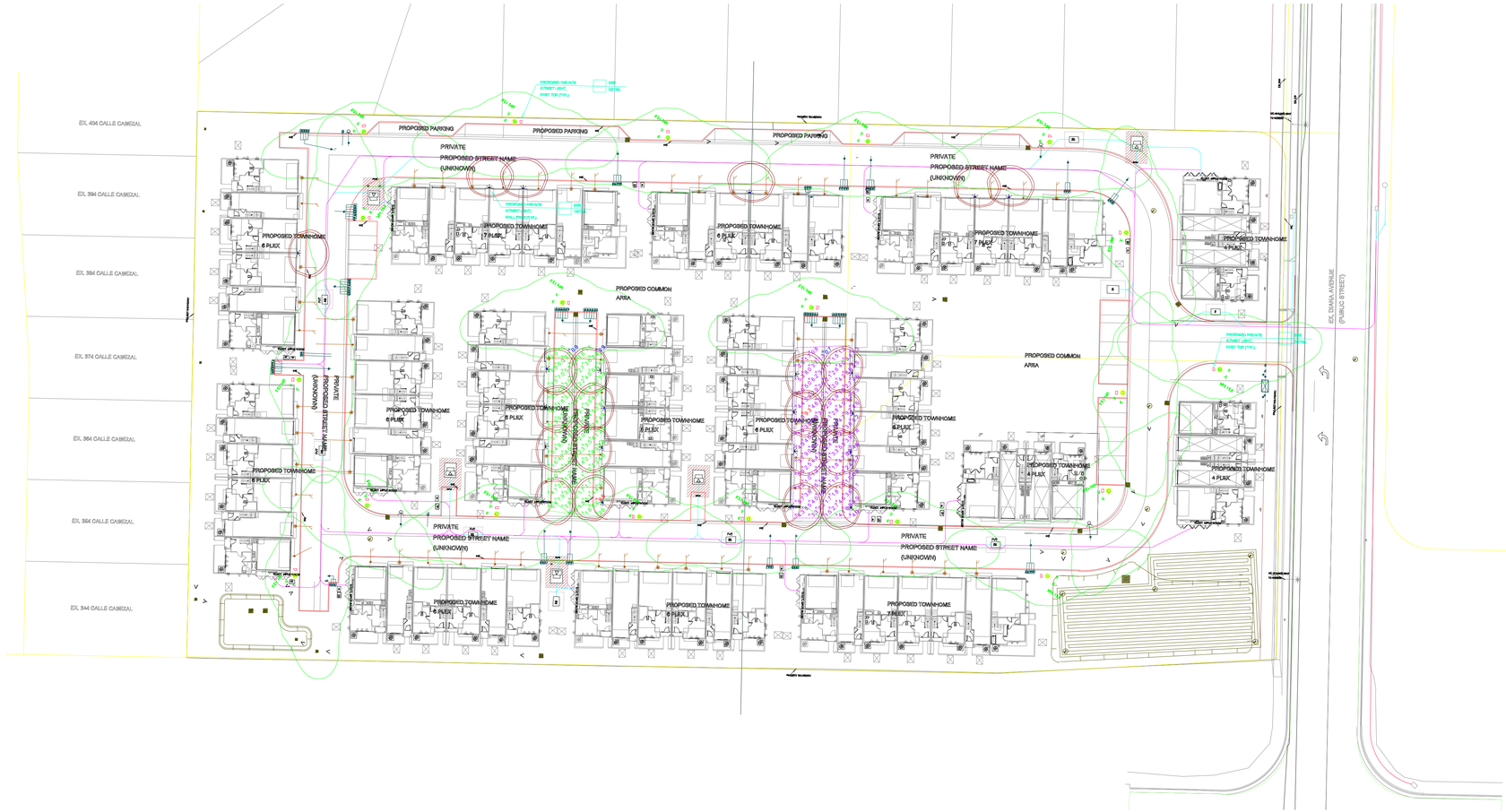

PROPOSED COMMON AREA
PROPOSED STREET NAME
PRIVATE PROPOSED STREET NAME
PROPOSED STREET NAME

Schedule

Symbol	Label	Image	QTY	Manufacturer	Catalog	Description	Number Lamps	Lamp Output	LLF	Input Power	Polar Plot
▭	A		22	Lithonia Lighting	ARC1 LED P2 30K	ARC1 LED WITH P2 - PERFORMANCE PACKAGE, 3000K	1	2035	1	16.7843	 Max: 1328cd

Statistics

Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Parking Area 2	+	3.3 fc	9.3 fc	0.7 fc	13.3:1	4.7:1
Parking Area1	+	3.4 fc	9.0 fc	0.9 fc	10.0:1	3.8:1



Plan View
Scale - 1" = 80ft

Valley Oak Partners
Wall Pack Additions

Designer

Date
10/29/2024
Scale
Not to Scale
Drawing No.

Summary

1 of 1

RESOLUTION NO. 25-08

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF MORGAN HILL APPROVING A 19-LOT RESIDENTIAL VESTING SUBDIVISION MAP ON AN APPROXIMATE 5-ACRE SITE FOR THE PROPERTY LOCATED ON THE NORTHEAST CORNER OF BUTTERFIELD BOULEVARD AND DIANA AVENUE AT 375 DIANA AVENUE (APN: 726-12-001 AND 004) DIANA-VALLEY OAK PROJECT (SD2024-0009)

WHEREAS, on July 22, 2024, an application was submitted for a 19-lot Vesting Subdivision Map to develop 93 multifamily attached townhome style units on an approximate 5-acre site located at the northeast corner of Butterfield Boulevard and Diana Avenue (SD2024-0009)

WHEREAS, such request was considered by the Planning Commission at their regular meeting of July 8, 2025; and

WHEREAS, the City of Morgan Hill, as the Lead Agency, prepared an Initial Study in compliance with the California Environmental Quality Act (CEQA), and the regulations and policies of the City of Morgan Hill, California and found the project to be consistent with the General Plan and Zoning, and any project-induced effects are found to be substantially mitigated under uniformly applicable development policies or standards. Therefore, pursuant to CEQA Guidelines Section 15183, the Development Services Director determined that no further review is required; and

WHEREAS, testimony received at a duly-noticed public hearing, along with exhibits and drawings and other materials have been considered in the review process.

NOW, THEREFORE, THE MORGAN HILL PLANNING COMMISSION DOES RESOLVE AS FOLLOWS:

SECTION 1. The Planning Commission has considered the full record before it, which may include but not limited to such things as the staff report, public testimony, and other materials and evidence submitted or provided. Furthermore, the recitals set forth above are found to be true and correct and are incorporated herein by reference.

SECTION 2. An Initial Study was prepared for the project in compliance with the CEQA Guidelines and is consistent with the State and Local Guidelines implementing CEQA.

SECTION 3. The Planning Commission finds the Vesting Subdivision Map, together with its provisions for its design and improvements, is consistent with the General Plan and any applicable specific plans.

SECTION 4. The Planning Commission approves the Vesting Subdivision Map Exhibit "A" as conditioned incorporated herein as Exhibit "B".

PASSED AND ADOPTED THIS 8th DAY OF JULY, 2025, AT A REGULAR MEETING OF THE PLANNING COMMISSION BY THE FOLLOWING VOTE:

AYES: COMMISSIONERS:

NOES: COMMISSIONERS:

ABSTAIN: COMMISSIONERS:

ABSENT: COMMISSIONERS:

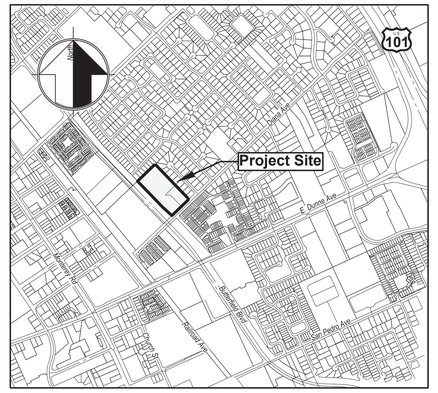
ATTEST: **APPROVED:**

JENNA LUNA, Deputy City Clerk **LIAM DOWNEY, Chair**

Item 5
Attachment 5

Line Table		
#	Direction	Length
L1	N41°06'29"E	26.00'
L2	N41°06'29"E	26.00'
L3	N48°53'31"W	32.02'
L4	S41°06'29"W	49.78'
L5	N41°06'29"E	49.78'

EXHIBIT A



Vicinity Map

SCALE: 1"=40'

0 10 20 30 40 60 80 100

Basis of Bearings: Bearings shown on this map are based up on the centerline of Diana Avenue as found and monumented as North 45°23' East as shown on that certain Tract Map recorded at Book 375 of Map, Page 36, Santa Clara County Records.

Benchmark: Elevations shown on this map are based upon Santa Clara Valley Water Benchmark BM002, Brass disk on top of concrete curb; at back of sidewalk of northwest corner of intersection of Monterey Road and W. Dunne Avenue *Elevation*= 342.80' (NAVD '88); Northing 1870161, Easting 6226277

Engineer:

Harrinder Singla, LS8347
MH Engineering
16075 Vineyard Blvd,
Morgan Hill, CA 95037
408.779.7381
harrys@mhengineering.com

Project Information:

APN	726-12-001 & 004
Present Use:	Ranch house
Proposed Use:	Residential
Present Zoning:	RAM
Proposed Zoning:	RAM
Sanitary Sewer:	City of Morgan Hill
Gas and Electric:	PG&E
Water:	City of Morgan Hill
Telephone:	Verizon
Existing Improvements:	As Shown
Area:	5.304 ac

Applicant:

VALLEY OAK PARTNERS
734 THE ALAMEDA
SAN JOSE, CA 95126
510.673.2078

375 Diana Avenue

Vesting Tentative Map for Condominium Purposes: 93 Units

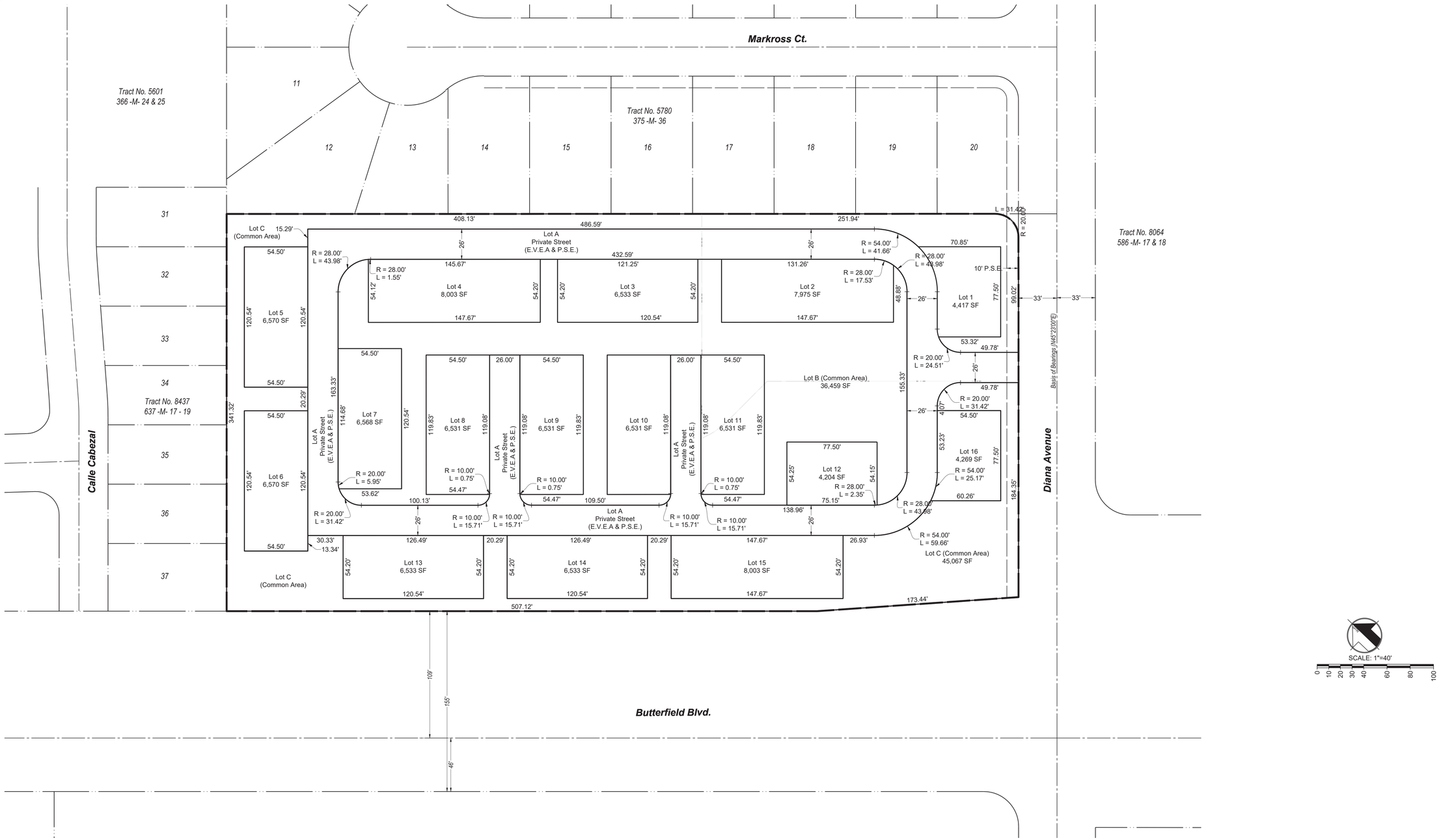
LICENSED LAND SURVEYOR
HARINDER SINGLA
No. 8347
STATE OF CALIFORNIA

MH engineering Co.
16075 Vineyard Boulevard Morgan Hill, CA 95037

DATE: 04/2025 DRAWN:RS CHECKED: HS

Sheet **C1** of **10**
223100

L:\Projects\Harry\223100-Valley Oak Partners SB330, Diana Ave\DWG\223100 C1 Vesting Tentative Map.dwg - 04/11/2025 3:03pm - Plotted 04/11/2025 3:03pm by Harry



Basis of Bearings: Bearings shown on this map are based up on the centerline of Diana Avenue as found and monumented as North 45°23' East as shown on that certain Tract Map recorded at Book 375 of Map, Page 36, Santa Clara County Records.

375 Diana Avenue

Vesting Tentative Map for Condominium Purposes: 93 Units

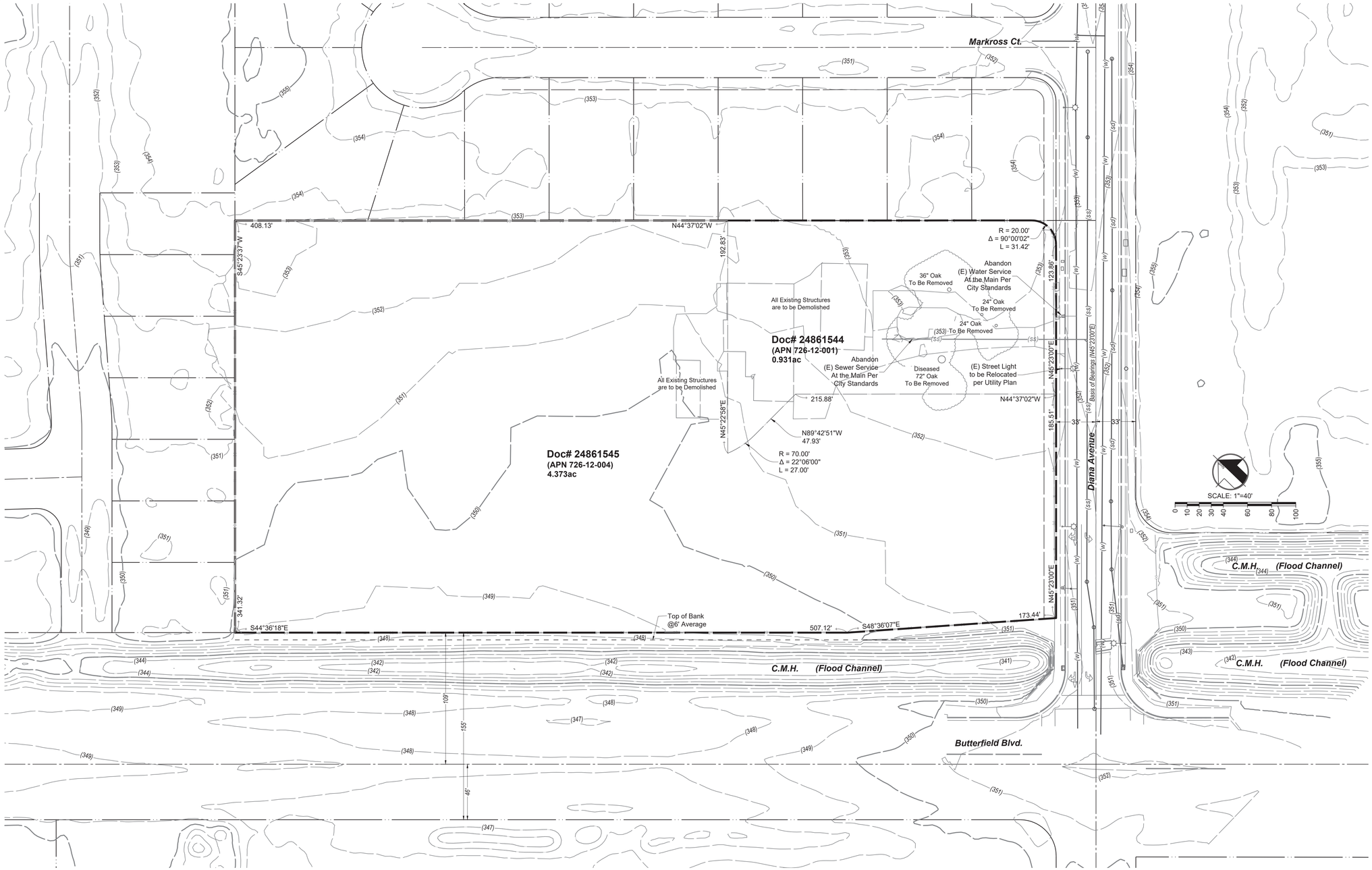
LICENSED LAND SURVEYOR HARINDER SINGLA No. 8347 STATE OF CALIFORNIA

MH engineering Co.
16075 Vineyard Boulevard Morgan Hill, CA 95037

DATE: 04/2025 DRAWN:RS CHECKED: HS

Sheet
C2
of 10
223100

C:\Users\harry\Documents\Backup & Autosaves\AcPublish_22628\223100 C2 Vesting Tentative Map.dwg - 04/10/2025 6:14pm - Plotted 04/10/2025 6:28pm by Harry



Legend

Proposed	Description	Existing
	Project Property Boundary	
	Property Line	
	Centerline	
	Easement, as noted	
	Curb and Gutter	
	Driveway Approach	
SD	Storm Drain	(sd)
SD	Perforated Storm Drain	(sd)
SS	Sanitary Sewer	(ss)
W	Water Main	(w)
F	Fire Service	(f)
E OH	Overhead Electric	(e) (oh)
T	Telephone	(t)
x 50	Wood Fence	x 50
100	Street Barricade	(100)
352	Major Contour	(99)
	Minor Contour	
	Benchmark	
	Monument, Type as shown	
#(A)	Section	
	Swale	
2.2%	Slope	(2.1%)
SD	Storm Drain Manhole	(sd)
	Curb Inlet	
	Drop Inlet	
SS	Sanitary Sewer Manhole	(ss)
	Fire Hydrant	
CO	Cleanout	(co)
	Gate Valve	
	Utility Pole	
	Electrolier	
	Sewer Service	
W	Water Service	W
	AC Pavement	
	PCC walks/driveways	
	Structures	
	Bio-Retention Area	

*** existing features are labeled in italics and parentesis, typical*

Abbreviations

AC	Asphalt Concrete	HP	High Point
BC	Beginning of Curve	INV	Invert
BVC	Beginning of Vertical Curve	JP	Joint Pole
BW	Back of Walk	LP	Low Point
℄	Centerline	Max	Maximum
CL D/W	Centerline Driveway	Min	Minimum
CMP	Corrugated Metal Pipe	NG	Natural Ground
CO	Clean Out	PB	Pull Box
DI	Drop Inlet	℘	Property Line
DIP	Ductile Iron Pipe	PSE	Public Service Easement
DWY	Driveway	PSDE	Private Storm Drain Easement
EC	End of Curve	PVI	Point of Vertical Intersection
EG	Existing Ground	PUE	Public Utility Easement
ELCT	Electrolier	RCP	Reinforced Concrete Pipe
EP	Edge of Pavement	R/W	Right of Way
ER	End of Return	SDMH	Storm Drain Manhole
EVC	End of Vertical Curve	SSMH	Sanitary Sewer Manhole
EX, EXST	Existing	Std	Standard
FC	Flush Curb	SW	Sidewalk
FF	Finish Floor	TBM	Temporary Benchmark
FG	Finish Grade	TC	Top of Curb
FL	Flowline	TWC	Top of Wedge Curb
GB	Grade Break	Typ	Typical

Engineer:

Harrinder Singla, LS8347
MH Engineering
16075 Vineyard Blvd.
Morgan Hill, CA 95037
408.779.7381
harrys@mhengineering.com

Project Information:

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Telephone:	Verizon
Existing Improvements:	As Shown
Area:	5.304 ac

Applicant:

VALLEY OAK PARTNERS
734 THE ALAMEDA
SAN JOSE, CA 95126
510.673.2078

Basis of Bearings: Bearings shown on this map are based up on the centerline of Diana Avenue as found and monumented as North 45°23' East as shown on that certain Tract Map recorded at Book 375 of Map, Page 36, Santa Clara County Records.

Benchmark: Elevations shown on this map are based upon Santa Clara Valley Water Benchmark BM002, Brass disk on top of concrete curb; at back of sidewalk of northwest corner of intersection of Monterey Road and W. Dunne Avenue *Elevation*= 342.80' (NAVD '88); Northing 1870161, Easting 6226277

375 Diana Avenue

Topographic Map & Demolition Plan

LICENSED LAND SURVEYOR HARRINDER S SINGLA No. 8347 STATE OF CALIFORNIA

MH engineering Co.
16075 Vineyard Boulevard Morgan Hill, CA 95037

DATE: 04/2025 DRAWN:RS CHECKED: HS

Sheet **C3** of **10**
223100

L:\Projects\Harry\223100-Valley Oak Partners SB330, Diana Ave\DWG\223100 C3 Topo Map & Demolition Plan.dwg - 04/17/2025 3:04pm - Plotted 04/11/2025 3:05pm by Harry

EXHIBIT "B"
STANDARD CONDITIONS

APPLICATION NO: SD2024-0009
THE FOLLOWING APPROVAL REQUIREMENTS AND ANY SPECIAL CONDITIONS SHALL BE APPLIED THROUGH THE DEVELOPMENT APPROVAL PROCESS.

Legend

MHMC= Morgan Hill Municipal Code
MHARH= Morgan Hill Architectural Review Handbook
CMH= City of Morgan Hill
CFC= California Fire Code

PROJECT DESCRIPTION

Vesting Subdivision Map application to subdivide an approximate 5-acre site into 19 lots with associated on-site and off-site improvements to allow for the construction of 93 attached townhome-style units dispersed between 16 buildings with private open space and neighborhood parks. The site is located on the northeast corner of Butterfield Blvd. and Diana Avenue at 375 Diana Avenue as defined by Assessor's Parcel Numbers 726-12-001 and 004.

The project shall comply with all requirements of related project approvals granted by the City, including all of the following:

Design Permit Application SR2024-0019
Initial Study EA2024-0014

Affordable Housing.
The project will provide 14 below-market-rate units (15% of the project) to be restricted for sale to qualified moderate-income buyers. Prior to the recordation of the final map (SD2024-0009), an Inclusionary Housing Ordinance Agreement shall be executed between the developer/applicant and the City.

PROJECT CONDITIONS OF APPROVAL

This Vesting Subdivision Map approval is limited to the plan set stamped approved on July 8th, 2025 on file (File Number SD2024-0009) with the Development Services Department. It shall be the responsibility of the Owner to ensure that any changes or modifications to the Project or any Unit are in compliance with the original City

Conditions of Approval of the Project, which are hereby incorporated herein as set forth in full.

The Final Map shall be in substantial compliance with the approved Vesting Tentative Map as determined by the City Engineer and Development Services Director.

PLANNING DIVISION

1. Defense and Indemnity: As part of, and in connection, with this application to the City of Morgan Hill, Applicant agrees to defend, indemnify, and hold harmless the City of Morgan Hill, its officers, agents, employees, officials and representatives (Indemnitees) from and against any and all claims, actions, or proceedings arising from any suit for damages or for equitable or injunctive relief which is filed against City to attack, set aside, void or annul its approval of this application or any related decision, or the adoption of any environmental documents which relates to said approval. The City shall promptly notify the Applicant of any such claim, action or proceeding and the City shall cooperate fully in the defense thereof. In the event that Applicant is required to defend Indemnitees in connection with the proceeding, Indemnitees shall retain the right to approve (a) the counsel to so defend Indemnitees; (b) all significant decisions concerning the manner in which the defense is conducted; and (c) any and all settlements, which approval shall not be unreasonably withheld. This indemnification shall include, but is not limited to, (a) all pre-tender litigation costs incurred on behalf of the City, including City's attorney's fees and all other litigation costs and expenses, including expert witnesses, required to defend against any lawsuit brought as a result of City's approval or approvals; (b) reasonable internal City administrative costs, including but not limited to staff time and expense spent on the litigation, after tender is accepted; and (c) all damages, costs, expenses, attorney fees or expert witness fees that may be awarded to the prevailing party arising out of or in connection with the approval of the application or related decision. City may, in its sole discretion, participate in the defense of such action; but such participation shall not relieve Applicant of its obligations under this condition. The undersigned hereby represents that they are the Applicant or are fully empowered by the Applicant as their agent to agree to provide the indemnification, defense and hold harmless obligations, and the signature below represents the unconditional agreement by Applicant to be bound by such conditions.

2. Time Limit: The Vesting Subdivision map approval granted pursuant to this Resolution shall remain in effect for two years from July 8th, 2025. Failure to obtain building permits and commence grading within this term shall result in termination of approval unless an extension of time is granted with a showing of just cause prior to expiration date. (MHMC 18.108.040)

3. Mitigation Fee Act: Notice is hereby given that, pursuant to the Mitigation Fee Act, the City of Morgan Hill charges certain fees (as such term is defined in Government Code Section 66000) pursuant to MHMC Chapter 3.56 in connection with approval of this development project for the purpose of defraying all or a portion of the cost of public facilities related to this development project (Mitigation Fee Act Fees). MHMC Section 3.56.050 provides for automatic annual adjustment on January 15 of those fees in existence utilizing the Engineering News Record Index for the preceding twelve months. These fees do not include fees for processing applications for governmental regulatory actions or approvals. The Mitigation Fee Act Fees applying to this project are listed in the schedule of fees to be provided at building permit stage and are generally described below in the Engineering Divisions Conditions, section H. Notice is also hereby given that the Developer has an opportunity to protest the imposition of the Mitigation Fee Act Fees within 90 days of the approval or conditional approval of this development project and that the 90-day protest period has begun.

4. Covenants, Conditions and Restrictions: The applicant shall provide a set of Covenants, Conditions and Restrictions (CC&R's), Bylaws and Articles of Incorporation, for review and approval by the Development Services Director prior to final occupancy or recordation of a final map. All such CC&Rs shall include the following:

   A. The Owners recognize that the use, modification and proper maintenance of the Common Area and public right-of-way(s)* are for the benefit of all citizens of the City of Morgan Hill (City) and that the City is an intended third-party beneficiary of these covenants, conditions and restrictions and may, upon notice of hearing as set forth below, exercise the same powers of enforcement as the Association.

      *Public right-of-way: Exclusive of streets dedicated to and accepted by the City of Morgan Hill.

   B. The City may, by mail or personal delivery, give written notice of the breach of any maintenance obligation to the Association with a demand that such breach be remedied. If such breach is not remedied within thirty (30) days of the mailing or delivery of such notice, the City shall have standing and the right (but not the obligation) to bring a court action against the Association and Owners to enforce such provision. In addition, the City shall be entitled to recover reasonable attorneys' fees and costs incurred in such action.

   C. The Notice may also contain a date for a hearing on the matter before a City employee designated by the City (which hearing shall be held no

sooner than fifteen (15) days after mailing of such notice), and if after such hearing the City determines that there has been inadequate maintenance, the City shall have the right (but not the obligation) to undertake the maintenance of the Common Area or public right-of-way in question. Any and all costs incurred by the City in so maintaining the Common Area or public right-of-way shall be a lien against all the properties included with the Project and shall be the personal responsibility of the Owners and the Association.

D. The entire Project and all of the properties located thereon shall be subject to the conditions and restrictions of all subdivision and other Project approvals by the City, with respect to the Project. Any changes and/or modifications to the Project and/or any Unit, including but not limited to changes to the exterior of any Unit, may be subject to review and approval of the City of Morgan Hill as may be determined by review of the Project approvals by the City of Morgan Hill.

E. This section may not be amended without the prior written consent of the Development Services Director for the City. Nothing contained in this section shall limit any other right or remedy which the City may have under its ordinances or state law.

F. For the purposes of this section, the question of whether there has been a breach of a maintenance obligation or adequate maintenance shall be determined by the provisions of the original Declaration as first recorded with the County Recorder for Santa Clara County and by any amendment thereto, but only to the extent that such maintenance obligation or duty of maintenance is increased by such amendment.

.

ENGINEERING DIVISION

5. Final Map, Easements, and Street Right-of-Way Dedications

A. Final Map: The project's tract/final map shall be approved by the City Council prior to issuance of a grading permit.
B. At improvement plan stage, the project shall confirm if the Diana Avenue frontage was dedicated to the City, in fee. If the project's Diana Avenue frontage was dedicated in easement, the project shall rededicate, in fee, on the Final Map the project's Diana Avenue frontage up to the centerline of the street.
C. The project shall provide Private Storm Drainage Easements on the Final Map over the areas with proposed stormwater control measures, bioretention ponds, and underground perforated pipe manifolds.

D. At improvement plan stage, all private utilities that benefit the condominium owners or convey drainage to the stormwater control measures shall be covered in the project's Covenants, Conditions, and Restrictions (CC&Rs).

E. Reciprocal Access: Reciprocal access easements and maintenance agreements ensuring access to all parcels and joint maintenance of all common roads, drives or parking areas shall be provided by CC&R's and by deed and shall be recorded concurrent with the map, or prior to issuance of building permit where no map is involved. (MHMC 17.20.350 H)

6. Street Improvements

A. Diana Avenue Frontage: The final road section for Diana Avenue will be determined by the City Engineer at improvement plan stage. If the existing road section is determined to be insufficient or inconsistent, the project shall remove and replace the existing road section on Diana Avenue. The minimum required street improvement shall be a two-inch removal and replacement of the existing asphalt concrete pavement along the project's Diana Avenue frontage and up to the street centerline.

B. At improvement plan stage, revise the plans to show the removal of the existing driveway approach at Diana Avenue and replacement with curb and gutter, park strip, and 5' detached sidewalk.

C. A detailed review of the existing condition of curb and gutter along the project's Diana Avenue frontage shall be performed at improvement plan stage. If the condition of the curb and gutter is determined to be inadequate, the project shall replace the curb and gutter along the project's frontage.

D. The Landscape Plans proposed enhanced paving at the Diana Avenue driveway. Enhanced paving will not be allowed within the public right-of-way or within a Public Service Easement (PSE). At improvement plan stage, revise the plans to show enhanced paving outside of the public right-of-way and PSE.

E. A detailed review of the final design of public improvements, including but not limited to, placement of streetlights, street trees, detached sidewalk, the project's proposed entrance, traffic markings and striping, etc., will be performed at improvement plan stage.

F. At improvement plan stage, the project shall submit a Separate Offsite Improvement Plan set to Land Development Engineering. The Onsite Improvement Plans shall be submitted to the Building Division as part of the project's Grading/Building Permit application.

H. Include the Offsite Landscaping Plan as part of the project's Offsite Improvement Plan set.

7. Utilities:
   A. At building permit/improvement plan stage, the project shall abandon/remove all existing, unused water and sewer services per City Standards.
   B. All new water main installations (public and private) shall adhere to the separation criteria established by the California Waterworks Standards (California Code of Regulations (CCR), Title 22, Division 4, Chapter 16, Section 64572). Any proposal for alternative compliance to these requirements shall be submitted to the State Water Resources Control Board's Division of Drinking Water, pursuant to CCR, Title 22, Section 64551.100.
   C. Broadband Connectivity: The project is required to comply with the City's Broadband Standards for conduits installed in the public right-of-way(s) fronting the project site. At building permit/improvement plan stage, revise the plans to show the following:
      a. Broadband conduit installed in the public right-of-way(s) to serve the project.
      b. Broadband conduit from the public right-of-way to each home or occupied building in the project.

8. Impact Fees & Fee Increase: The Developer shall pay all applicable impact fees and other engineering review fees (fees other than impact fees are automatically adjusted annually on July 1st) prior to building permit issuance and building final. The fees will be based on Public Works Fee Schedule prepared by Land Development Engineering. The estimated total amount of impact fees and engineering review fees for this project based on the Fee Schedule currently in effect is $3,492,000 based on 93 townhome style condominiums (multi-family units) with the square footage of each unit greater than 1,200 square feet.

9. Final Map: The applicant shall have a Final Map prepared by a registered engineer (licensed prior to 01/01/1982: registration number 33,965 or lower) or licensed land surveyor delineating all parcels and easements created. There shall be concurrence in writing by PG & E, Telephone, Cable TV and any other affected agencies to all improvements and easements which are applicable to them. The number and locations of monuments shall be set as required by the City Engineer. (MHMC 17.20.200 A; 17.20.290; 17.24.010)

10. Public and Private Improvements: The applicant shall cause the construction of all public and private improvements in accordance with the latest City Standard Drawings and Specifications. (MHMC 12.02.090 A; 17.32.010 A)

11. Improvement Plans: The applicant shall submit as part of the improvement plans for the project, profiles of all improvements in the subdivision and typical cross-sections of all streets and details of curbs, gutters, and sidewalks, to be

accomplished to the satisfaction of the City Engineer prior to submittal of Final Map. (MHMC Sec 17.32.060 B; 17.32.070; 17.32.080 A) Improvement plans are to show water lines, sanitary sewer, storm drain system, pavement widths, curve radius, and existing utilities.

12. Encroachment Permits: Obtain an encroachment permit from the City of Morgan Hill and provide guarantee covering off-site improvements. (MHMC 12.08.040 A; 12.08.090)

13. Subdivision Improvements Agreement: Enter into a Subdivision Improvements Agreement with the City of Morgan Hill to cover required improvements. (MHMC12.02.150; 17.32.010 B; 17.32.160)

14. Public and Private Streets: The applicant shall cause the design and construction of all new public and private streets serving the project. The design of all new public and private streets shall be consistent with the General Plan Land Use and Circulation Element as well as the Street Standard Details as contained within the Public Works Standards Details. The construction of the streets shall be undertaken to the lines and grades and in a manner satisfactory to the City Engineer pursuant to City standards. All street improvements shall be constructed to the satisfaction of the City Engineer pursuant to City standards. The timing of the improvements will be determined by the City. (MHMC 12.02.010; 12.02.090; 17.32.060 B; CMH General Plan; CMH Design Standards and Standard Details for Construction)

15. Installation and Dedication of Streets: The project shall install and dedicate street improvements including, but not limited to, curb and gutter, sidewalk, compaction, street paving, oiling, storm drainage facilities, sewer and water, fire protection, undergrounding of utilities and street lighting in conformance with City of Morgan Hill requirements. (MHMC 12.02.010; 12.02.50; 12.02.080; 12.02.100; 17.28.010; 17.32.060)

16. Underground Existing Utilities: All existing overhead utilities adjacent to any site boundary or along any street frontage of the site shall be placed underground in accordance with City standards and affected utility company guidelines. (MHMC 12.02.090 B; 17.32.020 E.1)

17. Street Trees: The proposed street trees shall comply with the street tree species and spacing listed under the applicable zone in the Master Street Tree List of the City's Master Street Tree Plan. The street tree species will be approved by the City Engineer at improvement plan stage.

18. Easement Dedications: The owner shall dedicate all necessary utility easements. (MHMC 12.02.080D; 17.28.010 A)

HOUSING DIVISION

19. Inclusionary Housing Agreement: The developer shall execute and record an Inclusionary Affordable Housing Agreement with the City prior recordation of final map. (MHMC 14.04.050)

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RESOLUTION NO. 25-011

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF MORGAN HILL APPROVING ONE DEVELOPMENT STANDARD WAIVER FOR THE DIANA-VALLEY OAK RESIDENTIAL PROJECT CONTAINING 15% PERCENT AFFORDABLE UNITS LOCATED ON NORTHEAST CORNER OF BUTTERFIELD BOULEVARD AND DIANA AVENUE AT 375 DIANA AVENUE (APNs 726-12-001 AND 004)

WHEREAS, Valley Oak Partners submitted an application for Diana – Valley Oak (Project) a multi-family attached residential development project consisting of ninety-three dwelling units.

WHEREAS, Valley Oak Partners has requested one waiver for the housing development.

WHEREAS, the Project is a market rate housing development that includes 15 percent below market rate units to be restricted for-sale to qualified buyers with moderate incomes (14 units).

WHEREAS, pursuant to Government Code Section 65915(d)(2)(B), at least 15 percent of the total units will be available to persons and families of moderate income in a common interest development and therefore, is allowed one concession and unlimited waivers.

WHEREAS, the city shall grant the waiver requested by the applicant unless the city makes a written finding as required by Government Code Section 65915(e)(l), based upon substantial evidence, of any of the following:

The waiver or reduction of the development standard would have a specific, adverse impact, as defined in paragraph (2) of subdivision (d) of Section 65589.5, upon health or safety, and for which there is no feasible method to satisfactorily mitigate or avoid the specific adverse impact. The waiver or reduced development standards would have an adverse impact on any real property that is listed in the California Register of Historical Resources, or the waiver or reduction would be contrary to state or federal law.

WHEREAS, the city shall grant the waiver requested by the applicant to allow for a reduction to the stream and riparian setback.

WHEREAS, the proposed project will provide a public benefit of a minimum of 15 percent of affordable units, for persons and families of moderate income, incorporated within the Diana – Valley Oak project located on the northeast corner of Butterfield Boulevard and Diana Avenue at 375 Diana Avenue and identified by Assessor's Parcel Numbers 726-12-001 and 726-12-004.

Docusign Envelope ID: 6954EE60-7A1D-4B2D-927E-D89889BD4055

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

Section 1. The City Council does hereby find that the foregoing recitals are true and correct.

Section 2. The project is consistent with the Zoning Ordinance and General Plan.

Section 3. The project is eligible for the proposed waiver per the Municipal Code Section 18.48.050 within the Municipal Code.

Section 4. The City Council of the City of Morgan Hill hereby approves the waiver request for the Diana – Valley Oak project.

Section 5. This resolution shall take effect immediately upon adoption.

PASSED, APPROVED AND ADOPTED by the City Council of the City of Morgan Hill at a regular meeting held on the 21st day of May 2025 by the following vote:

AYES:	**COUNCIL MEMBERS:**	**Mark Turner, Marilyn Librers, Miriam Vega Soraida Iwanaga, Yvonne Martinez Beltran**
NOES:	**COUNCIL MEMBERS:**	**None**
ABSTAIN:	**COUNCIL MEMBERS:**	**None**
ABSENT:	**COUNCIL MEMBERS:**	**None**

APPROVED:

Signed by:
Mark Turner
[illegible]

MARK TURNER, Mayor

ATTEST:

Signed by:
Michelle Bigelow
[illegible]

MICHELLE BIGELOW, City Clerk

Docusign Envelope ID: 6954EE60-7A1D-4B2D-927E-D89889BD4055

CERTIFICATION

I, **Michelle Bigelow, City Clerk of the City of Morgan Hill, California,** do hereby certify that the foregoing is a true and correct copy of Resolution No. 25-011, adopted by the City Council at a regular meeting held on May 21, 2025.

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

DATE: 5/27/2025

Signed by:
Michelle Bigelow
[illegible]

MICHELLE BIGELOW, City Clerk

SANTA CLARA VALLEY HABITAT AGENCY

City of Gilroy | City of Morgan Hill | City of San José | County of Santa Clara | Santa Clara Valley Water District | Santa Clara Valley Transportation Authority

Santa Clara Valley Habitat Plan
CONDITION 11 EXCEPTION REQUEST

Date	**February 26, 2025**
Subject	Stream and Riparian Setback Condition (Condition 11) Exception for375 Diana Ave MH Housing Project
Recommendation	Approve exception to reduce setback to no less than 21 feet from top of bank of unnamed Category 2 Stream channel
Reviewed by	Don Arnold, Planner

Diana MH Homes, LLC is requesting an exception from Condition 11, Stream and Riparian Setback for their project titled 375 Diana Ave Housing Project located in Morgan Hill, CA.

This condition applies to all covered activities that may impact streams. This includes all development inside the urban service area where a stream or the stream setback overlaps any portion of the parcel on which a covered activity is being implemented. Condition 11 Exception Criteria

For all proposed exceptions to the stream setbacks (inside or outside the urban service area), exceptions will be considered based on the following factors:

1. The existence of legal uses within the setback.
2. The extent to which meeting the required setback would result in a demonstrable hardship (i.e., denies an owner any economically viable use of his land or adversely affects recognized real property interests) for the applicant.
3. The extent to which meeting the required setback would require deviation from, exceptions to, or variances from other established policies, ordinances or standards regarding grading, access, water supply, wastewater treatment, disposal systems, geologic hazards, zoning, or other established code standards.

4. The stream setback exception does not preclude achieving the biological goals and objectives of the Habitat Plan or conflict with other applicable requirements of the Habitat Plan and local policies.

Other considerations may be made based on:

- the implications of a reduced setback on the riparian system and covered species, progress toward the biological goals and objectives of the Plan, and potential effects on adjacent properties; and
- if the exception would allow the project to avoid and minimize impacts on covered species and natural land cover types to the maximum extent practicable.

Exception Applicability and Evaluation

The proposed project is an urban infill housing project located in Morgan Hill, CA. The Category 2 stream channel that is requiring the stream setback exception (SSE) is an engineered stormwater conveyance facility with development encroaching to within 21 feet of top of bank both upstream and downstream of the project. The project proponent is requesting a SSE to the minimum of 35 feet for all Category 2 streams, to no less than 21 feet from top bank.

There are existing uses in the setback currently both upstream and downstream of the project and on the project site. There are housing developments and perimeter fencing on or adjacent to the project site within the 35-foot setback, currently. The area has also been mowed frequently.

Even though there are multiple projects that could make this land economically viable, not allowing the exception could adversely affect recognized real property interests.

The project proponent has chosen a housing project that can benefit from higher densities and more affordable units. Allowing the setback exception allows the project to meet housing density goals for Morgan Hill.

Allowing this SSE will not interfere with the biological goals and objectives of the Plan.

Determination

Based on the justification provided by the project proponent and, in consultation with USFWS and CDFW, the Santa Clara Valley Habitat Agency recommends approval of a reduced stream setback to no less than 21 feet from the unnamed Category 2 stream channel. Please consider using native plants during any revegetation or planting areas, especially within the setback area.

Figure 1. Vicinity Map

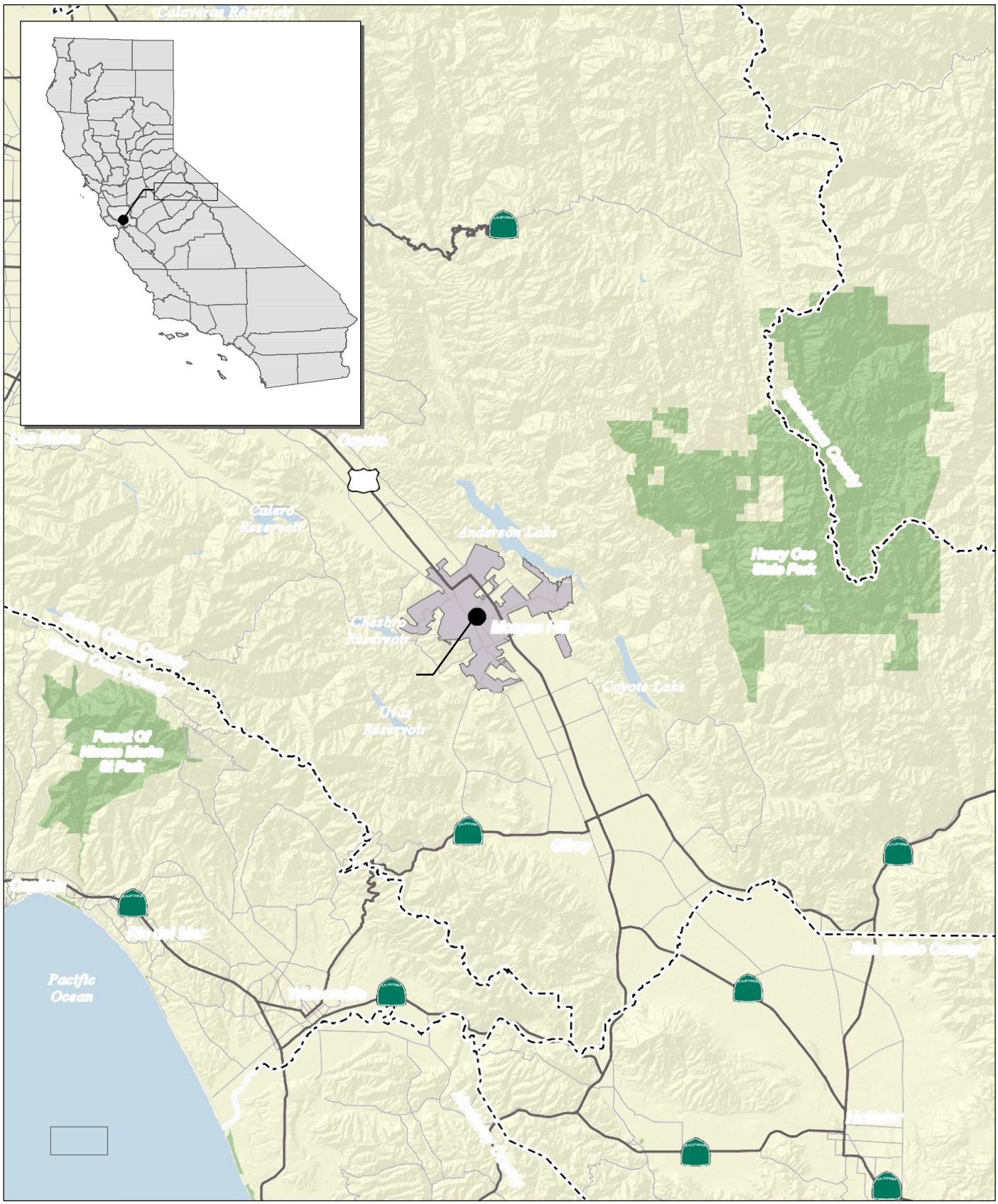
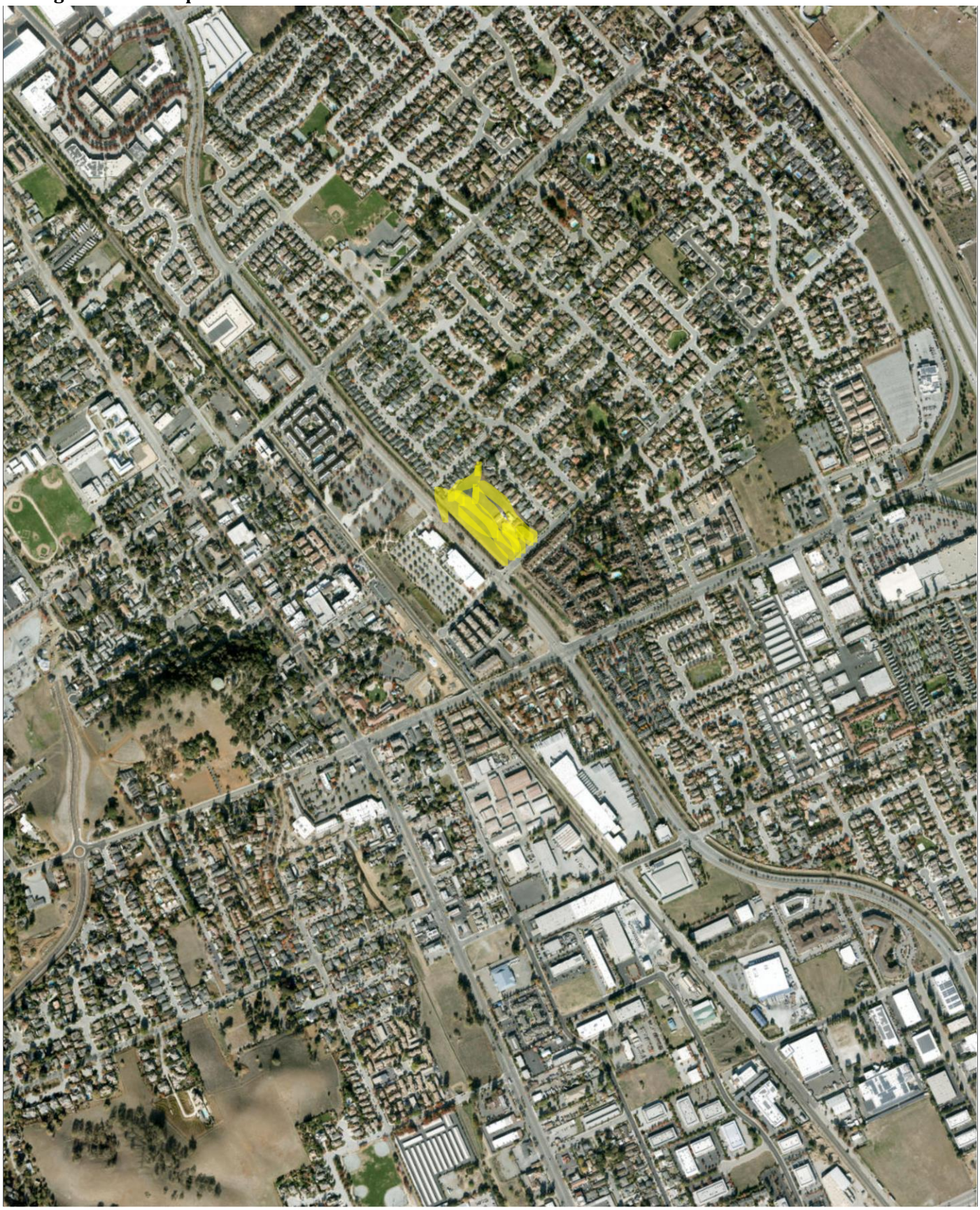
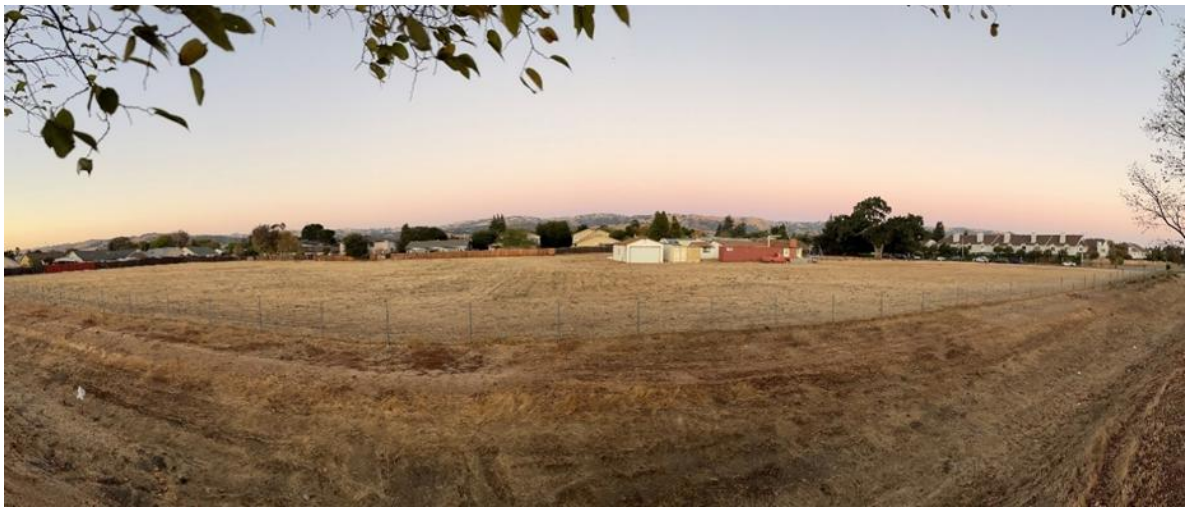


Figure 2. Site Map





375 Diana Avenue Residential Project

Environmental Consistency Checklist Pursuant to CEQA Guidelines Section 15183

prepared by

City of Morgan Hill
Development Services Department
17575 Peak Avenue
Morgan Hill, California 95037
Contact: Tiffany Brown, Senior Planner

prepared with the assistance of

Rincon Consultants, Inc.
66 Franklin Street, Suite 300
Oakland, California 94607

April 2025

RINCON CONSULTANTS, INC. SINCE 1994

375 Diana Avenue Residential Project

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Appendix D Geotechnical Feasibility Study
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Appendix G Noise Impact Analysis
Appendix H Trip Generation and Operations Analysis and Supplemental Vehicle Miles Traveled Evaluation

Project Description

1. Project Title

375 Diana Avenue Residential Project

2. Lead Agency Name and Address

City of Morgan Hill
Development Services Department
17575 Peak Avenue
Morgan Hill, California 95037

3. Lead Agency Contact

Tiffany Brown, Senior Planner
408-310-4655, Tiffany.Brown@morganhill.ca.gov

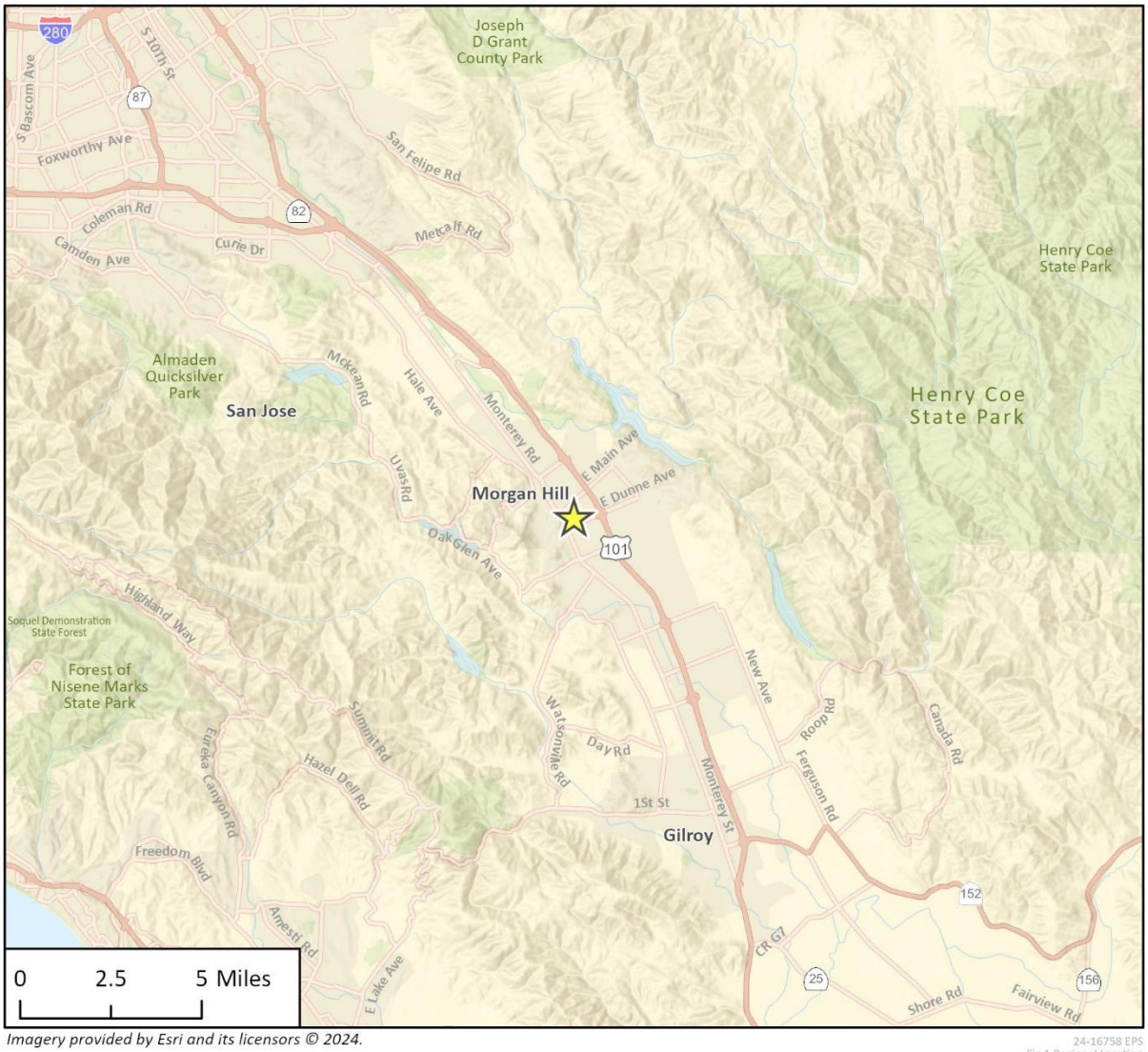
4. Project Location

The project site is located at 375 Diana Avenue in the City of Morgan Hill, Santa Clara County. The project site is at the northeast corner of Diana Avenue and Butterfield Boulevard. The site is approximately 5.45 gross acres (5.3 net acres) in size and consists of two assessor parcels (APNs), APN 726-12-001 and APN 726-12-004. Figure 1 shows the regional location of the proposed project and Figure 2 shows the location of the project site in its immediate context.

5. Project Applicant

Valley Oak Partners, LLC
734 The Alameda
San Jose, California 95126

Figure 1 Regional Location



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24-16758 EPS
Fig 1 Regional Location

Project Location

N

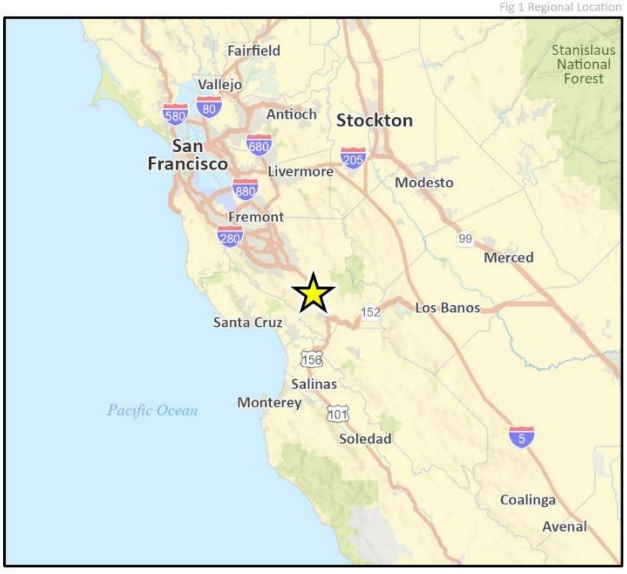
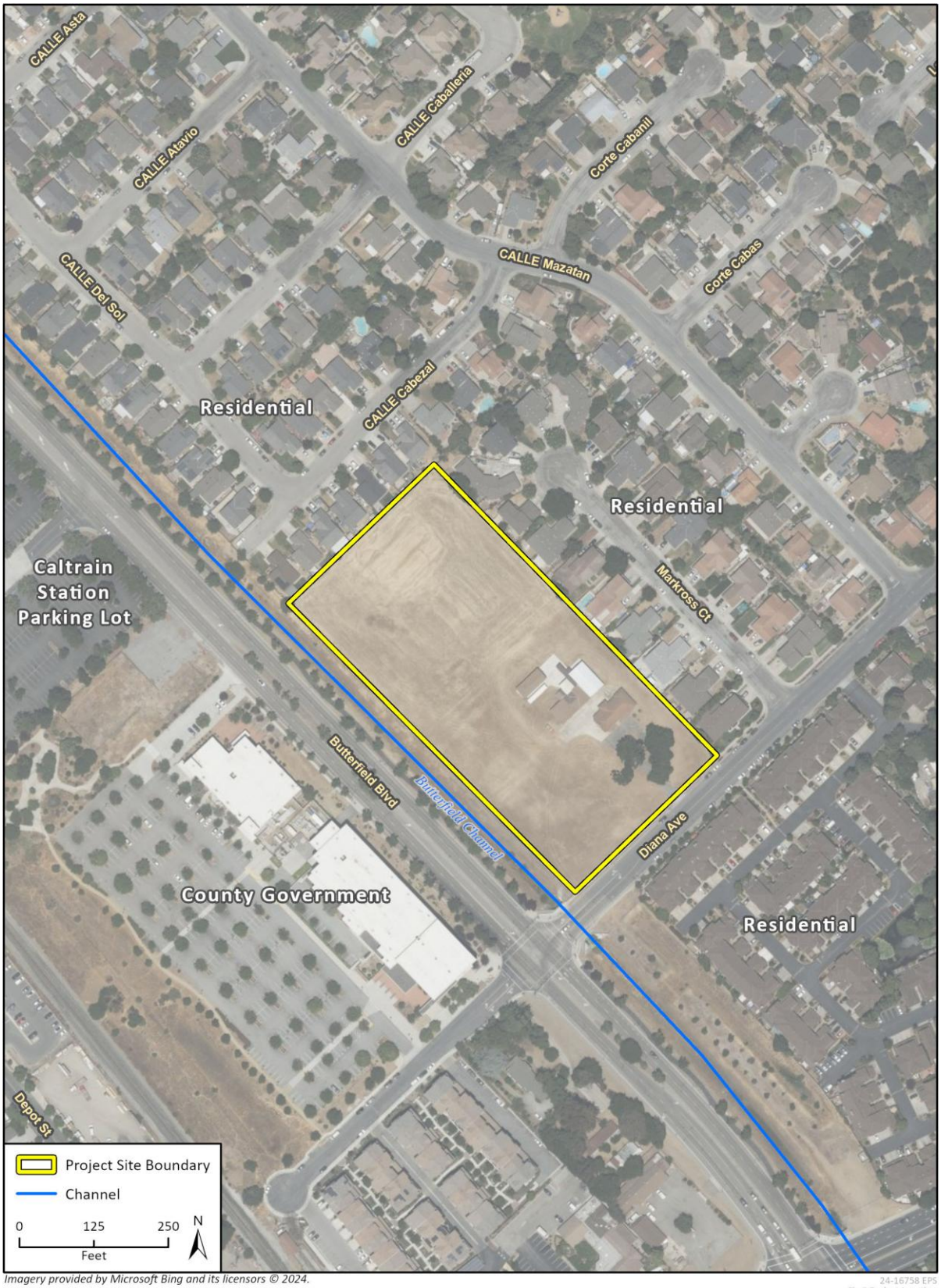


Figure 2 Project Site Location



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Additional data provided by Santa Clara County, 2024.

24-16758 EPS
Fig 2 Project Location

6. General Plan Designation

The project site is designated Residential Attached Medium (RAM) in the Morgan Hill 2035 General Plan (City of Morgan Hill 2016). The General Plan defines the RAM category as allowing for "attached housing types including townhomes, garden apartments, and stacked flats…this designation accommodates 16 to 24 units per net acre, most of which are townhomes, apartments, or condominiums."

7. Zoning

The project site is zoned Residential Attached Medium (RAM). Section 18.18.010 of the Morgan Hill Municipal Code states that the purpose of the RAM district is "to provide locations for medium density attached housing types." Section 18.18.020 sets forth the allowed uses and permit requirements in the RAM district as well as development standards such as minimum lot size, building coverage, site area per dwelling unit, building height limits and required setbacks.

8. Project Site Setting and Background

As shown on Figure 2, the project site is bordered by single-family residences to the northeast and northwest, Diana Avenue to the southeast, and Butterfield Boulevard to the southwest. Across Diana Avenue to the southeast are single-family residences and across Butterfield Boulevard to the southwest are the Santa Clara County Superior Court complex and the Morgan Hill Caltrain Station. The unlined Butterfield Channel, a drainage facility maintained by the City of Morgan Hill, runs adjacent to the site's western border between the site and Butterfield Boulevard.

The project site is generally level and is developed with a single-family residence, two accessory buildings and paved areas for vehicle access. Four mature coast live oak trees are located in the driveway area. The remainder of the site is mowed, non-native annual grassland. Figure 3 and Figure 4 show photographs of the project site.

Figure 3 Photographs of Project Site

Photograph 1: View of the existing fence, field and structures taken from the pedestrian path along Butterfield Avenue looking north. The existing drainage ditch is visible in the foreground.

Photograph 2: View of existing trees, fence and driveway taken from the east corner of the project site looking to the west.

Figure 4 Photographs of Project Site

Photograph 3: View of existing fence and undeveloped areas of the site taken from the pedestrian path on Butterfield Boulevard looking east.

Photograph 4: View looking southeast of existing structures, fence, drainage ditch, and residential development beyond across Diana Avenue.

9. Description of the Project

The project would involve demolition of the existing buildings on the project site, removal of the four existing trees, and construction of 93 three-story attached condominium residential units in 16 separate buildings. The project would also include internal roadways and walkways, landscaping, stormwater management features, and common open space amenities.

Residential units would range from two- to four-bedrooms with gross living areas ranging from approximately 1,410 square feet to approximately 2,093 square feet. The project would include 14 affordable units. Amenities would include benches, a passive recreation area, shade trellis area, picnic and BBQ areas, and an exercise structure. Second-level deck areas would provide private open space for each unit.

A newly constructed driveway would provide vehicular access from Diana Avenue and 217 automobile parking spaces are proposed, including 2-car garages for each unit and 31 surface parking spaces.

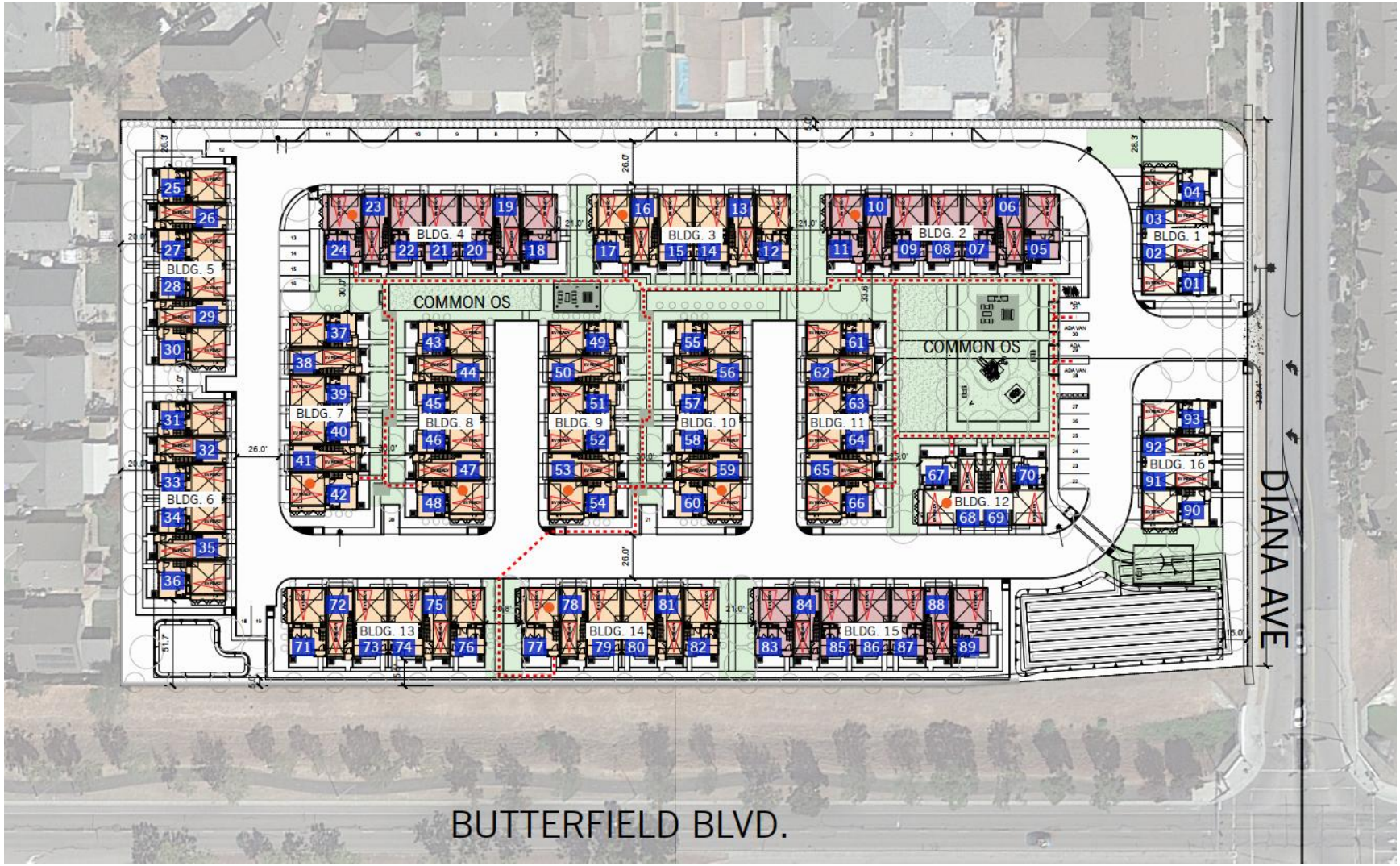
Table 1 summarizes the project characteristics and Figure 5 shows the proposed site plan.

Table 1 Project Summary

Proposed Project Characteristics	**RAM Requirements**	**Proposed by Project**
Density	16-24 dwelling units per net acre	17.5 dwelling units per acre
Minimum Lot Size	6,000 sf	231,049 sf
Building Height	3 stories/40 ft (maximum)	3 stories/40 ft
Lot Dimensions	**RAM Requirements[1]**	**Proposed by Project**
Average Lot Width	60 ft (minimum)	329.4 ft
Average Lot Depth	85 ft (minimum)	680.1 ft
Lot Coverage (percent)	60 percent (maximum)	35 percent
Yard Dimensions	**RAM Requirements[1]**	**Proposed by Project**
Front Setback	15 ft (minimum)	15 ft (minimum)
Interior Side Setback	5 ft (minimum)	29 ft (minimum)
Street Side Setback	15 ft (minimum)	15.5 ft (minimum)
Rear Setback	20 ft (minimum)	20 ft (minimum)
Parking	**RAM Requirements[1]**	**Proposed by Project**
Parking Spaces	1 covered and 1 uncovered per 2-bedroom unit 1 covered and 1.5 uncovered per 4-bedroom unit	2 covered parking spaces per 2-bedroom dwelling unit (64 total) 2 covered parking spaces per 4-bedroom unit (122 total) and 0.5 uncovered parking spaced per unit (31 total)

Notes: sf = square feet; ft = feet

Figure 5 Proposed Site Plan



Site Access, Circulation, and Parking

Vehicular access would be via a driveway located along the Diana Avenue frontage in the southeast corner of the project site, and internal circulation would be provided by a newly constructed 26-foot-wide internal road. A total of 217 parking spaces would be provided in private two-car garages for each residence and 31 additional surface parking spaces throughout the site.

The project would include walkways for pedestrian access and circulation that would connect residential entries to the surrounding streets, surface parking, and common open space.

Construction

Project construction would occur over approximately 36 months and would involve approximately 2 months of demolition, 2 months of site preparation, 2 months of grading, 32 months of building construction, 26 months of architectural coating, and 2 months of paving. Approximately 8,300 square feet of building would be demolished, resulting in approximately 1,138 tons of demolition debris. Approximately 2,138 cubic yards of soil would be excavated (cut) during site preparation and approximately 8,074 cubic yards of soil would be excavated during grading, with approximately 6,813 cubic yards of soil used as fill. Approximately 1,261 cubic yards of soil would be exported offsite. In a determination dated February 26, 2025, the Santa Clara Valley Habitat Agency recommended approval of a reduced setback for the project from the Butterfield Channel. This reduces the required setback from 35 feet to the project's proposed 21 feet.

Stormwater Management

The project would include stormwater basins and subsurface stormwater storage. One bio-retention area (1,150 square feet) would be located in the west corner of the project site, and a second bio-retention area (5,167 square feet) and an underground manifold with a storage capacity of 29,858 cubic feet would be located in the south corner of the project site.

Landscaping, Trees, and Irrigation

The project site currently contains four mature coast live oak (*Quercus agrifolia*) trees within the southern portion of the site. All four trees exceeded the 18-inch indigenous circumference requirement to qualify as a City designated Ordinance Size Tree. The proposed project would include removal of the four existing trees.

Landscaping would include a 6-foot perimeter fence around the project site and patio fencing around individual patios. Proposed landscaping includes street trees, accent trees and shrubs, perimeter screening trees, and planting areas designed to comply with City of Morgan Hill Water Conservation and Landscape Ordinance Chapter 18.148 of the Morgan Hill Municipal Code and the requirements of Chapter 18.64 (Landscaping) of the Morgan Hill Municipal code.

Open Space and Amenities

The proposed project would include approximately 34,970 square feet of common open space and 13,950 square feet of private open space. Proposed common space amenities include benches, a passive recreation area, shade trellis area, picnic / BBQ areas, and an exercise structure. Second-level deck areas would provide private open space for each unit.

10. Other Public Agencies Whose Approval is Required (e.g., Permits, Financing Approval, or Participation Agreement)

The City of Morgan Hill is the lead agency with responsibility for approving the project. Discretionary approval from other public agencies is not required. The project requires the following discretionary approvals from the City of Morgan Hill:

- Design Permit;
- Subdivision Map:
- Final Map;
- Off Site Improvements Agreement; and
- Associated Building and Grading Permits

11. Environmental Factors Potentially Affected

This Project would potentially affect the environmental factors checked below with an impact that is "Potentially Significant" or "Less than Significant with Mitigation Incorporated" that was not studied in the prior EIR as indicated by the Environmental Checklist on the following pages.

☐ Aesthetics	☐ Agriculture and Forestry Resources	☐ Air Quality
☐ Biological Resources	☐ Cultural Resources	☐ Energy
☐ Geology and Soils	☐ Greenhouse Gas Emissions	☐ Hazards and Hazardous Materials
☐ Hydrology and Water Quality	☐ Land Use and Planning	☐ Mineral Resources
☐ Noise	☐ Population and Housing	☐ Public Services
☐ Recreation	☐ Transportation and Traffic	☐ Tribal Cultural Resources
☐ Utilities and Service Systems	☐ Wildfire	☐ Mandatory Findings of Significance

12. Determination

On the basis of this initial evaluation:

■ I find that the proposed Project is consistent with a Community Plan or Zoning and WOULD NOT result in: 1) a peculiar impact that was not identified as a significant impact under the prior EIR; 2) a significant impact that was not analyzed as significant in the prior EIR; 3) a potentially significant offsite impact or cumulative impact not discussed in the prior EIR; or 4) a more severe impact due to substantial new information that was not known at the time of the prior EIR. New effects would be substantially mitigated under uniformly applicable development policies or standards. Pursuant to CEQA Guidelines section 15183, NO FURTHER REVIEW is required.

□ I find that the proposed Project WOULD result in: 1) a peculiar impact that was not identified as a significant impact under the prior EIR; 2) a significant impact that was not analyzed as significant in the prior EIR; 3) a potentially significant offsite impact or cumulative impact not discussed in the prior EIR; or 4) a more severe impact due to substantial new information that was not known at the time of the prior EIR. I find that FURTHER ENVIRONMENTAL REVIEW is necessary to analyze those effects that are subject to CEQA pursuant to CEQA Guidelines Section 15183.

Signature	Date
Printed Name	Title

This report follows a checklist format that outlines eligibility criteria for streamlined review under the California Environmental Quality Act (CEQA) Section 15183. A consistency checklist may be prepared by a lead agency to streamline the environmental review process for eligible projects by limiting the topics subject to review at the project level where the effects of development have been addressed in a previous Environmental Impact Report (EIR). In accordance with CEQA Guidelines Section 15183, if the project would result in new specific effects or more significant effects, and uniformly applicable development policies or standards would not substantially mitigate such effects, those effects are subject to CEQA. With respect to the effects that are subject to CEQA, the lead agency is to prepare a Mitigated Negative Declaration or EIR if the written checklist shows the effects of the infill project would be potentially significant.

The checklist concludes that the project would not have significant effects on the environment that either have not been analyzed in a prior EIR or are more significant than previously analyzed, or that uniformly applicable development policies would not substantially mitigate. Pursuant to Public Resources Code (PRC) Section 21094.5, such effects are exempt from further CEQA review.

California PRC Section 21083.3 also limits the application of CEQA to effects on the environment peculiar to the parcel or to the project and that were not addressed as significant effects in the prior

environmental impact report, or about which substantial new information shows will be more significant than described in the prior EIR, when projects are consistent with the development density established by existing zoning, community plan, or general plan policies for which an EIR was certified (CEQA Guidelines Section 15183[a], also PRC Section 21083.3[b]).

This CEQA Guidelines Section 15183 Consistency Checklist has been prepared in accordance with PRC Section 21000 et seq. and the CEQA Guidelines, California Code of Regulations Section 15000 et seq.

Environmental Checklist

Pursuant to CEQA Guidelines Section 15183, projects consistent with the development density established by existing zoning, community plan, or general plan policies for which an EIR was certified may not require additional review unless there may be project-specific effects that are peculiar to the project or site that were not adequately addressed in the EIR for the general plan. In approving a project meeting the requirements of Section 15183 of the CEQA Guidelines, a public agency must limit its examination of environmental effects to those the agency determines in an Initial Study or other analysis:

1. Are peculiar to the project or the parcel on which the project would be located
2. Were not analyzed as significant effects in a prior EIR on the zoning action, general plan, or community plan, with which the project is consistent
3. Are potentially significant off-site impacts and cumulative impacts which were not discussed in the prior EIR prepared for the general plan, community plan or zoning action
4. Are previously identified significant effects which, as a result of substantial new information which was not known at the time the EIR was certified, are determined to have a more severe adverse impact than discussed in the prior EIR

The purpose of this checklist is to assess consistency between the proposed project and the Morgan Hill 2035 General Plan, and to compare the environmental effects of the proposed project with the those identified in the Morgan Hill 2035 EIR to determine if additional environmental review is required under CEQA, in accordance with CEQA Guidelines Section 15183.

Pursuant to CEQA Guidelines Section 15183.3(f)(7), "Uniformly applicable development policies or standards" are policies or standards or enacted by a city or county, or by a lead agency, that reduce one or more adverse environmental effects." In evaluating the potential for adverse environmental impacts, the lead agency must identify and apply uniformly applicable development policies or standards that have been adopted by the lead agency, or city or county, and evaluate whether they would reduce potential impacts to below a level of significant. If impacts would be reduced with the application of Standard Conditions of Approval or existing policies or regulations, the project has a less than significant impact.

Relationship of the Proposed Project to Previous EIR Analysis

The City of Morgan Hill adopted the Morgan Hill 2035 General Plan on July 27, 2016. It includes goals and policies that convey the City's long-term vision and guide local decision making to reach that vision. The Morgan Hill 2035 EIR assessed impacts from the implementation of the General Plan and was certified in 2016 when the City Council adopted the General Plan.

Consistency of the Project with Adopted City Plans and Ordinances

City of Morgan Hill 2035 General Plan

The project would be located entirely in the City of Morgan Hill. The General Plan is the fundamental document that governs land use development. The project would be required to abide

by all applicable goals and policies in the adopted General Plan. The General Plan land use designation for the site is Residential Attached Medium (RAM), which allows for "attached housing types including townhomes, garden apartments, and stacked flats…this designation accommodates 16 to 24 units per net acre, most of which are townhomes, apartments, or condominiums." The proposed project would have a density of approximately 17.5 dwelling units per net acre, which would be within the range of allowed density for development in the RAM land use designation. Consistent with General Plan Housing Element Goal 1, the project would add new housing units served by transit.

City of Morgan Hill Municipal Code

The project site is zoned Residential Attached Medium (RAM). Section 18.18.010 of the Morgan Hill Municipal Code states that the purpose of the RAM district is "to provide locations for medium density attached housing types." Section 18.18.020 sets forth the allowed uses and permit requirements in the RAM district as well as development standards such as minimum lot size, building coverage, site area per dwelling unit, building height limits and required setbacks.

As shown in Table 1, the project would be consistent with the allowed uses and development standards of the RAM district.

CEQA Guidelines Updates

Subsequent to the City's certification of the Morgan Hill 2035 EIR, the *CEQA Guidelines* have been updated by the State of California. Therefore, this report is based on the current Appendix G checklist questions in the updated *CEQA Guidelines.* The current Appendix G checklist questions form the basis for this analysis, but exceptions are noted when thresholds and checklist questions from the Morgan Hill 2035 EIR are used to provide for tiering from the EIR.

1 Aesthetics

	Significant Impact	Less than Significant	No Impact	Analyzed in the Prior EIR	Substantially Mitigated by Uniformly Applicable Development Policies
Except as provided in Public Resources Code Section 21099, would the project:					
a. Have a substantial adverse effect on a scenic vista?	□	■	□	■	□
b. Substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	□	■	□	■	□
c. In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	□	■	□	■	□
d. Create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area?	□	■	□	■	□

Analysis in Previous Environmental Document

Impacts related to aesthetics were analyzed on pages 4.1-1 through 4.1-20 of the General Plan EIR. Impacts on aesthetics from implementation of the General Plan were determined to be less than significant.

The following summarizes the applicable analysis from the General Plan EIR and provides a review to determine if project-specific impacts would occur that 1) are peculiar to the project or the parcel on which the project is located; 2) were not previously analyzed in previous environmental

documents as significant effects; 3) are potentially significant off-site impacts and cumulative impacts that were not previously discussed in the previous environmental documents; and 4) are now determined to have a more severe impact than discussed in the previous environmental documents due to substantial new information.

Project-Specific Impacts

a. Would the project have a substantial adverse effect on a scenic vista?

b. Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

c. Would the project, in non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

d. Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

The project site is located within a few hundred feet of a major transit stop (the Morgan Hill Caltrain Station) and is therefore in a transit priority area as defined in CEQA Statute Section 21099 ("within one-half mile of a major transit stop"). The site also meets CEQA Statute definition of an Infill Site, as it is "a vacant site where at least 75 percent of the perimeter of the site adjoins, or is separated only by an improved public right-of-way from, parcels that are developed with qualified urban uses." Pursuant to CEQA Statute Section 21099, the aesthetic impacts of a residential project on an infill site within a transit priority area shall not be considered significant impacts on the environment. The project's impacts related to aesthetics would therefore be less than significant. The project would not result in new or more severe adverse impacts than discussed in the General Plan EIR.

Conclusion

The project would have no new significant effects which are peculiar to the project or project site or substantially more severe impacts related to aesthetics and visual resources, nor would there be potentially significant off-site impacts, cumulative impacts, or previously identified significant effects that were not discussed in the prior environmental document. Further, there are no previously identified significant effects which, as a result of substantial new information not known at the time of the previous environmental review, have been determined to have a more severe adverse impact than those discussed in the previous environmental documents. Accordingly, no additional review is required.

2 Agriculture and Forestry Resources

	Significant Impact	Less than Significant	No Impact	Analyzed in the Prior EIR	Substantially Mitigated by Uniformly Applicable Development Policies
Would the project:					
a. Convert Prime Farmland, Unique Farmland, Farmland of Statewide Importance (Farmland), as shown on maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	■	■	☐
b. Conflict with existing zoning for agricultural use or a Williamson Act contract?	☐	☐	■	■	☐
c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)); timberland (as defined by Public Resources Code Section 4526); or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?	☐	☐	■	■	☐
d. Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	■	■	☐
e. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	■	■	☐

Analysis in Previous Environmental Documents

The General Plan EIR discussed agricultural impacts in the agricultural and forestry resources section, on pages 4.2-1 through 4.2-28 and identifies a significant and unavoidable impact to agricultural and forestry resources.

The following describes applicable analysis in the General Plan EIR and provides a review to determine if project-specific impacts would occur that 1) are peculiar to the project or the parcel on which the project is located; 2) were not previously analyzed in previous environmental documents as significant effects; 3) are potentially significant off-site impacts and cumulative impacts that were not previously discussed in the previous environmental documents; and 4) are now determined to have a more severe impact than discussed in the previous environmental documents due to substantial new information.

Project-Specific Impacts

a. Would the project convert Prime Farmland, Unique Farmland, Farmland of Statewide Importance (Farmland), as shown on maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

As discussed in the General Plan EIR, since the 2035 General Plan would designate 1,126 acres of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural use, a significant impact would result. According to the California Department of Conservation (DOC), the project site is categorized as Urban and Built-Up Land, and it is not adjacent to Prime Farmland, Unique Farmland, Farmland of Statewide Importance (DOC 2025a). Therefore, the project would have no impact on Prime Farmland, Unique Farmland, Farmland of Statewide Importance. No impact would occur. The project's impacts to agricultural resources would be less than those identified in the General Plan EIR.

b. Would the project conflict with existing zoning for agricultural use or a Williamson Act contract?

The project site is not located on or adjacent to property zoned for agriculture or under Williamson Act Contract (DOC 2025b). No impact would occur. The project's impacts to agricultural zoning or Williamson Act land would be less than those identified in the General Plan EIR.

c. Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)); timberland (as defined by Public Resources Code Section 4526); or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?

d. Would the project result in the loss of forest land or conversion of forest land to non-forest use?

The General Plan EIR determined that since the Morgan Hill Municipal Code does not contain a zoning district for forest land or timberland, the 2035 General Plan would have no impact to associated resources. The project site is within the General Plan Area and does not contain and is not adjacent to forest land or timberland. No impact would occur. The project would not result in new or more severe adverse impacts than discussed in the General Plan EIR.

e. Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?

There is no forest or farmland on or adjacent to the project site. No impact would occur. The project's impacts to agricultural resources would be less than those identified in the General Plan EIR.

Conclusion

The project would have no new significant effects which are peculiar to the project or project site or substantially more severe impacts related to agricultural and forestry resources, nor would there be potentially significant off-site impacts, cumulative impacts, or previously identified significant effects that were not discussed in the prior environmental document. Further, there are no previously identified significant effects which, as a result of substantial new information not known at the time of the previous environmental review, have been determined to have a more severe adverse impact than those discussed in the previous environmental documents. Accordingly, no additional review is required.

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3 Air Quality

	Significant Impact	Less than Significant	No Impact	Analyzed in the Prior EIR	Substantially Mitigated by Uniformly Applicable Development Policies
Would the project:					
a. Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☐	■	■
b. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	☐	■	☐	■	☐
c. Expose sensitive receptors to substantial pollutant concentrations?	☐	■	☐	■	☐
d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	■	☐	■	☐

This analysis is partially based upon the results of the project's *Air Quality and Greenhouse Gas Emissions and Energy Technical Analysis* (Air Quality Report), completed by FirstCarbon Solutions in 2025 (Appendix A).

Analysis in Previous Environmental Documents

The General Plan EIR discussed air quality impacts on pages 4.3-1 through 4.3-56. and determined that odor-related impacts would be less than significant. Impacts associated with short-term construction, long-term operational emissions, and health risk exposure to toxic air contaminants (TAC) and particulate matter 2.5 ($PM_{2.5}$) would be significant and unavoidable, even after application of feasible mitigation including specific source-reduction and receptor-oriented risk reduction measures and best management practices (BMPs), although the overall effectiveness of these measures in reducing communitywide health risk could not be quantified. These impacts would, therefore, remain significant and unavoidable. Because the General Plan would not be fully consistent with the primary goals of the Bay Area 2010 Clean Air Plan with the elevated emissions projected, the General Plan EIR found that this impact would be significant and unavoidable.

The following describes the applicable analysis in the General Plan EIR and provides a review to determine if project-specific impacts would occur that 1) are peculiar to the project or the parcel on which the project is located; 2) were not previously analyzed in previous environmental documents

as significant effects; 3) are potentially significant off-site impacts and cumulative impacts that were not previously discussed in the previous environmental documents; and 4) are now determined to have a more severe impact than discussed in the previous environmental documents due to substantial new information.

Project-Specific Impacts

a. Would the project conflict with or obstruct implementation of the applicable air quality plan?

The project site is located in the San Francisco Bay Area Air Basin (Air Basin), where the BAAQMD regulates air quality. The EPA is responsible for identifying nonattainment and attainment areas for each criteria pollutant within the Air Basin. The Air Basin is designated nonattainment for State standards for 1-hour and 8-hour ozone, 24-hour respirable PM_{10}, annual PM_{10}, and annual $PM_{2.5}$. The BAAQMD has adopted several air quality policies and plans to address regional air quality standards, the most recent of which is the 2017 Clean Air Plan. The 2017 Clean Air Plan was adopted in April of 2017 and serves as the regional Air Quality Plan (AQP) for the Air Basin for attaining NAAQS. The primary goals of the 2017 Clean Air Plan are to protect public health and protect the climate. The 2017 Clean Air Plan acknowledges that the BAAQMD's two stated goals of protection are closely related. As such, the 2017 Clean Air Plan identifies a wide range of control measures intended to decrease both criteria pollutants and GHG emissions. The 2017 Clean Air Plan also accounts for projections of population growth provided by ABAG and VMT provided by the MTC and identifies strategies to bring regional emissions into compliance with federal and State air quality standards. A project would be judged to conflict with or obstruct implementation of the 2017 Clean Air Plan if it would result in substantial new regional emissions not foreseen in the air quality planning process.

The BAAQMD does not provide a numerical threshold of significance for project-level consistency analysis with AQPs. Therefore, the following criteria will be used for determining the project's consistency with the AQP.

- Criterion 1: Does the project support the primary goals of the AQP?
- Criterion 2: Does the project include applicable control measures from the AQP?
- Criterion 3: Does the project disrupt or hinder the implementation of any AQP control measures?

Criterion 1

The primary goals of the 2017 Clean Air Plan, the current AQP to date, are to:

- Attain air quality standards;
- Reduce population exposure to unhealthy air and protect public health in the Bay Area; and
- Reduce GHG emissions and protect the climate.

A measure for determining whether the proposed project supports the primary goals of the AQP is if the project would not result in an increase in the frequency or severity of existing air quality violations, cause or contribute to new violations, or delay timely attainment of air quality standards or the interim emission reductions specified in the air quality plans. This measure is determined by comparing project emissions to the significance thresholds identified by the BAAQMD for construction- and operation-related pollutants. These significance thresholds are applied in the evaluation of impact b, below. As discussed under impact b and impact c, the proposed project

would not significantly contribute to cumulative nonattainment pollutant violations or expose sensitive receptors to substantial pollutant concentrations. Pursuant to the City's Standard Conditions of Approval for Air Quality, basic construction mitigation measures related to dust suppression would be required to be implemented during the construction of the proposed project in order to reduce localized dust impacts. Required implementation of the City of Morgan Hill's Standard Condition of Approval for dust control would ensure that impacts related to fugitive dust from the proposed project's construction would be less than significant. Construction exhaust emissions would result in less than significant health risk impacts with the implementation of the City's Standard Condition of Approval that requires that construction equipment, diesel trucks and generators be equipped with Best Available Control Technology for emission reductions of NOx and PM. Pursuant to this Standard Condition, the proposed project would be required to use Tier 4 (interim or final) engines for construction equipment equal to or greater than 25 horsepower. With required implementation of the City's Standard Conditions for Air Quality, the proposed project would be consistent with Criterion 1.

CITY OF MORGAN HILL STANDARD CONDITIONS OF APPROVAL

- Dust, Noise, Vibration and Materials Management Plan: A management plan detailing strategies for control of noise, dust and vibration, and storage of hazardous materials during construction of the project shall be submitted for review prior issuance of a grading permit and requirements shall be included on all site development and grading plans. The intent of this condition is to minimize construction-related disturbance of residents of the nearby or adjacent properties. (Morgan Hill Municipal Code [MHMC] 18.76)
- Basic Best Management Practices for Construction-Related Fugitive Dust Emissions. The following measures shall be implemented with the project:
    1. All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
    2. All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
    3. All visible mud or dirt trackout onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
    4. All vehicle speeds on unpaved roads shall be limited to 15 mph.
    5. All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
    6. All excavation, grading, and/or demolition activities shall be suspended when average wind speeds exceed 20 miles per hour.
    7. All trucks and equipment, including their tires, shall be washed off prior to leaving the site.
    8. Unpaved roads providing access to sites located 100 feet or further from a paved road shall be treated with a 6- to 12-inch layer of compacted layer of wood chips, mulch, or gravel.
    9. Post a publicly visible sign with the telephone number and person to contact at the lead agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations.

- For projects that exceed BAAQMD thresholds:
  1. Limit the simultaneous occurrence of excavation, grading, and ground-disturbing construction activities.
  2. Install wind breaks (e.g., trees, fences) on the windward side(s) of actively disturbed areas of construction. Wind breaks should have at maximum 50 percent air porosity.
  3. Plant vegetative ground cover (e.g., fast-germinating native grass seed) in disturbed areas as soon as possible and watered appropriately until vegetation is established.
  4. Install sandbags or other erosion control measures to prevent silt runoff to public roadways from sites with a slope greater than one percent.
  5. Minimize the amount of excavated material or waste materials stored at the site.
  6. Use zero-emission and hybrid-powered equipment to the greatest extent possible, particularly if emissions are occurring near sensitive receptors or located within a BAAQMD-designated Community Air Risk Evaluation (CARE) area or Assembly Bill 617 community.
  7. Require all diesel-fueled off-road construction equipment be equipped with EPA Tier 4 Final compliant engines or better as a condition of contract.
  8. Minimize idling time either by shutting equipment off when not in use or reducing the time of idling to no more than 2 minutes (A 5-minute limit is required by the state airborne toxics control measure [Title 13, Sections 2449(d)(3) and 2485 of the California Code of Regulations]). Provide clear signage that posts this requirement for workers at the entrances to the site and develop an enforceable mechanism to monitor idling time to ensure compliance with this measure.
  9. Where grid power is available, prohibit portable diesel engines and provide electrical hook ups for electric construction tools, such as saws, drills and compressors, and using electric tools whenever feasible.

Criterion 2

Another measure for determining whether a project is consistent with the AQP is to determine whether the project is inconsistent with the growth assumptions incorporated into the AQP and, thus, whether it would interfere with the region's ability to comply with federal and California air quality standards. The development of the AQP is based in part on the land use plan determinations of the various cities and counties that constitute the Air Basin. The City's 2035 General Plan (General Plan) designates the project site as "Residential Attached Medium," and the City's Zoning Ordinance zones the project site as RAM. As such, the proposed project falls within the land uses contemplated for development by the City. Considering this information, the proposed project would not directly or indirectly result in substantial unplanned population growth. Therefore, the overall development of the project site would generally be consistent with the growth assumptions incorporated into the Clean Air Plan.

The AQPs also assume that all mandatory regulations to reduce air pollution would be adhered to. Therefore, to conform to the assumptions in the AQP, a project must be consistent with all applicable measures contained in the applicable AQP. The Clean Air Plan contains 85 control measures to reduce air pollutants and GHGs at the local, regional, and global levels. Along with the traditional stationary, area, mobile source, and transportation control measures, the Clean Air Plan contains several control measures designed to protect the climate, promote mixed-use, and compact development to reduce vehicle emissions and exposure to pollutants from stationary and

mobile sources. The Clean Air Plan also includes an account of the implementation status of control measures identified in the 2010 Clean Air Plan.

Table 3 of the Air Quality Report lists the Clean Air Plan policies relevant to the proposed project and evaluates the proposed project's consistency with the policies (Appendix A). As shown therein, the proposed project would be consistent with applicable measures. In summary, the proposed project would not conflict with applicable measures under the 2017 Clean Air Plan with implementation of the City's Standard Conditions of Approval for Air Quality.

Criterion 3

The proposed project would not preclude extension of a transit line or bike path, propose excessive parking beyond parking requirements, or otherwise create an impediment or disruption to implementation of AQP control measures. As demonstrated in Table 3 of the Air Quality Report, the proposed project would incorporate several AQP control measures as project design features, such as conforming with energy efficiency standards contained in the 2022 California Building Code and installing landscaping and bicycle and pedestrian connections across the project site. Therefore, the proposed project would not disrupt or hinder the implementation of AQP control measures. The proposed project is therefore consistent with Criterion 3.

Summary

As discussed above, the proposed project would be consistent with all three criteria after implementing the City's Standard Conditions of Approval for Air Quality. Thus, the proposed project would not conflict with the 2017 Clean Air Plan. With implementation of these measures, impacts associated with conflicting with or obstructing the 2017 Clean Air Plan would be substantially mitigated by uniformly applicable development policies. The project's impacts would be less than those identified in the General Plan EIR.

b. Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?

The General Plan EIR assessed air quality impacts on a programmatic level and recognized that site-specific impacts are assessed during project review.

The proposed project would result in temporary construction emissions and long-term operational emissions. Construction activities such as the operation of construction vehicles and equipment over unpaved areas, grading, trenching, and disturbance of stockpiled soils have the potential to generate fugitive dust (PM_{10}) through the exposure of soil to wind erosion and dust entrainment. In addition, exhaust emissions associated with heavy construction equipment would potentially degrade regional air quality. Long-term emissions associated with operational impacts would include emissions from vehicle trips (mobile sources), electricity use (energy sources), and landscape maintenance equipment, consumer products, and architectural coating associated with on-site development (area sources).

Construction Emissions

The Air Quality Report (Appendix A) used the California Emissions Estimator Model (CalEEMod) Version 2022.1 to estimate the proposed project's construction emissions. Table 2 summarizes the estimated maximum daily emissions of pollutants during construction on the project site. As shown

in the table, the BAAQMD construction thresholds would not be exceeded. Therefore, impacts associated with construction would be less than significant. The project's impacts associated with construction would be less than those identified in the General Plan EIR.

Table 2 Estimated Construction Air Pollution Emissions

	Emissions (lbs/day)					
Year	**ROG**	**NO_X**	**CO**	**PM_{10} (exhaust)**	**$PM_{2.5}$ (exhaust)**	**SO_X**
Average Daily Emissions	11	10	12	<1	<1	<1
BAAQMD Thresholds (average daily emissions)	54	54	N/A	82	54	N/A
Threshold Exceeded?	**No**	**No**	**N/A**	**No**	**No**	**N/A**

Source: Appendix A

N/A = not applicable; lbs/day = pounds per day; ROG = reactive organic gases; NO_X = oxides of nitrogen; CO = Carbon Monoxide; $PM_{2.5}$ = fine particulate matter with an aerodynamic resistance diameter of 2.5 micrometers or less; PM_{10} = respirable particulate matter with an aerodynamic resistance diameter of 10 micrometers or less; SO_x = oxides of sulfur.

No BAAQMD threshold for CO or SO_X

Operational Emissions

As shown in Table 3, operational emissions would not exceed BAAQMD operational thresholds for criteria pollutants. Operational impacts would be less than significant.

Table 3 Estimated Operational Air Pollution Emissions

	Emissions (lbs/day)					
Sources	**ROG**	**NO_X**	**CO**	**PM_{10}**	**$PM_{2.5}$**	**SO_X**
Average Daily Emissions						
Total Emissions	8	1	16	3	1	<1
BAAQMD Thresholds	54	54	N/A	82	54	N/A
Threshold Exceeded?	**No**	**No**	**N/A**	**No**	**No**	**N/A**
Annual Emissions						
Mobile	<1	<1	2	1	<1	<1
Area	1	0	1	0	0	<1
Energy	0	0	0	0	0	0
Total Emissions	1	<1	3	1	<1	<1
BAAQMD Thresholds	10	10	N/A	15	10	N/A
Threshold Exceeded?	**No**	**No**	**N/A**	**No**	**No**	**N/A**

Source: Appendix A

N/A = not applicable; lbs/day = pounds per day; ROG = reactive organic gases; NO_X = oxides of nitrogen; CO = Carbon Monoxide; $PM_{2.5}$ = fine particulate matter with an aerodynamic resistance diameter of 2.5 micrometers or less; PM_{10} = respirable particulate matter with an aerodynamic resistance diameter of 10 micrometers or less; SO_x = oxides of sulfur.

No BAAQMD threshold for CO or SO_X

Criteria Pollutant Emissions Summary

Construction and operational emissions would not exceed BAAQMD thresholds for criteria pollutants. The proposed project would not result in individually or cumulatively significant impacts

to air quality. Additionally, the project would be within the type of use and density assumed for the site in the General Plan EIR. This impact would be less than significant. The project's impacts associated with operation would be less than those identified in the General Plan EIR.

c. Would the project expose sensitive receptors to substantial pollutant concentrations?

Carbon Monoxide Hotspots

A CO hotspot is a localized concentration of CO that is above a CO ambient air quality standard. Localized CO hotspots can occur at areas with high vehicle density, such as intersections with heavy peak hour traffic. A project's localized air quality impact is considered significant if CO concentrations exceed the federal one-hour standard of 35.0 ppm and state one-hour standard of 20 ppm, or the federal and state eight-hour standard of 9.0 ppm (CARB 2025).

BAAQMD recommends comparing a project's attributes with the following screening criteria as a first step to evaluating whether the project would result in the generation of CO concentrations that would substantially contribute to an exceedance of the *Thresholds of Significance* (BAAQMD 2023). The project would result in a less than significant impact to localized CO concentrations if:

1. The project is consistent with an applicable congestion management program for designated roads or highways, regional transportation plan, and local congestion management agency plans.
2. The project would not increase traffic volumes at affected intersections to more than 44, 000 vehicles per hour.
3. The project traffic would not increase traffic volumes at the affected intersections to more than 24,000 vehicles per hour where vertical and/or horizontal mixing is substantially limited (e.g., tunnel, parking garage).

According to California Department of Transportation traffic volumes (2017), the intersection of Dunne Avenue and Hwy 101 receives approximately 10,300–10,900 trips during peak hours. Based on trip generation defaults generated by CalEEMod, the proposed 93 condominiums would generate approximately 757 average daily weekday trips, which, combined with existing traffic, is significantly lower than the threshold levels of 24,000 and 44,000 vehicles per hour. Therefore, the proposed project would not increase traffic columns at affected intersections above thresholds. The proposed project would meet the CO screening criteria and would result in a less than significant impact related to carbon monoxide.

Toxic Air Contaminants

TACs are defined by California law as air pollutants that may cause or contribute to an increase in mortality or an increase in serious illness, or which may pose a present or potential hazard to human health. The following subsections discuss the project's potential to result in impacts related to TAC emissions during construction and operation.

The BAAQMD defines a sensitive receptor as the following: "Facilities or land uses that include members of the population that are particularly sensitive to the effects of air pollutants, such as children, the elderly, and people with illnesses. Examples include schools, hospitals, and residential areas." As stated in the Air Quality Report (Appendix A), health risk and hazard should be analyzed for sensitive receptors within a 1,000-foot radius of the project site. The closest existing sensitive receptors include the following:

- Residential dwellings immediately adjacent to the project boundaries on the north, south, and east.
- Worker receptors across Butterfield Boulevard to the west of the project boundaries.

The proposed project would result in a potentially significant impact on sensitive receptors if any of the following criteria are met:

- **Criterion 1:** Construction of the proposed project would exceed the BAAQMD health risk significance thresholds.
- **Criterion 2:** Operation of the proposed project would exceed the BAAQMD health risk significance thresholds.

In addition, Criterion 3 is assessed for purposes of demonstrating consistency with the City's General Plan Policy NRE-11.1, which requires modeling for sensitive land uses, such as residential development, within sources of pollution such as freeways and industrial uses. As previously stated, General Plan Policy NRE-11.1 also requires new residential development to incorporate appropriate features into project designs or be located adequate distances from sources of TACs to avoid significant risk to health and safety. Furthermore, the City's Standard Conditions of Approval require the implementation of a Clean Fleet for "projects that exceed BAAQMD thresholds."

- **Criterion 3:** The proposed project would locate new sensitive receptors (residents) that could be exposed to existing sources of TACs at the project site which exceed the BAAQMD cumulative health risk significance thresholds.

Criterion 1 Project Construction Toxic Air Pollutants and PM2.5 Concentrations

Diesel particulate matter (DPM) has been identified by CARB as a carcinogenic substance. Major sources of DPM include off-road construction equipment and heavy-duty delivery and vendor trucks and worker activities. For purposes of this analysis, DPM is represented as exhaust emissions of PM_{10}. $PM_{2.5}$ concentrations were calculated using the $PM_{2.5}$ emission rates for the maximum annual year for $PM_{2.5}$ emissions, including fugitive dust and brake and tire wear from the site and nearby roadway sources.

The Air Quality Report (Appendix A) conducted an assessment of potential health impacts to surrounding sensitive receptors resulting from TAC and/or $PM_{2.5}$ emissions during construction. Table 4 summarizes the cancer risk, chronic HI, and $PM_{2.5}$ concentrations for project construction at the maximally exposed individual resident (MEIR), a multi-family apartment complex southeast of the project site across Diana Avenue. The Air Quality Report analysis assumed implementation of Clean Fleet Off-Road Equipment (Tier 4 Interim or Final Off-Road Engines for equipment greater than 25 hp, as required by the City's Standard Condition of Approval Air Quality). As shown in the table below, the cancer risk and chronic hazards from DPM and $PM_{2.5}$ concentrations are below the BAAQMD thresholds of significance. Impacts would be less than significant.

Table 4 Estimated Cancer Risks, Chronic Non-Cancer Hazards and PM2.5 Concentrations (with Clean Fleet)

Cancer Risk Scenario[1]	Average DPM (µg/m³)	DPM Cancer Risk (risk per million)	DPM Chronic Non-Cancer Hazard Index	Annual $PM_{2.5}$ (µg/m³)
Off-Site Maximum Exposed Individual Resident (MEIR)[2]	0.04	7.28	0.08	0.14
Maximum Expose Individual Off-Site Worker	0.01	0.11	0.01	0.03
Thresholds of Significance	N/A	10	1	0.3
Threshold Exceeded?	N/A	No	No	No

See Appendix A of Air Quality Study Memo for emissions summaries, methods, and detailed model assumptions.

µg/m³ = micrograms per cubic meter; MEIR = Maximally Exposed Individual Receptor; DPM = Diesel Particulate Matter based in PM_{10} Exhaust= particulate matter less than 10 microns in diameter; $PM_{2.5}$ = particulate matter less than 2.5 microns in diameter (includes $PM_{2.5}$ exhaust, dust, brake wear and tire wear); REL = reference Exposure Level.

[1] The proposed project construction cancer risk and chronic non-cancer hazard estimates shown here are based on a construction fleet with a statewide average engine Tier distribution for the given calendar year.

[2] The MEIR was determined to be a multi-family apartment complex southeast of the project site, across Diana Avenue.

Sources: Bay Area Air Quality Management District (BAAQMD). 2022. CEQA Air Quality Guidelines. April. Website: https://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa-guidelines-2022/ceqa-guidelines-chapter-3-thresholds_final_v2-pdf.pdf?la=en.

Criterion 2 Project-Specific Operational Toxic Air Pollutants

The proposed project is a residential project, and primary emissions would be from traffic generated by the project residents. The residential traffic would consist of mostly light-duty gasoline-powered passenger vehicles, which are not a significant source of TAC and air pollutant emissions. Thus, the proposed project would not generate a significant amount of DPM or other TAC emissions during operation and would not result in significant health impacts to nearby sensitive receptors during operation.

Criterion 3 Cumulative Health Risk Assessment

The BAAQMD recommends assessing the potential cumulative impacts to the project from sources of TACs within 1,000 feet of a project. Accordingly, a cumulative screening-level HRA was performed in the Air Quality Report (Appendix A) that examined the cumulative impacts to the project site from the project's construction emissions and existing sources of TAC emissions located within 1,000 feet of the project. The cumulative health risk results at the MEIR during project construction, including health risks from the existing stationary sources, roadway, and rail data from the BAAQMD sources above, are summarized in Table 5. Cumulative impacts from mitigated project construction and existing sources of TACs at the MEIR would be less than the BAAQMD cumulative thresholds of significance for cancer risk and non-cancer chronic hazard and annual $PM_{2.5}$ concentrations. Therefore, the proposed project, along with cumulative sources of TAC emissions within 1,000 feet, would be below the BAAQMD's cumulative thresholds of significance and would not be cumulatively considerable or result in a significant impact. No impacts beyond those identified in the General Plan EIR would occur.

Table 5 Summary of the Cumulative Health Impacts at the MEIR during Construction

Source	Source Name/Type	Distance from MEIR (ft)[1]	Cancer Risk (per million)	Chronic Hazard Index	Maximum Annual $PM_{2.5}$ Concentration ($\mu g/m^3$)
Project					
Clean Fleet Construction[2]	Diesel Construction Equipment	25	7.28	0.008	0.14
Stationary Sources					
Facility ID 20861	Generator	25	2.78	0.00	0.00
Facility ID 17708	Generator	25	1.47	0.00	0.00
Existing Roadways[3]		See footnote	7.80	0.028	0.19
Existing Rail Lines[3]		See footnote	1.46	0.00	0.00
Cumulative Health Risks					
Cumulative Total with Project Construction utilizing Clean Fleet			20.78	0.069	0.33
BAAQMD Cumulative Thresholds of Significance			100	10	0.8
Threshold Exceeded?			No	No	No

$\mu g/m^3$ = micrograms per cubic meter; BAAQMD = Bay Area Air Quality Management District; MEIR = Maximally Exposed Individual Receptor; $PM_{2.5}$ = particulate matter less than 2.5 microns in diameter; TAC = toxic air contaminant

[1] The MEIR was determined to be a multi-family apartment complex southeast of the project site, across Diana Avenue. The distance factor has not been applied to the health risk values and as such represents the most conservative, worst-case scenario.

[2] The project construction cancer risk and chronic non-cancer hazard estimates shown here incorporate the use of Tier 4 (Interim or Final) engines for all construction equipment rated for 25 horsepower or greater.

[3] BAAQMD Roadway layers provide results for the combined contribution of all freeways and surface streets at each receptor and therefore impacts are not from a single surface street or freeway but an aggregate of their impacts. The impact of the roadways will depend both on their traffic volume and proximity. High traffic roadways emit TACs at much higher rates than surface streets, but their impacts are dissipated by distance. Nearby surface streets have lower traffic volumes and emissions, but their impact is more localized. The same practice is applied to the rail lines.

See Appendix A of Air Quality Study Memo for emissions summaries, methods, and detailed model assumptions.

d. *Would the project result* in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

The ability to detect odors varies considerably among the population and is subjective. The BAAQMD does not have a recommended odor threshold for construction activities. However, the BAAQMD recommends operational screening criteria based on the distance between receptors and types of sources known to generate odors. Project construction would generate diesel exhaust and ROGs; however, these emissions would disperse rapidly from the project site and therefore would not create significant odors affecting a substantial number of people. As such, construction odor impacts would be less than significant.

According to BAAQMD, odor-generating projects include wastewater treatment plants, landfills or transfer stations, refineries, composting facilities, confined animal facilities, food manufacturing, smelting plants, and chemical plants, none of which are proposed (BAAQMD 2025).The proposed project would not involve any of these uses. The project would not emit odors beyond those previously assessed and impacts would be less than significant. The project would not result in new or more severe adverse impacts than discussed in the General Plan EIR.

Conclusion

No significant impacts or peculiar circumstances associated with the proposed project's air quality emissions would occur that require additional review. The project would not result in new significant or substantially more severe or peculiar impacts to air quality. In addition, there would not be any potentially significant off-site impacts, cumulative impacts, or previously identified significant effects, which were not discussed in the prior environmental document. Furthermore, there are no previously identified significant effects which, because of substantial new information that was not known at the time of the previous environmental review, are determined to have a more severe adverse impact that discussed in the previous environmental documents. Accordingly, no additional review is required.

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4 Biological Resources

	Significant Impact	Less than Significant	No Impact	Analyzed in the Prior EIR	Substantially Mitigated by Uniformly Applicable Development Policies
Would the project:					
a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	☐	☐	■	■
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	☐	■	■	☐
c. Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	■	■	☐
d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	■	■	☐

	Significant Impact	Less than Significant	No Impact	Analyzed in the Prior EIR	Substantially Mitigated by Uniformly Applicable Development Policies
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	■	■
f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	■	☐

Analysis in Previous Environmental Documents

The General Plan EIR discussed biological resources impacts on pages 4.4-1 through 4.4-36 and found impacts on biological resources to be less than significant.

The following describes applicable analysis in the General Plan EIR and provides a review to determine if project-specific impacts would occur that 1) are peculiar to the project or the parcel on which the project is located; 2) were not previously analyzed in previous environmental documents as significant effects; 3) are potentially significant off-site impacts and cumulative impacts that were not previously discussed in the previous environmental documents; and 4) are now determined to have a more severe impact than discussed in the previous environmental documents due to substantial new information.

Project-Specific Impacts

This analysis is based primarily on a Biological Resources Assessment (BRA) prepared by FirstCarbon Solutions in 2024, which is in Appendix B to this report. The BRA was peer reviewed by Rincon Consultants.

a. Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as candidate, sensitive, or special-status in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or the U.S. Fish and Wildlife Service?

The project site is located in an urbanized area of Morgan Hill, within the Santa Clara Valley Habitat Plan (SCVHP) area. Based on the site's General Plan designation, its development was anticipated in the analysis of biological resources impacts in the General Plan EIR.

The southeast corner of the project site has been graded and developed/paved for an existing single-family residence and associated structures, covering approximately 1.04 acres, and also includes four large coast live oak trees (*Quercus agrifolia*). The remaining 4.26 acres of the project site is comprised of non-native annual grassland. California ground squirrel (*Otospermophilus beecheyi*) burrows were also observed on the project site (see Appendix B).

The applicant's Biological Resources Assessment (see Appendix B) identified the potential for burrowing owl (*Athene cunicularia*), a "candidate" for listing under California Endangered Species Act (CESA), and nesting birds protected under the Migratory Bird Treaty Act (MBTA), to occur on the project site. The removal of trees and general construction activity could impact burrowing owl and protected nesting birds, and this impact is potentially significant. However, burrowing owl is a covered species under the SCVHP, and the project would be required to comply with the SCVHP conditions, which include Condition 1, *Avoid Direct Impacts on Legally Protected Wildlife Species,* as standard City conditions of approval. The project would also be required to implement measures included in the Citywide Burrowing Owl Habitat Mitigation Plan such as preconstruction surveys, City authorization before grading, and passive exclusion of burrowing owls (if found) during the non-nesting season (Sept 1 – Jan 31), among others. Lastly, the project would be required to remain in compliance with the applicable regulations and policies in the General Plan, including those protecting water quality, wildlife, sensitive habitats, and native plants. Adherence to SCVHP Condition 1, the City of Morgan Hill Citywide Burrowing Owl Habitat Mitigation Plan, and applicable regulations and policies in the General Plan would ensure no violations of California Fish and Game Code (CFGC), MBTA, or CESA occur as a result of project development. As discussed in the General Plan EIR, compliance with the applicable regulations and policies in the General Plan would avoid or reduce impacts on wildlife habitats to a less than significant level. With implementation of these measures, as described below, impacts to burrowing owl and nesting birds would be substantially mitigated by uniformly applicable development policies. The project would not result in new or more severe adverse impacts than discussed in the General Plan EIR. The City's standard procedure is to include the conditions, measures and requirements of the SCVHP and Burrowing Owl Habitat Mitigation Plan as project conditions of approval where they are applicable.

SCVHP Conditions Applicable to the Project

Condition 1: Avoid Direct Impacts on Legally Protected Plant and Wildlife Species

This permit condition applies to all covered actives and requires avoidance of Contra Costa goldfields (*Lasthenia conjugens*), a federally endangered species not included for coverage under the HCP; and species that are fully protected by CFGC (Sections 3511 and 4700), the MBTA, and Bald and Golden Eagle Protection Act. These species including but not limited to:

- Golden eagle
- Bald eagle
- American peregrine falcon
- Southern bald eagle
- White-tailed kite
- California condor
- Ring-tailed cat
- Migratory birds (including western burrowing owl, least Bell's vireo, and tricolored blackbird)

Citywide Burrowing Owl Habitat Mitigation Plan Measures Applicable to the Project

The Citywide Burrowing Owl Habitat Mitigation Plan (Section III) includes measures to avoid direct mortality of burrowing owl during clearing and grading of grassland. Under this plan a

preconstruction survey protocol establishes the requirements for: 1) a habitat assessment, 2) burrow surveys, 3) burrowing owl surveys, and 4) a survey report.

Clearing and grading for development in the City will be authorized by the Community Development Department. The Department will review the results of the preconstruction survey and issue authorization for clearing and grading, including a specific time period within which clearing and grading must take place. If clearing and grading is not completed within the authorized time period, the authorization and grading permit or clearance will expire and the preconstruction survey must be repeated.

If burrowing owl are identified during the burrowing owl survey, passive exclusion is required following authorization from the City and the SCVHP. Burrowing owl may only be passively relocated during the non-nesting season (September 1 through January 31).

Additional Applicable Regulations and General Plan Policies

Applicable Regulations:

- Clean Water Act
- Federal Endangered Species Act
- Migratory Bird Treaty Act
- California Endangered Species Act
- California Department of Fish and Game Code
- Oak Woodlands Conservation Act
- California Native Plant Protection Act
- Santa Clara Valley Habitat Conservation Plan
- Santa Clara County General Plan
- Morgan Hill Municipal Code

General Plan policies:

- Policy NRE-6.1 Natural State of Habitat. Preserve all fish and wildlife habitats in their natural state whenever possible. Consider development impacts upon wildlife and utilize actions to mitigate those environmental impacts.
- Policy NRE-6.2 Habitat Conservation Plan. Support the implementation of the Santa Clara Valley Habitat Conservation Plan to protect wildlife, rare and endangered plants and animals, and sensitive habitats from loss and destruction.

b. Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

The project site does not contain riparian habitat or sensitive natural communities (Appendix B). Therefore, no impacts to riparian habitat or any other sensitive natural communities would occur.

c. Would the project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

As discussed in the introductory sections of this checklist, an engineered drainage channel occurs approximately 10 feet west of the project site. The proposed project would not involve direct disturbance, such as removal, filling, or hydrological interruption to the channel. Off-site impacts may occur due to stormwater runoff during construction or as a result of increased impervious surfaces. However, as discussed in Section 10, *Hydrology and Water Quality,* the project would be required to conform to the National Pollutant Discharge Elimination System (NPDES) General Permit No. CAS000002 for Discharges of Storm Water Associated with Construction Activity (General Permit), the Municipal Separate Storm Sewer System (MS4) Permit, as well as the Stormwater Management Guidance Manual for Low Impact Development & Post Construction Requirements, June 2015, City of Gilroy, City of Morgan Hill and County of Santa Clara requirements for Post-Construction Requirements based upon the amount of impervious area created/replaced. Finally, in a determination dated February 26, 2025, based on consultation with the US Fish & Wildlife Service and California Department of Fish & Wildlife, the Santa Clara Valley Habitat Agency recommended approval of a reduced setback for the project from the Butterfield Channel. This reduces the required setback from 35 feet to the project's proposed 21 feet. Therefore, the project would not impact state or federally protected wetlands and there would be no impact. The project would not result in new or more severe adverse impacts than discussed in the General Plan EIR.

d. Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

The project site is located in an urbanized area and is not within a known regional wildlife movement corridor (see Appendix B). Land uses surrounding the project site include residential and commercial uses in an urban setting, with no nearby natural lands or open space, and no known or potential regional wildlife movement corridors. The drainage channel adjacent to the project site may function as a small local corridor for movement within urban areas; however, no direct impacts to the channel would occur. No impacts to wildlife movement corridors would occur. The project would not result in new or more severe adverse impacts than discussed in the General Plan EIR.

e. Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

The applicant's Preliminary Arborist Report (HortScienec Bartlett Consulting 2024 Appendix D to the BRA, see Appendix B) assessed 15 trees, including four on-site coast live oak trees and 11 off-site trees overhanging the property line. The project would require removal of all four on-site coast live oak trees, which are protected under the City's Municipal Code as ordinance sized trees. City of Morgan Hill Municipal Code Chapter 12.32, *Restrictions on Removal of Significant Trees*, requires a permit for the removal of protected trees and stipulates tree replacement requirements. The Municipal Code requires replacement of native trees with native species as approved by the Community Development Director. The removal of locally protected trees would be a potentially significant impact. However, incorporation of the following City of Morgan Hill Standard Conditions of Approval would ensure protection of trees and compliance with the City's Tree Preservation Ordinance. With implementation of the Standard Condition of Approval outlined below, impacts to trees would be substantially mitigated by uniformly applicable development policies. The project would not result in new or more severe adverse impacts than discussed in the General Plan EIR.

STANDARD CONDITION OF APPROVAL

1. Tree Removal Permit. The Tree Removal permit shall be obtained from City's Planning department prior to issuance of grading permit and prior to removing any trees. Tree removal permit shall be obtained in addition to grading permit and/or demolition permit. Off-site trees to remain will be avoided, and the preliminary tree preservation guidelines recommended in the Preliminary Arborist Report will be implemented (HortScienec Bartlett Consulting 2024, BRA Appendix D).

2. Pre Demolition and Pre-Construction Treatments and Recommendations.

a. The project's perimeter security fence will also serve as the TREE PROTECTION ZONE. No grading, excavation, construction or storage of materials should occur outside the project limit.
b. Off-site trees to be preserved may require pruning to provide clearance for demolition, grading and construction. Tree care firm providing the pruning shall be a State of California Licensed Tree Contractor (C61/D49). All pruning shall be done by Certified Arborist or Certified Tree Worker in accordance with the latest edition of the Best Management Practices for Pruning (International Society of Arboriculture) and the American National Standard for Tree Care Operations (Z133.1) and Pruning (A300).
c. Tree(s) to be removed that have branches extending into the canopy of tree(s) to remain shall be removed by a Certified Arborist or Certified Tree Worker and not by the demolition contractor. The Certified Arborist or Certified Tree Worker shall remove the trees in a manner that causes no damage to the tree(s) and understory to remain.
d. Trees to be removed shall be felled so as to fall away from TREE PROTECTION ZONE and avoid pulling and breaking of roots of off-site trees to remain. If roots are entwined, the Consulting Arborist may require first severing the major woody root mass before extracting the trees.
e. All tree work shall comply with the Migratory Bird Treaty Act as well as California Fish and Wildlife code 3503-3513 to not disturb nesting birds. To the extent feasible tree pruning and removal should be scheduled outside of the breeding season. Breeding bird surveys should be conducted prior to tree work. Qualified biologists should be involved in establishing work buffers for active nests.

3. Recommendations for Tree Protection During Construction.

a. Any approved grading, construction, demolition or other work within 5 feet of the Tree Protection Zone should be monitored by the Consulting Arborist.
b. Any root pruning that will occur within 5 feet of the Tree Protection Zone shall receive the prior approval of and may be supervised by the Consulting Arborist. Roots should be cut with a saw to provide a flat and smooth cut. Removal of roots larger than 2 inches in diameter should be avoided.
c. If roots 2 inches and greater in diameter are encountered during site work and must be cut to complete the construction, the Consulting Arborist must be consulted to evaluate effects on the health and stability of the tree and recommend treatment.
d. If injury should occur to any tree during construction, it should be evaluated as soon as possible by the Consulting Arborist so that appropriate treatments can be applied.

4.Tree Replacement. Replacement trees shall be native species approved by the community development director.

f. Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

The project is within the SCVHP area and the project would be required to obtain coverage under the plan (see Section 4.6). As such, the project would follow all applicable conditions and conform to the permit conditions, including avoiding and minimizing impacts to listed species and jurisdictional waters and wetlands. The drainage adjacent to the project site qualifies as a Category 2 stream under the SCVHP, which requires a 35-foot setback. In a determination dated February 26, 2025, the Santa Clara Valley Habitat Agency recommended approval of a reduced setback for the project from the Butterfield Channel. This reduces the required setback from 35 feet to the project's proposed 21 feet. There would be no conflicts with the SCVHCP and there would be no impact. The project would not result in new or more severe adverse impacts than discussed in the General Plan EIR.

Conclusion

With incorporation of the standard conditions of approval to ensure consistency with the SCVHCP and Burrowing Owl Habitat Mitigation Plan as described in this section, the project would have no new significant or substantially more severe or peculiar impacts to biological resources, nor are there potentially significant off-site impacts, cumulative impacts, or previously identified significant effects, which were not discussed in the prior environmental document. Also, there are no previously identified significant effects which, because of substantial new information that was not known at the time of the previous environmental review, are determined to have a more severe adverse impact than discussed in the previous environmental documents. Accordingly, no additional review is required.

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5 Cultural Resources

	Significant Impact	Less than Significant	No Impact	Analyzed in the Prior EIR	Substantially Mitigated by Uniformly Applicable Development Policies
Would the project:					
a. Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?	□	■	□	■	□
b. Cause a substantial adverse change in the significance of an archaeological resource as defined in Section 15064.5?	□	■	□	■	□
c. Disturb any human remains, including those interred outside of formal cemeteries?	□	■	□	■	□

Analysis in Previous Environmental Documents

The General Plan EIR analyzed cultural resources on pages 4.5-1 through 4.5-22 and found that impacts to sites of local importance, overall historic setting, and previously undiscovered archaeological resources would be less than significant.

The following describes applicable analysis in the General Plan EIR and provides a review to determine if project-specific impacts would occur that 1) are peculiar to the project or the parcel on which the project is located; 2) were not previously analyzed in previous environmental documents as significant effects; 3) are potentially significant off-site impacts and cumulative impacts that were not previously discussed in the previous environmental documents; and 4) are now determined to have a more severe impact than discussed in the previous environmental documents due to substantial new information.

Project-Specific Impacts

This section is based primarily on a Phase I Cultural Resources Assessment (CRA) prepared by FirstCarbon Solutions for the project and peer reviewed by Rincon Consultants in 2024 (Appendix C to this report).

a. Would the project cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?

CEQA Guidelines Section 15064.5 defines a historical resource as that listed or determined eligible for listing in the California Register of Historical Resources (CRHR), that listed in a local register of historical resources, or that determined by a lead agency to be historically significant. The CRA prepared by FirstCarbon Solutions (Appendix C) consisted of the following: a search of the California

Historical Resources Information System (CHRIS) at the Northwest Information Center (NWIC), review of inventories of known cultural resources, archival research, Sacred Lands File (SLF) search, Native American coordination, and field survey and sensitivity assessment of the project site. The field survey, background and archival research identified one over historical age property (more than 45-years old) within the project site, a single-family residence at 375 Diana Avenue which was constructed in the early 1950s. This residence was recorded and evaluated for listing in the CRHR on California Department of Parks and Recreation 523 Series forms. FirstCarbon Solutions confirmed that the property at 375 Diana Avenue is not currently listed in a register of known cultural resources and recommended it ineligible for listing on the CRHR. No historical resources have been identified within the project site. Therefore, the project would have no impact on historical resources. The project would not result in more severe adverse impacts than discussed in the General Plan EIR.

b. Would the project cause a substantial adverse change in the significance of an archaeological resource as defined in Section 15064.5?

The CRA (Appendix C) search of the CHRIS at the NWIC, Native American Heritage Commission (NAHC) Sacred Lands File (SLF) search, Native American coordination, archaeological survey and sensitivity assessment of the project site did not identify historic or prehistoric-era archaeological resources within the project site, and the site was determined to have a low to moderate degree of sensitivity for buried archaeological resources. The project would not result in more severe adverse impacts than discussed in General Plan EIR. The project's impacts related to archaeological resources would therefore be less than significant. The project would not result in new or more severe adverse impacts than discussed in the General Plan EIR.

c. Would the project disturb any human remains, including those interred outside of formal cemeteries?

The project site is not known to contain human remains. Nonetheless, the discovery of remains or resources is always a possibility during ground-disturbing activities. As stated in the General Plan EIR, compliance with existing federal, state, and local laws would reduce potential impacts to less than significant levels. No development is proposed outside of the areas studied in the General Plan. Consistent with California Health and Safety Code Section 7050.5, if human remains are found, no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. In the event of an unanticipated discovery of human remains, the Santa Clara County Coroner must be notified immediately. If the human remains are determined to be prehistoric, the coroner is required to notify the Native American Heritage Commission, a representative of which would determine and notify a most likely descendant. The most likely descendant must complete the inspection of the site within 48 hours of notification and may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials. Compliance with existing regulations would ensure that impacts would be less than significant. The project would not result in new or more severe adverse impacts than discussed in the General Plan EIR.

Conclusion

Cultural resource assessments of the project area were conducted (Appendix C), and their findings were incorporated into the analysis above. Compliance with existing federal, state, and local laws would reduce impacts to historical resources, archaeological resources, and human remains to less than significant levels. Accordingly, the project would have no new significant or substantially more

severe or peculiar impacts to cultural resources, nor are there any potentially significant off-site impacts, cumulative impacts, or previously identified significant effects, which were not discussed in the prior environmental document. Also, there are no previously identified significant effects which, because of substantial new information that was not known at the time of the previous environmental review, are determined to have a more severe adverse impact that discussed in the previous environmental documents. Accordingly, no additional review is required.

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6 Energy

	Significant Impact	Less than Significant	No Impact	Analyzed in the Prior EIR	Substantially Mitigated by Uniformly Applicable Development Policies
Would the project:					
a. Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	□	■	□	■	□
b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	□	■	□	■	□

This analysis is partially based upon the results of an Air Quality Report completed by FirstCarbon Solutions and peer reviewed by Rincon Consultants in 2025 (Appendix A).

CEQA Guidelines Appendix F (Energy Conservation) and the updated Appendix G guidelines published in December of 2018 require that environmental analysis include a discussion of the potential energy impacts of proposed projects, with particular emphasis on avoiding or reducing inefficient, wasteful, and unnecessary consumption of energy.

Energy consumption accounts for energy consumed during construction and operation of the proposed project, such as fuel consumed by vehicles, natural gas consumed for heating and/or power, and electricity consumed for power.

Analysis in Previous Environmental Documents

The General Plan EIR analyzed impacts on energy on pages 4.15-47 through 4.15-60. This discussion addresses the potential energy impacts of proposed projects, with particular emphasis on avoiding or reducing inefficient, wasteful, and unnecessary consumption of energy. Specifically, the discussion addressed the issues of effects of the project on local and regional energy supplies and on requirements for additional capacity, the degree to which the project complies with existing energy standards, the effects of the project on energy resources, and project's projected transportation energy use requirements and its overall use of efficient transportation alternatives. The General Plan EIR identified impacts related to energy consumption as less than significant.

The following describes applicable analysis in the General Plan EIR and provides a review to determine whether there would be project-specific impacts that 1) are peculiar to the project or the parcel on which the project is located; 2) were not previously analyzed in previous environmental documents as significant effects; 3) are potentially significant off-site impacts and cumulative impacts that were not previously discussed in the previous environmental documents; and 4) are

now determined to have a more severe impact than discussed in the previous environmental documents due to substantial new information.

a. Would the project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

b. Would the project conflict with or obstruct a State or local plan for renewable energy or energy efficiency?

Construction

Construction of the proposed project would result in energy expenditures from diesel and gasoline utilized to fuel off-road construction equipment and construction vehicles traveling to and from the project site. According to the project's Air Quality Report (Appendix A), off-road construction equipment would consume an estimated 35,082 gallons of diesel. Vehicles used by workers, vendors, and haul trucks would consume an estimated 11,716 gallons of diesel and gasoline combined.

Construction practices would comply with all local and State regulatory requirements related to equipment age, operation, and design. Adherence with BAAQMD's "Basic Best Management Practices for Construction-Related Fugitive Dust Emissions" as implemented by the City's Standard Condition of Approval listed in Section 3, *Air Quality,* would ensure that idling time of trucks is limited to 5 minutes (BAAQMD 2025). Construction equipment would be maintained and tuned according to manufacturer specifications which would promote fuel efficiency. Therefore, project construction would not result in wasteful, inefficient, or unnecessary consumption of energy resources and energy impacts from construction of the project would be less than significant.

Operation

The BAAQMD GHG design elements of the proposed project would have the co-benefits of energy efficiency and reductions in fossil fuel consumption. The project would be designed to be all electric and would not include natural gas usage. The 93 new residential condominiums units would comply with Title 24, Part 6, Subchapter 8 of the CBC, which requires the installation of rooftop solar panels. In addition, all proposed indoor and outdoor lighting would be modern energy-efficient lighting, as required under the CBC. The proposed project would also be required to comply with the City's Reach Code, which requires all new residential dwellings to include a Level 2 EV Ready space and (and a Level 1 EV Ready space for a second parking space). Therefore, the proposed project would exceed CALGreen's Tier 2 EV charging criterion.

The proposed project would consume an estimated 711,031 kWh/yr of electricity from the residential land uses. Mobile source energy consumption for vehicle trips to the site consist of an estimated 62,403 gallons per year of fossil fuel, 265 gallons per year of natural gas, and 44,549 kWh of electricity for electric vehicles.

The electricity use associated with the proposed project would be provided by Silicon Valley Clean Energy (SVCE). SVCE is ahead of California's strong clean energy goals with half of the base energy supply coming from renewable resources and more new renewable projects underway to help meet long-term goals. In addition, SVCE has surpassed California's energy storage targets for all electricity providers by committing to more than 100 MW of utility-scale energy storage, and continues to support customers in adding home battery storage paired with rooftop solar. SVCE currently has a

number of solar, solar + storage, wind, geothermal, battery storage, and long-duration storage projects in contract and under construction, with many already online. The continued growth in available renewable energy products and storage, combined with the proposed project's rooftop solar panels, means that the proposed project would not burden the existing energy infrastructure.

The project would be compliant with State and local regulations for renewable energy and energy efficiency. The project design would result in a decreased reliance on fossil fuels and increased reliance on renewable energy sources, and energy impacts from operation of the project would be less than significant. No impacts beyond those identified in the General Plan EIR would occur.

Conclusion

The project would have no new significant effects which are peculiar to the project or project site or substantially more severe impacts related to energy, nor would there be potentially significant off-site impacts, cumulative impacts, or previously identified significant effects that were not discussed in the prior environmental document. Further, there are no previously identified significant effects which, as a result of substantial new information not known at the time of the previous environmental review, have been determined to have a more severe adverse impact than those discussed in the previous environmental documents. Accordingly, no additional review is required.

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7 Geology and Soils

	Significant Impact	Less than Significant	No Impact	Analyzed in the Prior EIR	Substantially Mitigated by Uniformly Applicable Development Policies
Would the project:					
a. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:					
1. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?	☐	■	☐	■	☐
2. Strong seismic ground shaking?	☐	■	☐	■	☐
3. Seismic-related ground failure, including liquefaction?	☐	■	☐	■	☐
4. Landslides?	☐	■	☐	■	☐
b. Result in substantial soil erosion or the loss of topsoil?	☐	■	☐	■	☐
c. Be located on a geologic unit or soil that is made unstable as a result of the project, and potentially result in on or offsite landslide, lateral spreading, subsidence, liquefaction, or collapse?	☐	■	☐	■	☐
d. Be located on expansive soil, as defined in Table 1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	☐	☐	☐	☐	■

	Significant Impact	Less than Significant	No Impact	Analyzed in the Prior EIR	Substantially Mitigated by Uniformly Applicable Development Policies
e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	■	☐	☐
f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☐	■	■

This analysis is partially based upon the results of the project's *Geotechnical Feasibility Study*, completed by Cornerstone Earth Group in January 2025 (Appendix D).

Analysis in Previous Environmental Documents

The General Plan EIR discussed geology and soils impacts on pages 4.6-1 through 4.6-28 and concluded that impacts related to geology and soils would be less than significant. Impacts related to paleontology were discussed on pages 4.5-17 through 4.5-18 of Section 4.5, Cultural Resources, of the General Plan EIR and found to be less than significant.

The following describes applicable analysis in the General Plan EIR and provides a review to determine project-specific would occur impacts that 1) are peculiar to the project or the parcel on which the project is located; 2) were not previously analyzed in previous environmental documents as significant effects; 3) are potentially significant off-site impacts and cumulative impacts that were not previously discussed in the previous environmental documents; and 4) are now determined to have a more severe impact than discussed in the previous environmental documents due to substantial new information.

Project-Specific Impacts

a.1. Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?

As discussed in the General Plan EIR, no state-designated earthquake fault zones have been mapped within the General Plan Area. The project site is not located within an earthquake fault zone and the nearest fault zone is approximately 3.5 miles northeast of the project site (CGS 2025). The Geotechnical Feasibility Study found that fault surface rupture hazard is not a geologic hazard for the project site (Appendix D). Thus, the risk of fault rupture is remote. This impact would be less than significant. The project would not result in new or more severe adverse impacts than discussed in the General Plan EIR.

a.2. Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking?

a.3. Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction?

The project site is in an area subject to seismic ground shaking. The General Plan EIR evaluated the potential for fault rupture and strong seismic ground shaking from seismic events. As noted in the General Plan EIR, with implementation of General Plan Policies SSI-1.1, SSI-1.2, and SSI-2.1 and the California Building Code, impacts related to seismic ground shaking and liquefaction would be less than significant. The project site is not located on a liquefaction zone and the nearest liquefaction zone is approximately 1.8 miles north of the project site (CGS 2025). The Geotechnical Feasibility Study determined that the project site's potential for liquefaction is low (Appendix D). Construction of the project would be required to adhere to applicable General Plan policies and building codes including the CBC and Morgan Hill Building Code, which would further reduce the project's risk of adverse effects related to ground shaking and liquefaction. Impacts related to exposing people or structures to potential substantial adverse effects related to seismic shaking or liquefaction would be less than significant. The project would not result in new or more severe adverse impacts than discussed in the General Plan EIR.

a.4. Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving landslides?

The General Plan EIR determined that earthquake hazard maps prepared by the state show only isolated, small seismic-induced landslide hazard areas in the General Plan Area in the northeast part of the city beyond Hill Road, where they are almost exclusively limited to steeper hillsides. The project site is located in a generally flat area and is not surrounded by substantial slopes. The project site is not located in a landslide zone and the nearest landslide zone is approximately 0.35-mile southwest of the project site (CGS 2025). There is no risk of landslides affecting the project site. Impacts would be less than significant. The project would not result in new or more severe adverse impacts than discussed in the General Plan EIR.

b. Would the project result in substantial soil erosion or the loss of topsoil?

The General Plan EIR identifies most soils in the General Plan Area as loams or gravelly loams, and that their erodibility is judged low to moderate in light of the prevailing low topographic relief. However, clearing, grading, excavation, and construction activities associated with development allowed by the General Plan would have the potential to impact water quality through soil erosion and increasing the amount of silt and debris carried in runoff. The project site and surroundings are generally flat. In addition, construction of the project would be required to adhere to applicable General Plan policies and building codes including the California Building Code Section 1804 *Excavation, Grading, and Fill*, along with the City of Morgan Hill's Urban Storm Water Quality Management and Discharge Control Ordinance, as specified in Chapter 13.30 of the Municipal Code, that requires project applicants to submit an erosion and sediment control plan for review by the City prior to the issuance of grading permits (Section 13.30.270). Project applicants must also implement City-approved best management practices to control stormwater runoff and minimize potential impacts to water quality. Compliance with these requirements would ensure that substantial erosion during construction would not occur. Following construction, the majority of the project site would be developed with structures and landscaping, and areas of exposed soils would

be minimal. Therefore, this impact would be less than significant. The project would not result in new or more severe adverse impacts than discussed in the General Plan EIR.

c. Would the project be located on a geologic unit or soil that is made unstable as a result of the project, and potentially result in on or offsite landslide, lateral spreading, subsidence, liquefaction, or collapse?

As detailed under impacts a.3 and a.4, the General Plan EIR determined that the project would not result in impacts related to landslides and liquefaction. The General EIR also determined that the requirement for the performance of geotechnical investigation in known or suspected lateral spreading, subsidence, or collapse hazard areas and compliance with the CBC, Morgan Hill Building Code, and Morgan Hill General Plan policies would reduce potential impacts related to unstable soils to less than significant levels. As identified under impacts a.3 and a.4, the project site is not at risk of landslide or liquefaction.

Lateral spreading is the horizontal movement or spreading of soil toward an open face. Lateral spreading may occur when soils liquefy during an earthquake event, and the liquefied soils with overlying soils move laterally to unconfined spaces. The project site is located in a generally flat area and is not surrounded by substantial slopes which would increase the risk of lateral spreading. The Geotechnical Feasibility Study determined that the project site's potential for lateral spreading is low (Appendix D).

Subsidence occurs with vertical and/or horizontal displacement, which include but is not limited to the withdrawal of groundwater, oil, or natural gas or as a result of decomposition of natural organic materials. Soils that are particularly subject to subsidence include those with high silt or clay content and/or high organic content. The potential for failure from subsidence and lateral spreading is highest in areas where the groundwater table is high and where relatively soft and recent alluvial deposits exist. The Geotechnical Feasibility Study determined that the project site's anticipated potential for subsidence is low (Appendix D).

Construction of the project would be required to adhere to applicable General Plan policies and building codes including the CBC and Morgan Hill Building Code, which would further ensure that the project would not be at risk of lateral spreading, subsidence, or collapse. Impacts related to exposing people or structures to potential substantial adverse effects related to unstable soils would be less than significant. The project would not result in new or more severe adverse impacts than discussed in the General Plan EIR.

d. Would the project be located on expansive soil, as defined in Table 1-B of the Uniform Building Code (1994), creating substantial risks to life or property?

The General Plan EIR concluded that compliance with the CBC and Morgan Hill Building Code would reduce potential risks related to expansive soils to a less-than-significant level. The Geotechnical Feasibility Study determined that the project site's surficial soils may be low to moderately expansive and includes recommendations to reduce the potential of damage related to expansive soils (Appendix D). Recommendations related to expansive soils include employment of grading and compaction methods to reduce potential volume change, sufficient reinforcement to resist expansive soil forces, and supporting slabs on a layer of non-expansive fill.

The project would be required to comply with the CBC, Morgan Hill Building Code, and applicable standards and codes to reduce risks related to expansive soils. Required implementation of the Geotechnical Feasibility Study's recommendations and compliance with applicable regulations and

standards would ensure that the project would not be at risk of expansive soils. The project would not result in impacts related to exposing people or structures to potential substantial adverse effects related to expansive soils beyond what is previously analyzed in the General Plan EIR.

e. Would the project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?

The General Plan EIR concluded that the majority of the anticipated development in the city would be serviced by the present-day wastewater collection and treatment system. The General Plan EIR also concluded that buildout under the General Plan would not be located on soils incapable of supporting septic tanks or alternative wastewater disposal systems. The City's comprehensive, integrated wastewater collection, treatment, and disposal municipal sanitary sewer system would serve the project site. The project would not involve the use of septic tanks or other alternative wastewater disposal systems; therefore, no impact would occur. The project would not result in new or more severe adverse impacts than discussed in the General Plan EIR.

f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Paleontological resources, or fossils, are the evidence of once-living organisms preserved in the rock record. They include both the fossilized remains of ancient plants and animals and the traces thereof (e.g., trackways, imprints, burrows, etc.). Paleontological resources are not found in "soil" but are contained within the geologic deposits or bedrock that underlies the soil layer. Typically, fossils are greater than 5,000 years old (i.e., older than middle Holocene in age) and are typically preserved in sedimentary rocks. Although rare, fossils can also be preserved in volcanic rocks and low-grade metamorphic rocks under certain conditions (Society of Vertebrate Paleontology [SVP] 2010). Fossils occur in a non-continuous and often unpredictable distribution within some sedimentary units, and the potential for fossils to occur within sedimentary units depends on several factors. It is possible to evaluate the potential for geologic units to contain scientifically important paleontological resources, and therefore evaluate the potential for impacts to those resources and provide mitigation for paleontological resources if they are discovered during construction of a development project. The project site is mapped as Pleistocene sediments at the surface, which have the potential to contain paleontological resources, and the project would involve grading and excavation at various depths for site preparation, building foundations, stormwater control features, and utility trenches.

The General Plan EIR analyzed development throughout the city, including on sites, such as the project site, that have geological and soils conditions favorable for paleontological resources, and concluded that impacts would be less than significant with adherence to General Plan policies and existing regulations. General Plan Policy HC-8.5 states that the City must require that if paleontological resources are uncovered during grading or other on-site excavation activities, construction shall stop until appropriate mitigation is implemented. To ensure consistency with the General Plan, the City will include a project condition of approval requiring standard procedures for sites sensitive for paleontological resources, including retaining a qualified paleontologist to present a preconstruction Workers Environmental Awareness Program presentation and monitor construction for ground-disturbing activities greater than two feet below the surface, as well as procedures for handling paleontological resources discovered during project construction and reporting on the monitoring program. Similar to the General Plan EIR's analysis and conclusion for citywide buildout, with required adherence to this policy, impacts would be reduced to a less than

significant level. The project would not result in new or more severe adverse impacts than discussed in the General Plan EIR.

Conclusion

The project would have no new significant or substantially more severe or peculiar impacts to geology and soils, nor would there be potentially significant off-site impacts, cumulative impacts, or previously identified significant effects that were not discussed in the prior environmental document. Further, there are no previously identified significant effects which, as a result of substantial new information not known at the time of the previous environmental review, have been determined to have a more severe adverse impact than those discussed in the previous environmental documents. Accordingly, no additional review is required.

8 Greenhouse Gas Emissions

	Significant Impact	Less than Significant	No Impact	Analyzed in the Prior EIR	Substantially Mitigated by Uniformly Applicable Development Policies
Would the project:					
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	□	■	□	■	□
b. Conflict with any applicable plan, policy, or regulation adopted for the purposes of reducing the emissions of greenhouse gases?	□	■	□	■	□

This analysis is partially based upon the results of the project's *Air Quality and Greenhouse Gas Emissions and Energy Technical Analysis* (Air Quality Report), completed by FirstCarbon Solutions in 2025 (Appendix A).

Analysis in Previous Environmental Documents

The General Plan EIR analyzed greenhouse gas (GHG) emissions on pages 4.7-1 through 4.7-40 and concluded that impacts related to generation of GHG emissions that may have a significant impact on the environment would be significant and unavoidable, and impacts related to applicable plans, policies, or regulations adopted for the purposes of reducing the emissions of GHG would be less than significant.

The following describes applicable analysis in the General Plan EIR and provides a review to determine if project-specific impacts would occur that 1) are peculiar to the project or the parcel on which the project is located; 2) were not previously analyzed in previous environmental documents as significant effects; 3) are potentially significant off-site impacts and cumulative impacts that were not previously discussed in the previous environmental documents; and 4) are now determined to have a more severe impact than discussed in the previous environmental documents due to substantial new information.

Project-Specific Impacts

a. Would the project generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?

b. Would the project conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

The proposed project would generate GHG emissions during temporary (short-term) construction activities, such as site grading, operation of construction equipment, operation of on-site heavy-duty construction vehicles, hauling of materials to and from the project site, asphalt paving, and

construction worker vehicle trips. Long-term operational GHG emissions would result from project-generated vehicular traffic, operation of any landscaping equipment, natural gas combustion for space and water heating and off-site generation of electrical power over the life of the proposed project, the energy required to convey water to and wastewater from the project site, the emissions associated with the hauling and disposal of solid waste from the project site, and any fugitive refrigerants from air conditioning or refrigerators.

The significance of the proposed project's GHG emissions is analyzed against BAAQMD's qualitative GHG thresholds. The proposed project's GHG emissions quantified by the project's Air Quality Report (Appendix A) are provided for informational purposes further below.

Construction

BAAQMD does not have thresholds of significance for construction-related GHG emissions. GHG emissions from construction activities are one-time, temporary emissions and therefore would not significantly contribute to long-term cumulative GHG emissions impacts of the proposed project. Therefore, construction emissions would be less than significant and within those studies in the General Plan EIR.

Operation

The City does not have a Climate Action Plan that meets the criteria set forth in State CEQA Guidelines Section 15183.5(b). As previously discussed, the BAAQMD's proposed 2022 GHG significance thresholds represent a method for determining whether the proposed project would be cumulatively considerable or whether the proposed project contributes to solving the cumulative problem of climate change, taking into consideration the State's long-term climate goal of carbon neutrality by 2045. Therefore, the proposed project is evaluated against the design elements in Criterion A of BAAQMD's 2022 GHG Significance thresholds:

All-electric design: The City of Morgan Hill requires that all new construction include building electrification and EV infrastructure. All new construction must use electricity for water heating, space heating, cooking, clothes drying, indoor and outdoor fireplaces, and decorative appliances. The proposed project would be an all-electric design and would therefore comply with this requirement.

Energy efficiency: As demonstrated in Section 6, *Energy*, the proposed project would not result in any wasteful, inefficient, or unnecessary energy usage; therefore, the proposed project is consistent with this design element.

VMT impact: In November 2024, the City adopted its VMT policy which identifies VMT screening criteria and significance thresholds to be consistent with SB 743. Per the City's VMT policy, projects located within 0.5-mile of an existing major transit stop or an existing stop along a high-quality transit corridor can be considered to have a less than significant impact on VMT. The project site is located well within 0.5-mile of the Morgan Hill Caltrain Station. Therefore, the proposed project's VMT impact is less than significant and is consistent with the third design element.

Tier 2 EV Charging Infrastructure: The last design element relates to implementation of CALGreen Tier 2 level of EV charging infrastructure, which is beyond the mandatory CALGreen requirement of EV charging spaces. Tier 2 level of EV charging infrastructure calls for a dedicated 208/240V branch circuit installed in raceway in each dwelling unit. The proposed project would comply with the City's Reach Code, which requires residential buildings to include a minimum of one Level 2 EV

Ready space (if a second parking space is provided, it must be at minimum Level 1 EV Ready). Therefore, the proposed project would exceed the Tier 2 EV charging criterion and would be consistent with this design element.

In summary, the proposed project would satisfy all four design elements as outlined in the BAAQMD GHG threshold Criterion A. Therefore, impacts would be less than significant. The project would not result in new or more severe adverse impacts than discussed in the General Plan EIR.

GHG Emissions for Informational Purposes

Construction Emissions

The proposed project's construction emissions are presented in Table 6, with the project generating approximately 454 metric tons of carbon dioxide equivalents (MT CO_2e) during construction.

Table 6 Construction GHG Emissions

Construction Year	Total MT CO_2e per year
2026	401.77
2027	51.88
Entire Construction Duration (2025-2026)	
Total	453.65
Amortized over 30 years	15.12

MT CO_2e = metric tons of carbon dioxide equivalents.
Source: Appendix A

Operational Indirect and Stationary Direct Emissions

Operational or long-term emissions occur over the life of the project. Project operations were modeled for the 2027 operational year, immediately following the completion of construction. Sources for operational emissions are summarized below. Sources for operational GHG emissions include:

- **Motor Vehicles:** These emissions refer to GHG emissions contained in the exhaust from the cars and trucks that would travel to and from the project site.
- **Area Sources:** These emissions refer to those produced during activities such as landscape maintenance.
- **Energy-Electricity:** These emissions refer to those generated by off-site power plants to supply electricity required for the project.
- **Water Transport:** These emissions refer to those generated by the electricity required to transport and treat the water to be used on the project site.
- **Waste:** These emissions refer to the GHG emissions produced by decomposing waste generated by the project.

Table 7 presents the estimated annual GHG emissions from the proposed project's operational activities. As shown in Table 7, the proposed project would generate approximately 675 MT CO_2e per year after the inclusion of the amortized 15.12 MT CO_2e per year from project construction.

(The quantified GHG emissions are included here for informational purposes only; the significance of GHG impacts is discussed above based on BAAQMD's qualitative GHG thresholds.)

Table 7 Estimated Operational Greenhouse Gas Emissions

Emissions Source	Annual Emissions (MT of CO_2e/year)
Mobile	563.46
Area	1.16
Energy	66.44
Water	7.06
Solid Waste	21.46
Refrigerants	0.26
Amortized Construction Emissions	15.12
Total	**674.96**

MT CO_2e = metric tons carbon dioxide equivalent

Totals were summed using unrounded numbers and may not appear to sum exactly due to rounding.

Source: Air Quality and Greenhouse Gas Emissions and Energy Technical Analysis, Appendix A

Conclusion

BAAQMD does not have thresholds of significance for construction-related GHG emissions. GHG emissions from construction activities are one-time, temporary emissions and would not significantly contribute to long-term cumulative GHG emissions impacts of the proposed project. Therefore, construction emissions would be less than significant. Similarly, operation of the proposed project would satisfy all four design elements as outlined in the BAAQMD GHG threshold Criterion A. Impacts would be less than significant and within those studies in the General Plan EIR. The project would have no new significant or substantially more severe or peculiar impacts to greenhouse gas emissions, nor would there be potentially significant off-site impacts, cumulative impacts, or previously identified significant effects that were not discussed in the prior environmental document. Further, there are no previously identified significant effects which, as a result of substantial new information not known at the time of the previous environmental review, have been determined to have a more severe adverse impact than those discussed in the previous environmental documents. Accordingly, no additional review is required.

9 Hazards and Hazardous Materials

	Significant Impact	Less than Significant	No Impact	Analyzed in the Prior EIR	Substantially Mitigated by Uniformly Applicable Development Policies
Would the project:					
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	□	■	□	■	□
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	□	■	□	■	□
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?	□	■	□	■	□
d. Be located on a site that is included on a list of hazardous material sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	□	■	□	■	□
e. For a project located in an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	□	□	■	■	□

	Significant Impact	Less than Significant	No Impact	Analyzed in the Prior EIR	Substantially Mitigated by Uniformly Applicable Development Policies
f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	■	☐	■	☐
g. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?	☐	■	☐	■	☐

This section is partially based on a modified Phase I Environmental Site Assessment (ESA) prepared by ENGEO, Inc. on January 19, 2024 (Appendix E).

Analysis in Previous Environmental Documents

The General Plan EIR discussed hazardous materials impacts on pages 4.8-1 through 4.8-34 and found that impacts related to hazards and hazardous materials use in the city would be less than significant.

The following describes applicable analysis in the General Plan EIR and provides a review to determine if project-specific impacts would occur that 1) are peculiar to the project or the parcel on which the project is located; 2) were not previously analyzed in previous environmental documents as significant effects; 3) are potentially significant off-site impacts and cumulative impacts that were not previously discussed in the previous environmental documents; and 4) are now determined to have a more severe impact than discussed in the previous environmental documents due to substantial new information.

Project-Specific Impacts

a. Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

The General Plan EIR concluded that projects developed under the General Plan would have a less than significant impact related to the transport, use, or disposal of hazardous materials, or the upset and accidental release of hazardous materials through compliance with applicable federal, state, and local laws and regulations. Residential uses, such as those proposed by the project, typically do not use or store large quantities of hazardous materials other than minor amounts needed for cleaning or landscaping maintenance. During grading and construction activities, limited quantities of miscellaneous hazardous substances, such as gasoline, diesel fuel, hydraulic fluid, solvents, oils, paints, may be transported to the site, used on site, and disposed of after use. However, as discussed in the General Plan EIR the project would be required to comply with applicable federal, State, and local regulations that address the handling, storage, use, and disposal of hazardous substances, including those overseen by the Regional Water Quality Control Board (RWQCB) and Department of Toxic Substances Control (DTSC). This would eliminate potential significant hazards

to the public or the environment through the routine transport, use, or disposal of hazardous materials. Construction contractors would be required to comply with applicable federal and State environmental and workplace safety laws. Impacts would be less than significant. The project would not result in new or more severe adverse impacts than discussed in the General Plan EIR.

b. Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

The General Plan EIR notes that some uses in Industrial/Commercial could use or release hazardous materials and Agricultural zoned areas could introduce pesticides, but the project is not located in any of these areas. The modified Phase I ESA (Appendix E) did not identify any recognized environmental conditions that could result in significant impacts during site preparation, grading and construction. The Phase I ESA did note that several soil samples taken for the study detected chlordane at a concentration of 0.881 mg/kg, which exceeds the San Francisco Bay RWQCB residential threshold of 0.48 mg/kg. (Chlordane is a carcinogen associated with historic pesticide use.) However, the detection did not exceed the DTSC residential screening level or the Environmental Protection Agency residential regional screening level, both 1.7 mg/kg. Based on these results, the concentrations of chlordane (which are likely relatively common in former agricultural areas of the city) would not create a significant hazard to the public or the environment during construction or operation. The Phase I ESA recommends that, to be conservative, the project applicant should conduct additional sampling at key sample locations and that the excavated soil should be stockpiled and sampled before disposal. However, these actions, although recommended, are not required to reduce the impact, which would be less than significant. The project would not result in new or more severe adverse impacts than discussed in the General Plan EIR.

c. Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?

The General Plan EIR concluded that projects developed under the General Plan would have a less than significant impact related to hazardous emissions or handling of hazardous materials within 0.25-mile of a school, through compliance with applicable federal, state, and local laws and regulations. There are no existing or proposed K-12 schools within 0.25-mile of the project site. Further, as a residential project, the proposed project would not emit substantial quantities of hazardous materials or hazardous waste. As discussed above under impact a and b, the use, storage, transportation, and disposal of hazardous materials associated with construction activities would be required to adhere to numerous regulatory requirements which would prevent emissions of hazardous substances. This impact would be less than significant. The project would not result in new or more severe adverse impacts than discussed in the General Plan EIR.

d. Would the project be located on a site included on a list of hazardous material sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

The General Plan EIR concluded that projects developed under the General Plan would have a less than significant impact related to hazardous material sites compiled pursuant to Government Code Section 65962.5, through compliance with applicable federal, state, and local laws and regulations. As part of the modified 2024 Phase I ESA, ENGEO was contracted to conduct site reconnaissance and provide a review of regulatory databases and public lists of sites that generate, store, treat, or dispose of hazardous materials or sites for which a release or incident has occurred for the project

site and surrounding area. Federal, State, and county lists were reviewed as part of the research effort (Appendix E).

A review of regulatory databases maintained by county, state, tribal, and federal agencies found no documentation of hazardous materials violations or discharge on the project site. The project site is not listed on any of the environmental regulatory databases (DTSC 2024; DTSC 2025; State Water Resources Control Board [SWRCB] 2025). Therefore, the project site is not included on a list compiled pursuant to Section 65962.5 of the Government Code.

The project would not create a significant hazard to the public environment and this impact would be less than significant. The project would not result in new or more severe adverse impacts than discussed in the General Plan EIR.

e. For a project located in an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?

As stated in the General Plan EIR, there are no private airstrips within the vicinity of the General Plan and impacts would be less than significant. The project site is not located within two miles of a public airport or public use airport. The nearest airport, San Martin Airport, is approximately 5 miles south of the project site. There would be no impact. The project would not result in new or more severe adverse impacts than discussed in the General Plan EIR.

f. Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

As stated in the General Plan EIR, the City of Morgan Hill Office of Emergency Services is responsible for coordinating agency response to disasters or other large-scale emergencies in the City of Morgan Hill with assistance from the Santa Clara County Office of Emergency Services and the SCCFD. The Morgan Hill EOP establishes policy direction for emergency planning, mitigation, response, and recovery activities within the City. The Morgan Hill Emergency Operations Plan addresses interagency coordination, procedures to maintain communications with county and state emergency response teams, and methods to assess the extent of damage and management of volunteers.

The project does not involve alteration to roadways used for emergency evacuation. Compliance with applicable federal, state, and local laws and regulations regarding handling of hazardous materials, and General Plan policies SSI-12.4 through 12.6 which require adequate access and prompt response time, would ensure the project would not interfere with an adopted emergency response plan, or emergency evacuation plan and impacts would be less than significant. The project would not result in new or more severe adverse impacts than discussed in the General Plan EIR.

g. Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?

The project site is not within or near wildland areas and the proposed project does not involve uses that could exacerbate wildfire risks. Risks to project occupants would be addressed through conformance with the 2022 California Fire Code, 2022 CBC, and California Health and Safety Code, which establishes provisions for fire safety related to construction, maintenance and design of building, and land uses. Therefore, the project would not substantially expose people or structures

to significant risk of loss, injury, or death involving wildland fires. The impact would be less than significant. The project would not result in new or more severe adverse impacts than discussed in the General Plan EIR.

Conclusion

The project would have no new significant or substantially more severe or peculiar impacts to hazards and hazardous materials, nor would there be potentially significant off-site impacts, cumulative impacts, or previously identified significant effects that were not discussed in the prior environmental documents. Further, there are no previously identified significant effects which, as a result of substantial new information not known at the time of the previous environmental review, have been determined to have a more severe adverse impact than those discussed in the previous environmental documents. Accordingly, no additional review is required.

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10 Hydrology and Water Quality

	Significant Impact	Less than Significant	No Impact	Analyzed in the Prior EIR	Substantially Mitigated by Uniformly Applicable Development Policies
Would the project:					
a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	□	□	□	■	■
b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	□	■	□	■	□
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:	□	□	□	■	■
(i) Result in substantial erosion or siltation on- or off-site;	□	□	□	■	■
(ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;	□	□	□	■	■
(iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	□	□	□	■	■
(iv) Impede or redirect flood flows?	□	□	□	■	■

	Significant Impact	Less than Significant	No Impact	Analyzed in the Prior EIR	Substantially Mitigated by Uniformly Applicable Development Policies
d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	□	■	□	■	□
e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	□	■	□	■	□

This analysis is partially based upon the results of the project's Preliminary Region 3 Stormwater Mitigation Plan (Stormwater Mitigation Plan), completed by MH Engineering Co. in July 2024 (Appendix F).

Analysis in Previous Environmental Documents

The General Plan EIR discussed hydrology and water quality impacts on pages 4.9-1 through 4.9-54. The EIR found that potential impacts to hydrology and water quality would be less than significant.

The following describes applicable analysis in the General Plan EIR and provides a review to determine if project-specific impacts would occur that 1) are peculiar to the project or the parcel on which the project is located; 2) were not previously analyzed in previous environmental documents as significant effects; 3) are potentially significant off-site impacts and cumulative impacts that were not previously discussed in the previous environmental documents; and 4) are now determined to have a more severe impact than discussed in the previous environmental documents due to substantial new information.

Project-Specific Impacts

a. Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

The General Plan EIR concluded that with compliance with existing regulations, and the City of Morgan Hill's requirement for projects to submit a Stormwater Management Plan for review and approval in addition to General Plan policies, impacts related to water quality associated with General Plan implementation would be less than significant. The proposed project is adjacent to a drainage culvert, the unlined Butterfield Channel. The proposed project would modify the site conditions which could affect water quality during construction and operation, as discussed below.

Construction Impacts

During grading activities, the site's soils would be exposed to wind and water erosion that could transport sediments into local stormwater drainages. Furthermore, accidental spills of fluids or fuels

from construction vehicles and equipment, or miscellaneous construction materials and debris, could be mobilized and transported off-site in overland flow.

As part of Section 402 of the CWA, the U.S. EPA has established regulations under the National Pollution Discharge Elimination System (NPDES) program to control both construction and operation (occupancy) stormwater discharges. The Federal CWA was first adopted in 1972 and is intended to protect and preserve water supply and quality in the "waters of the nation." In the Central Coast area, the Central Coast Regional Water Quality Control Board (RWQCB) administers the NPDES permitting program and is responsible for developing permitting requirements. According to City's Standard Conditions of Approval, the project would be subject to the California Regional Water Quality Control Board Central Coast Region Resolution No. R3-2013-0032 as documented by the Stormwater Management Guidance Manual for Low Impact Development (LID) and Post-Construction Requirement, and applicable design standards for structural or treatment control best management practices (BMPs). In addition, because the project would disturb more than one acre of land, the project would be required to obtain coverage under the General Permit for Discharges of Storm Water and would be subject to the City's following Standard Conditions of Approval regarding discharges of stormwater associated with construction activity.

STANDARD CONDITIONS OF APPROVAL

NPDES Construction Activity General Permit/SWPPP Requirements

As required by the State Water Resources Control Board (SWRCB) Order No. 2009-0009-DWQ, construction activity resulting in a land disturbance of one (1) acre or more of soil, or whose projects are part of a larger common plan of development that in total disturbs more than one (1) acre, are required to obtain coverage under the National Pollutant Discharge Elimination System (NPDES) General Permit No. CAS000002 for Discharges of Storm Water Associated with Construction Activity (General Permit). To be permitted with the SWRCB under the General Permit, owners must file a complete Notice of Intent (NOI) ONLINE at: http://smarts.waterboards.ca.gov/smarts/faces/SwSmartsLogin.jsp and develop a Storm Water Pollution Prevention Plan (SWPPP) Manual in accordance with the General Permit. The SWPPP Manual shall follow the CASQA SWPPP template/format at https://www.casqa.org/store/products/tabid/154/p-167-construction-handbookportal-initial-subscription.aspx and shall be approved by Public Works Engineering. A Waste Discharger Identification (WDID) number to be issued to the construction site after the SWRCB receives and verifies the submitted ONLINE NOI information. The WDID number and approved SWPPP Manual shall be provided to Public Works and the Building Department prior to any approval of grading activities (SWRCB NPDES General Permit CAS000002).

NPDES General Permit/Site SWPPP Inspections and Compliance

1. ALL project onsite and offsite construction activity shall have the site inspected by a qualified third party SWPPP Inspector (QSD or QSP or RCE).
2. SWPPP Inspections shall occur weekly during the rainy season (September 15th thru May 1st).
3. SWPPP Inspections shall occur bi-weekly during the non-rainy season.
4. 48 hours prior to and following a forecasted rain event, SWPPP Inspections shall occur in addition to those of items 2 or 3 above.

5. Per each of the inspection conditions 2, 3, or 4, the NPDES SWPPP Inspector shall certify in writing to the Building and Public Works Department if the site is in compliance or non-compliance with the NPDES General Permit for Stormwater, site SWPPP Manual, and Water Pollution Control Drawings (per the CMH-SWPPP Inspection Check List to be provided by Public Works). QSD/QSP SWPPP Inspectors shall forward onsite and offsite information/certification to the Building (on-site private property issues) and Public Works (public right-of-way issues) inspectors respectively.
6. Prior to rain events, BMPs* not in compliance will need to be corrected immediately.
7. Illicit discharges per the NPDES General Permit, non-compliance of tracking control, and inlet protection within the public right of way shall be addressed immediately.
8. Other non-compliance issues need to be addressed within a 24-hour period.
9. Non-compliance issues which have been corrected shall be verified by NPDES SWPPP Inspector by a follow up inspection.

*BMPs maintenance/inspections shall include tree protection if applicable.

NPDES Water Quality Stormwater Management Development Standards

A. State Water Resources Control Board Post Construction Requirements (PCRs): Project shall comply with the California Regional Water Quality Control Board Central Coast Region Resolution No. R3-2013-0032 as documented by the Stormwater Management Guidance Manual for Low Impact Development and Post-Construction Requirements (developed from Resolution No. R3-2013-0032 Attachment 1 and 2 at: http://www.waterboards.ca.gov/centralcoast/water_issues/programs/stormwater/docs/lid/lid_hydromod_charette_index.shtml). A copy of the guidance manual can be obtained through the Land Development Engineering webpage. Project shall provide Stormwater Runoff Management Plan, Stormwater Control Plan Checklist and applicable calculations per the Stormwater Management Guidance Manual for Low Impact Development and Post-Construction Requirements. Project shall meet the applicable requirements of the Stormwater Management Guidance Manual for Low Impact Development and Post-Construction Requirements:
    1. Performance Requirement 1: Site Design and Runoff Reduction
    2. Performance Requirement 2: Water Quality Treatment
    3. Performance Requirement 3: Runoff Retention
    4. Performance Requirement 4: Peak Management

With compliance with City construction-related water quality and erosion control requirements and Standard Conditions of Approval, construction of the project would not violate water quality standards, substantially alter the drainage pattern of the area such that substantial erosion or siltation would occur and would not degrade water quality. Impacts during construction would be substantially mitigated by uniformly applicable development policies. The project would not result in new or more severe adverse impacts than discussed in the General Plan EIR.

Operational Impacts

The project site is currently developed with a single-family residence and two accessory buildings. The project would increase the total area of impervious surfaces on the project site by

approximately 142,518 square feet, from 19,819 square feet to 162,337 square feet. Increasing the total area of impervious surfaces could increase stormwater runoff which could result in a greater potential to introduce pollutants to receiving waters. Urban runoff could carry a variety of pollutants, including oil and grease, metals, sediment, and pesticide residues from roadways, parking lots, rooftops, and landscaped areas and deposit them into adjacent waterways via the storm drain system.

Stormwater discharge during operation is regulated by the Municipal Separate Storm Sewer System (MS4) Permit, issued by the RWQCB, pursuant to NPDES regulations. The CCRWQCB Resolution R3-2013-0032 as well as the Stormwater Management Guidance Manual for Low Impact Development & Post Construction Requirements, June 2015, City of Gilroy, City of Morgan Hill and County of Santa Clara describe levels of Post-Construction Requirements based upon the amount of impervious area created/replaced. Because the project would replace in excess of 2,500 square feet of the impervious surface of the project site, a Preliminary Stormwater Mitigation Plan was prepared for the project by MH engineering Co. in July 2024 (Appendix F) to demonstrate compliance with the Central Coast Regional Water Quality Control Board's (CCRWQCB) Post-Construction Stormwater Compliance Resolution R3-2013-0032 and the Stormwater Management Guidance Manual for LID & Post Construction Requirements, June 2015, City of Gilroy, City of Morgan Hill and County of Santa Clara.

Pursuant to the City's Standard Condition of Approval, *NPDES Water Quality Stormwater Development Standards*, since the project would create and/or replace in excess of 2,500 square feet, the project is subject to Performance Requirement No. 1 (PR-1), No. 2. (PR-2), No. 3 (PR-3) and No. 4 (PR-4). PR-2 requires projects to treat any contaminants created by the development. The proposed project would utilize bio-retention to pre-treat runoff. One bio-retention area (1,150 square feet) would be located in the west corner of the project site, and a second bio-retention area (5,167 square feet) and an underground manifold with a storage capacity of 29,858 cubic feet would be located in the south corner of the project site. The Geotechnical Feasibility Study prepared for the proposed project determined that slope stability analysis and recommended measures may be required for the proposed bio-retention areas adjacent to Butterfield Channel under both seismic and 100-year flood conditions (Appendix D).

By adhering to the City's Standard Conditions of Approval, and the stormwater control plan, as well as required adherence to measures based on slope stability analysis for Butterfield Channel, the project would not result in adverse effects on water quality and or in the violation of water quality standards or waste discharge requirements during construction or operation. Therefore, the project would have a less than significant impact on water quality. With implementation of the measures contained in these plans, excessive stormwater runoff, erosion, and sedimentation would not occur and the potential for the project to violate water quality standards and substantially degrade water quality would be reduced. Impacts during operation would be substantially mitigated by uniformly applicable development policies. The project would not result in new or more severe adverse impacts than discussed in the General Plan EIR.

b. Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

The General Plan EIR concluded that with the use of retention and detention design features and compliance with General Plan policies, impacts related to groundwater supplies associated with General Plan implementation would be less than significant. The proposed project would modify the

site conditions which would result in an increase of approximately 142,518 square feet of impervious surfaces, reducing infiltration and increasing demand for water. Development of the proposed project would not include installation of new groundwater wells or use of groundwater from existing wells. Although the project would increase impervious surfaces on the site, development of the project site was anticipated under the General Plan and would not use water or prevent recharge at a rate beyond that anticipated in the General Plan. Further, the proposed project involves one bio-retention area (1,150 square feet) which would be located in the west corner of the project site, a second bio-retention area (5,167 square feet), and an underground manifold with a storage capacity of 29,858 cubic feet which would be located in the south corner of the project site. The retention areas would implement the General Plan EIR's requirement of infiltration features which would contribute to groundwater recharge and minimize stormwater runoff. Therefore, the proposed project would not substantially decrease groundwater supplies or interfere with groundwater recharge. This impact would be less than significant. The project would not result in new or more severe adverse impacts than discussed in the General Plan EIR.

C.(i) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would result in substantial erosion or siltation on- or off-site?

c.(ii) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?

c.(iii) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner that would create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

c.(iv) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would impede or redirect flood flows?

The project site is relatively flat, with minimal changes in elevation. The project site is an urban area that does not contain natural drainage features such as streams or rivers, other than the adjacent unlined Butterfield Channel. The project would not involve the altering course of streams or rivers. The proposed project would not involve changes to the Butterfield Channel. Although the project would increase the total area of impervious surfaces on the project site by approximately 142,518 square feet, a Preliminary Stormwater Mitigation Plan was prepared for the proposed project by MH engineering Co. in July 2024 (Appendix F) to demonstrate compliance with the CCRWQCB's Post-Construction Stormwater Compliance Resolution R3-2013-0032 and the Stormwater Management Guidance Manual for LID & Post Construction Requirements, ensuring the project would not substantially modify the existing drainage patterns through the addition of impervious surfaces.

During the construction phase of the project, earth-moving activities could temporarily affect on-site drainage patterns by exposing the underlying soils, increasing site permeability, and altering the site's terrain. Moreover, construction activities could contribute to erosion and sediment in stormwater runoff. However, as stated in impact a, the project would be required to obtain

coverage under the General Permit for Discharges of Storm Water pursuant to the City's Standard Conditions of Approval, *NPDES Water Quality Stormwater Development Standards*, regarding discharges of stormwater associated with construction activity. The construction activities associated with the project would not cause substantial erosion or siltation either on- or off-site. The project site would be entirely occupied by the proposed development, paved areas, and landscaping upon completion, there would be no exposed bare soil vulnerable to erosion. Therefore, operation of the project would not lead to significant erosion or siltation on or off-site. This impact would be substantially mitigated by uniformly applicable development policies. The project would not result in new or more severe adverse impacts than discussed in the General Plan EIR.

Pursuant to the City's Standard Condition of Approval, *NPDES Water Quality Stormwater Development Standards*, since the project would create and/or replace in excess of 2,500 square feet, the project is subject to PR-1 through PR-4. PR-2 requires projects to treat any contaminants created by the development. The proposed project would utilize bio-retention to pre-treat runoff. One bio-retention area (1,150 square feet) would be located in the west corner of the project site, and a second bio-retention area (5,167 square feet) and an underground manifold with a storage capacity of 29,858 cubic feet would be located in the south corner of the project site. The retention areas would implement the General Plan EIR's requirement of infiltration features which would contribute to groundwater recharge and minimize surface runoff. Therefore, with adherence to the City's Standard Conditions of Approval, the proposed project is not anticipated to substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site. This impact would be substantially mitigated by uniformly applicable development policies. The project would not result in new or more severe adverse impacts than discussed in the General Plan EIR.

Runoff from the site would be channeled into the existing drainage system. As required by the General Plan EIR, a Preliminary Stormwater Mitigation Plan, which includes hydrologic and hydraulic calculations, was prepared for the proposed project by MH Engineering Co. in July 2024 (Appendix F). The Preliminary Stormwater Mitigation Plan determined the proposed project would not exceed the capacity of the City's storm drain system. In addition, as stated in impact a, the project would be required to obtain coverage under the General Permit for Discharges of Storm Water pursuant to the City's Standard Conditions of Approval. As the project involves development of a site with residential uses consistent with the development envisioned for the site under the General Plan, and the project would be required to adhere to the General Permit for Discharges of Storm Water pursuant to the City's Standard Conditions of Approval, the proposed project would not exceed the capacity of the existing stormwater drainage systems or provide substantial additional sources of polluted runoff. This impact would be substantially mitigated by uniformly applicable development policies. The project would not result in new or more severe adverse impacts than discussed in the General Plan EIR.

Compliance with the City's Standard Conditions of Approval *NPDES Water Quality Stormwater Development Standards* would ensure the proposed project would not involve the altering course of streams or rivers, nor would it substantially modify the existing drainage patterns through the addition of impervious surfaces to the extent that it could cause flooding or redirection of floodwaters. This impact would be substantially mitigated by uniformly applicable development policies. The project would not result in new or more severe adverse impacts than discussed in the General Plan EIR.

As detailed in the analysis above, compliance with the City's Standard Conditions of Approval would ensure the proposed project would not involve the altering course of streams or rivers, nor would it substantially modify the existing drainage patterns through the addition of impervious surfaces which would result in substantial erosion or siltation on- or off-site, substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site, in a manner that would create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff, or to the extent that it could cause flooding or redirection of floodwaters. Impacts would be substantially mitigated by uniformly applicable development policies. The project would not result in new or more severe adverse impacts than discussed in the General Plan EIR.

d. In flood hazard, tsunami, or seiche zones, would the project risk release of pollutants due to project inundation?

The project site is not within a 100-year flood hazard area (1 percent chance annually); the project site is located within Zone X, defined as an area of minimal flood hazard (FEMA 2009). The project site is located over 30 miles southeast of the San Francisco Bay and 17 miles east of the Pacific Ocean. The Geotechnical Feasibility Study determined the project site's potential for inundation due to tsunami or seiche is low (Appendix D). The project site is located within the Anderson Reservoir dam inundation area according to Figure 4.9-6 of the General Plan EIR. As detailed in the General Plan EIR, the probability of dam failure is extremely low and there is no historic record of dam failure in Santa Clara County or Morgan Hill. Further, the Anderson Reservoir dam's water levels have been lowered since October 2020 and the dam is currently operating at approximately 3 percent of its capacity due to seismic concerns. The Anderson Dam Seismic Retrofit Project, which is intended to retrofit the dam, improve the dam's seismic safety and reliability, and reduce the project site's potential risk of dam inundation, is currently underway. This impact would be less than significant. The project would not result in new or more severe adverse impacts than discussed in the General Plan EIR.

e. Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

The project site is under the jurisdiction of the Central Coast RWQCB, which provide permits for projects that may affect surface waters and groundwater locally and is responsible for preparing the Water Quality Control Plan for the Central Coast Basin (Basin Plan). The Basin Plan designates beneficial uses of water in the region and establishes narrative and numerical water quality objectives. The Basin Plan serves as the basis for the Central Coast RWQCB's regulatory programs and incorporates an implementation plan for achieving water quality objectives (SWRCB 2024). As detailed under impact a, a Preliminary Stormwater Mitigation Plan was prepared for the proposed project by MH engineering Co. in July 2024 (Appendix F) to demonstrate compliance with the CCRWQCB Resolution R3-2013-0032 as well as the Stormwater Management Guidance Manual for Low Impact Development & Post Construction Requirements to demonstrate compliance with the CCRWQCB's Post-Construction Stormwater Compliance Resolution R3-2013-0032 and the Stormwater Management Guidance Manual for Low Impact Development & Post Construction Requirements, June 2015, City of Gilroy, City of Morgan Hill and County of Santa Clara. The project applicant is required to submit a final stormwater mitigation plan at the improvement plan and building permit stage that addresses the City's stormwater conditions of approval. With approval of the final stormwater mitigation plan, the proposed project would not interfere with the objectives

and goals in the Basin Plan. This impact would be less than significant. The project would not result in new or more severe adverse impacts than discussed in the General Plan EIR.

Conclusion

The project would have no new significant or substantially more severe or peculiar impacts to hydrology and water quality, nor would there be potentially significant off-site impacts, cumulative impacts, or previously identified significant effects that were not discussed in the prior environmental document. Further, there are no previously identified significant effects which, as a result of substantial new information not known at the time of the previous environmental review, have been determined to have a more severe adverse impact than those discussed in the previous environmental documents. Accordingly, no additional review is required.

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11 Land Use and Planning

	Significant Impact	Less than Significant	No Impact	Analyzed in the Prior EIR	Substantially Mitigated by Uniformly Applicable Development Policies
Would the project:					
a. Physically divide an established community?	□	■	□	■	□
b. Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	□	■	□	■	□

Analysis in Previous Environmental Documents

The General Plan EIR addressed land use and planning on pages 4.10-1 through 4.10-22. Impacts related to land use and planning were determined to be less than significant in the document.

The following describes applicable analysis in the General Plan EIR and provides a review to determine whether there would be project-specific impacts that 1) are peculiar to the project or the parcel on which the project is located; 2) were not previously analyzed in previous environmental documents as significant effects; 3) are potentially significant off-site impacts and cumulative impacts that were not previously discussed in the previous environmental documents; and 4) are now determined to have a more severe impact than discussed in the previous environmental documents due to substantial new information.

Project-Specific Impacts

a. Would the project physically divide an established community?

The General Plan EIR states that examples of physical features that would divide an existing community are a roadway or railroad track. The General Plan did not include new major roadways or other physical features through existing neighborhoods that would create new barriers, and land uses proposed in the General Plan were largely consistent with existing development patterns. The project would be infill development and would not result in new obstructions or divisions between established communities. The project and the proposed internal roadway and driveway would be limited to the project site and would not include linear or other features that could impede access between or within neighborhoods. Therefore, the project's impacts would be less than significant. The project would not result in new or more severe adverse impacts than discussed in the General Plan EIR.

b. Would the project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

The City of Morgan Hill's 2035 General Plan City and Neighborhood Form chapter defines the RAM category as "attached housing types including townhomes, garden apartments, and stacked flats…this designation accommodates 16 to 24 units per net acre, most of which are townhomes, apartments, or condominiums." The proposed project would have a density of 17.5 dwelling units per acre, which would not exceed the maximum allowed density in the RAM land use category of 16 to 24 dwelling units per acre. The project would be consistent with the RAM designation, and would be within the type of use and density analyzed in the General Plan EIR.

The project site is zoned Residential Attached Medium (RAM). Section 18.18.010 of the Morgan Hill Municipal Code states that the purpose of the RAM district is "to provide locations for medium density attached housing types." Section 18.18.020 sets forth the allowed uses and permit requirements in the RAM district as well as development standards such as minimum lot size, building coverage, site area per dwelling unit, building height limits and required setbacks. As shown in Table 1, the project would be consistent with minimum lot size, building height, set back, and density requirements under the RAM zoning and land use designation. Therefore, the project would not conflict with the City's General Plan or Zoning Ordinance, and impacts of the proposed project would be less than significant. The project would not result in new or more severe adverse impacts than discussed in the General Plan EIR.

Conclusion

The project would have no new significant or substantially more severe or peculiar impacts to land use and planning, nor would there be potentially significant off-site impacts, cumulative impacts, or previously identified significant effects that were not discussed in the prior environmental document. Further, there are no previously identified significant effects, which as a result of substantial new information not known at the time of the previous environmental review, have been determined to have a more severe adverse impact than those discussed in the previous environmental documents. Accordingly, no additional review is required.

12 Mineral Resources

	Significant Impact	Less than Significant	No Impact	Analyzed in the Prior EIR	Substantially Mitigated by Uniformly Applicable Development Policies
Would the project:					
a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	□	□	■	■	□
b. Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	□	□	■	■	□

Analysis in Previous Environmental Documents

The General Plan EIR analyzed mineral resources, on page 7-1 to 7-2 and found that there would be no impact regarding mineral resources.

The following describes applicable analysis in the General Plan EIR and provides a review to determine whether there would be project-specific impacts that 1) are peculiar to the project or the parcel on which the project is located; 2) were not previously analyzed in previous environmental documents as significant effects; 3) are potentially significant off-site impacts and cumulative impacts that were not previously discussed in the previous environmental documents; and 4) are now determined to have a more severe impact than discussed in the previous environmental documents due to substantial new information.

Project-Specific Impacts

a. Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

b. Would the project result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?

The General Plan EIR determined that due to the largely urbanized nature of the General Plan Planning Area, and because there are no areas identified for the protection of mineral resources, implementation of the General Plan would have no impact to mineral resources. The project site is not zoned or designated for mining uses and no active mining operations are in the project site or vicinity. The project site is not classified as a Mineral Resource Zone (MRZ) and would not result in the loss of availability of a known mineral resource that would be of value to the residents of the state and the region, nor would it result in loss of a locally important mineral resource recovery site (USGS 2024).The project site is an infill site and the project would not involve developing currently undeveloped land with the potential to contain valuable mineral resources. There would be no

impact. The project would not result in new or more severe adverse impacts than discussed in the General Plan EIR.

Conclusion

The project would have no new significant or substantially more severe or peculiar impacts to mineral resources, nor would there be potentially significant off-site impacts, cumulative impacts, or previously identified significant effects that were not discussed in the prior environmental document. Further, there are no previously identified significant effects which, as a result of substantial new information not known at the time of the previous environmental review, have been determined to have a more severe adverse impact than those discussed in the previous environmental documents. Accordingly, no additional review is required.

13 Noise

	Significant Impact	Less than Significant	No Impact	Analyzed in the Prior EIR	Substantially Mitigated by Uniformly Applicable Development Policies
Would the project:					
a. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	□	■	□	■	□
b. Generation of excessive groundborne vibration or groundborne noise levels?	□	■	□	■	□
c. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	□	□	■	■	□

This analysis is partially based upon the results of the project's *Noise Impact Analysis* (Noise Report), completed by FirstCarbon Solutions in 2025 (Appendix G).

Analysis in Previous Environmental Documents

The General Plan EIR analyzed noise on pages 4.11-1 through 4.11-42. The General Plan EIR concluded that construction and operational impacts related to the generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project would be less than significant, construction and operation impacts related to the generation of excessive groundborne vibration or noise levels would be less than significant, and there would be no impact related to the exposure of people residing or working in the project area to excessive noise levels due to a nearby airport.

The following describes applicable analysis in the General Plan EIR and provides a review to determine whether there would be project-specific impacts that 1) are peculiar to the project or the parcel on which the project is located; 2) were not previously analyzed in a previous environmental documents as significant effects; 3) are potentially significant off-site impacts and cumulative

impacts that were not previously discussed in the previous environmental documents; and 4) are now determined to have a more severe impact than discussed in the previous environmental documents due to substantial new information.

Project-Specific Impacts

a. Would the project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Construction Impacts

Project construction activities on-site and traffic noise from construction vehicles would increase noise levels in the project vicinity. The closest noise-sensitive receptors to the proposed project site are single-family residences located directly northwest of the project site. The closest residence would be located approximately 35 feet from potential construction activity where multiple pieces of heavy construction equipment would potentially operate at the project site. At this distance, and assuming no shielding from existing fencing, maximum anticipated construction noise levels could have an hourly average of up to 86 dBA L_{eq} at the façade of the nearest single-family residence. Throughout the course of a typical construction day, construction activity would operate at a further distance away due to the nature of construction where equipment moves back and forth across the site. Assuming that construction equipment averages 70 feet from the nearest residence during a typical construction day, average daily noise level during the loudest phase of construction would be 80 dBA L_{eq} (8-hour average), as measured at any single residential receptor adjacent to the project site (the noise calculation sheet is provided in Attachment B of Appendix G).

These construction noise levels would not exceed the FTA's 80 dBA Leq (8-hour average) noise threshold. In addition, as noted previously, the City of Morgan Hill Municipal Code limits construction activities to between the hours of 7:00 a.m. and 8:00 p.m. Monday through Friday and between the hours of 9:00 a.m. to 6:00 p.m. on Saturday. Compliance with the City's permissible hours of construction would ensure that the project would not result in substantial annoyance or sleep disturbance of nearby sensitive receptors. Therefore, reasonable maximum construction noise impacts on sensitive receptors in the project vicinity would be less than significant. The project would not result in new or more severe adverse impacts than discussed in the General Plan EIR.

Operational Impacts

Mechanical Equipment Noise Impacts

Reference noise levels for typical residential mechanical ventilation equipment range up to approximately 70 dBA at a distance of 3 feet (Appendix G). Proposed mechanical ventilation systems could be located as close as approximately 40 feet from the nearest off-site receptor, the single-family residence located along the northwest corner of the project site. At this distance and assuming no shielding from any existing fences or structures, noise generated by mechanical ventilation equipment would attenuate to below 40 dBA L_{eq} at the nearest off-site residential receptors (the calculation sheet and modeling assumptions are provided in Attachment B of Appendix G).

Ambient noise levels measured as part of the Noise Report ranged between 57.2 dBA and 71 dBA Leq (Appendix G). Therefore, the proposed project's mechanical ventilation equipment operational noise levels of 40 dBA L_{eq} as calculated at the nearest off-site residential receptors would not

generate noise levels in excess of documented existing ambient noise levels. In addition, these operational noise levels would not exceed the City's noise performance threshold of 60 dBA as measured at the nearest receiving residential property line. Therefore, mechanical ventilation system operational noise levels would not result in a substantial permanent increase in noise levels in excess of established standards. The impact of mechanical ventilation equipment operational noise levels on sensitive off-site receptors would be less than significant. The project would not result in new or more severe adverse impacts than discussed in the General Plan EIR.

Traffic Noise Impacts

A significant impact would occur if a project doubled the existing traffic volume on a roadway, which would increase the ambient noise level by approximately 3 dBA (Appendix G). According to the Noise Report, project trips would generate 53 dBA CNEL as measured at 50 feet from the centerline of the outermost travel lane (the noise calculation sheets for these traffic noise levels are provided in Attachment B of Appendix G).

These noise levels are below the documented existing ambient noise levels of 57.2 dBA to 71 dBA. In addition, adding these traffic noise levels to the documented existing ambient noise levels would result in a less than 2 dBA increase in ambient noise levels. This is below the City's significant increase threshold of 3 dBA. Therefore, the proposed project would not result in a substantial permanent increase in ambient noise levels from project-generated traffic trips, and mobile source operational noise impacts would be less than significant. The project would not result in new or more severe adverse impacts than discussed in the General Plan EIR.

b. Would the project result in generation of excessive groundborne vibration or groundborne noise levels?

Construction

Of the variety of equipment used during construction, the small vibratory rollers that are anticipated to be used in the site preparation phase of construction would produce the greatest groundborne vibration levels. Small vibratory rollers produce groundborne vibration levels ranging up to 0.101 inch per second (in/sec) peak particle velocity (PPV) at 25 feet from the operating equipment (Appendix G).

The nearest off-site structure is a single-family residential building located northwest of the project site, approximately 25 feet from the nearest construction footprint where small vibratory rollers would potentially operate. At this distance, groundborne vibration levels could range up to 0.101 PPV from operation of a small vibratory roller. This is below the FTA's vibration impact criteria of 0.2 in/sec PPV for this type of structure, a building of nonengineered timber and masonry construction (Appendix G).

Therefore, construction of the proposed project would not expose nearby buildings to groundborne vibration levels in excess of their applicable FTA damage criteria, and this impact would be less than significant. The project would not result in new or more severe adverse impacts than discussed in the General Plan EIR.

Operation

Implementation of the proposed project would not include any permanent sources that would expose persons in the project vicinity to groundborne vibration levels that could be discernible without instruments at any existing sensitive land use in the project vicinity. In addition, there are no existing significant permanent sources of groundborne vibration in the project vicinity to which the proposed project would be exposed. Therefore, project operational groundborne vibration level impacts would be considered less than significant. The project would not result in new or more severe adverse impacts than discussed in the General Plan EIR.

c. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

The nearest airports to the project site are the San Martin Airport, located approximately four miles south of the project site, and the San José International Airport, located approximately 21 miles north of the project site. Because of the distance from and orientation of the airport runways, the project site is located well outside of the 65 dBA CNEL airport noise contours. While aircraft noise is occasionally audible on the project site from aircraft flyovers, aircraft noise associated with nearby airport activity would not expose people residing or working near the project site to excessive noise levels.

Therefore, implementation of the proposed project would not expose persons residing or working in the project vicinity to noise levels from airport activity that would be in excess of normally acceptable standards for residential land use development, the project would result in no impact associated with airport noise. The project would not result in new or more severe adverse impacts than discussed in the General Plan EIR.

Conclusion

Based on the project understanding described above, the proposed project would result in less than significant impacts related to noise. The project would not have peculiar or substantial noise impacts, nor would there be any potentially significant off-site impacts, cumulative impacts, or previously identified significant effects, which were not discussed in the prior environmental document. Also, there are no previously identified significant effects which, as a result of substantial new information that was not known at the time of the previous environmental review, are determined to have a more severe adverse impact that discussed in the previous environmental documents. Accordingly, no additional review is required.

14 Population and Housing

	Significant Impact	Less than Significant	No Impact	Analyzed in the Prior EIR	Substantially Mitigated by Uniformly Applicable Development Policies
Would the project:					
a. Induce substantial unplanned population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)?	□	■	□	■	□
b. Displace substantial amounts of existing housing, necessitating the construction of replacement housing elsewhere?	□	■	□	■	□

Analysis in Previous Environmental Documents

The General Plan EIR discussed population and housing on pages 4.12-1 through 4.12-16. The General Plan EIR accounted for a population of 68,057 and found that impacts would be less than significant.

The following describes applicable analysis in the General Plan EIR and provides a review to determine whether there would be project-specific impacts that 1) are peculiar to the project or the parcel on which the project is located; 2) were not previously analyzed in previous environmental documents as significant effects; 3) are potentially significant off-site impacts and cumulative impacts that were not previously discussed in the previous environmental documents; and 4) are now determined to have a more severe impact than discussed in the previous environmental documents due to substantial new information.

Project-Specific Impacts

a. Would the project induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

The project would include the construction of 93 three-story attached condominium residential units in an infill site. The project would directly generate population growth. Based on the City of Morgan Hill's average household size of 2.90 persons per household (California Department of Finance [DOF] 2024), the project would add an estimated 270 new residents to the city (93 units x 2.90 persons per unit). The project would increase the population of Morgan Hill from 46,384 to 46,654 people, an increase that falls within the residential buildout analyzed in the General Plan EIR of 68,057 (DOF 2024). Accordingly, it would not induce substantial population growth directly or

indirectly because the project would be part of planned growth in the region and within the growth projection analyzed in the General Plan EIR. Further, the proposed project is consistent with type of use and density assumed for the site in the General Plan EIR. Therefore, population growth related to the project would be less than significant. The project would not result in new or more severe adverse impacts than discussed in the General Plan EIR.

b. Would the project displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?

"Substantial" displacement would occur if the proposed project would displace more residences than would be accommodated through growth facilitated by the project. The goal of the proposed project is to accommodate and encourage new residential development in Morgan Hill. The project site is currently developed with a single-family residence and associated accessory buildings. The proposed project would not result in substantial displacement since it is being sold by the current owner/occupant and would include the construction of 93 condominium residences, 92 more than what currently exist on the project site. Therefore, construction and development of the site would not displace substantial numbers of people or residences, and impacts would be less than significant. The project would not result in new or more severe adverse impacts than discussed in the General Plan EIR.

Conclusion

The project would not involve development in areas not analyzed previously in the General Plan EIR, nor would it result in impacts to population and housing not covered in the General Plan EIR. The project would have no new significant or substantially more severe or peculiar impacts concerning population and housing, nor would there be any potentially significant off-site impacts, cumulative impacts, or previously identified significant effects, which were not discussed in the prior environmental document. Also, there are no previously identified significant effects which, as a result of substantial new information that was not known at the time of the previous environmental review, are determined to have a more severe adverse impact that discussed in the previous environmental documents. Accordingly, no additional review is required.

15 Public Services

		Significant Impact	Less than Significant	No Impact	Analyzed in the Prior EIR	Substantially Mitigated by Uniformly Applicable Development Policies
a.	Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:					
	1 Fire protection?	☐	■	☐	■	☐
	2 Police protection?	☐	■	☐	■	☐
	3 Schools?	☐	■	☐	■	☐
	4 Parks?	☐	■	☐	■	☐
	5 Other public facilities?	☐	■	☐	■	☐

Analysis in Previous Environmental Documents

The General Plan EIR analyzed public services on pages 4.13-1 through 4.13-44 and concluded that impacts regarding public services would be less than significant.

The following describes applicable analysis in the General Plan EIR and provides a review to determine whether there would be project-specific impacts that 1) are peculiar to the project or the parcel on which the project is located; 2) were not previously analyzed in previous environmental documents as significant effects; 3) are potentially significant off-site impacts and cumulative impacts that were not previously discussed in the previous environmental documents; and 4) are now determined to have a more severe impact than discussed in the previous environmental documents due to substantial new information.

Project-Specific Impacts

a.1. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered fire protection facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives?

a.2. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered police protection facilities, or the need for new or physically altered police protection facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives?

The General Plan EIR evaluated fire and police protection demand impacts and found them to be less than significant with implementation of applicable General Plan policies, required enforcement of fire and building codes, and the City's fire prevention regulations and procedures. The City reviews plans and conducts construction inspections to ensure that new development complies with existing building and fire code requirements. In addition, new development is required to pay an impact fee for new single-family, multi-family, commercial, and industrial development. This fee would support construction of new facilities which would undergo separate project-level CEQA review. The General Plan EIR determined that a new fire station would be needed to meet future demands in the City and General Plan policies would ensure that adequate fire protection services are provided without causing significant environmental impacts. Construction of the new fire station, Station 59, was completed in early 2025 and is anticipated to be operational prior to construction of the proposed project. Station 59 is located approximately 350 feet west of the project site, at 17285 Butterfield Boulevard. Station 59 would provide fire protection services to the project site. Regarding police services, the General Plan EIR determined that no existing facility deficiencies exist that would be exacerbated by the General Plan and new or altered facilities would not be needed.

As discussed in Section 14, *Population and Housing,* population growth facilitated by the proposed project would be within with General Plan population growth forecasts and the project is consistent with type of use and density assumed for the site in the General Plan EIR. The project involves infill residential development as envisioned in the General Plan, in an area currently served by police and fire protection services; it would not result in the need for new or expanded fire or police protection facilities. Pursuant to MHMC Section 3.56.030, the project applicant would be required to pay a development impact fee that would be used to cover the cost of new law enforcement facilities, equipment, and training and maintenance of existing law enforcement facilities, equipment, and training. This in lieu fee would ensure police protection facilities would be maintained with the proposed increase in population. Thus, there would be no impact. The project would not result in new or more severe adverse impacts than discussed in the General Plan EIR.

a.3. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered schools, or the need for new or physically altered schools, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives?

While new development, including the proposed project, would increase the demand for new school facilities, the General Plan EIR analyzed this issue and found impacts to be less than

significant with implementation of General Plan policies HC-1.1 through HV-1.8 and HC-1.12 and school impact fees. As analyzed in the General Plan EIR, the project applicant would be subject to developer fees that would be used by the local school district to mitigate impact associated with long-term operation and maintenance of school facilities. Pursuant to Section 65996(3)(h) of the California Government Code, payment of these fees "is deemed to be full and complete mitigation of impacts of any legislative or adjudicative act, or both, involving but not limited to, the planning, use, or development of real property, or any change in government organization or reorganization." The General Plan EIR also determined that environmental impacts resulting from the construction of new schools would be analyzed by MHUSD prior to construction. The project would have the potential to generate students at the rate assumed in the General Plan EIR for the site and therefore would have a less than significant impact. The project would not result in new or more severe adverse impacts than discussed in the General Plan EIR.

a.4. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered parks, or the need for new or physically altered parks, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives?

Please refer to Section 16, *Recreation*.

a.5. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for other public facilities?

The proposed project does not include and would not require new or physically altered governmental facilities. Population growth facilitated by the proposed residential units included in the project would generate additional demand for library and other public services, but this growth would be consistent with and accounted for in the General Plan and its EIR. Impacts would be less than significant. The project would not result in new or more severe adverse impacts than discussed in the General Plan EIR.

Conclusion

The project would have no new significant or substantially more severe or peculiar impacts to public services, nor would there be potentially significant off-site impacts, cumulative impacts, or previously identified significant effects that were not discussed in the prior environmental document. Further, there are no previously identified significant effects which, as a result of substantial new information not known at the time of the previous environmental review, have been determined to have a more severe adverse impact than those discussed in the previous environmental documents. Accordingly, no additional review is required.

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16 Recreation

	Significant Impact	Less than Significant	No Impact	Analyzed in the Prior EIR	Substantially Mitigated by Uniformly Applicable Development Policies
a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	□	■	□	■	□
b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	□	■	□	■	□

Analysis in Previous Environmental Documents

The General Plan EIR analyzed recreation on pages 4.13-30 through 4.13-44, in the Public Services section, and identified a less than significant impact to recreation.

The following describes applicable analysis in the General Plan EIR and provides a review to determine whether there would be project-specific impacts that 1) are peculiar to the project or the parcel on which the project is located; 2) were not previously analyzed in previous environmental documents as significant effects; 3) are potentially significant off-site impacts and cumulative impacts that were not previously discussed in the previous environmental documents; and 4) are now determined to have a more severe impact than discussed in the previous environmental documents due to substantial new information.

Project-Specific Impacts

a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

The General Plan EIR determined that compliance with General Plan Policies and the provision of required park impact fees, impacts related to the deterioration of neighborhood or regional parks would be less than significant. The project includes residential development that would increase population within Morgan Hill. The additional population would increase the use of existing parks and other recreational facilities. There are six existing parks within the project vicinity: Diana Park, located approximately 0.1 miles northeast along Diana Ave; Stone Creek Park, located approximately 0.1 miles east of the project site across Diana Avenue; Railroad Park, located approximately 0.1 miles west of the project site across Butterfield Boulevard; Third Street Creek

Park and Nob Hill Trail Park located approximately 0.15 miles west of the project site; and Galvan Park, located approximately 0.2 miles northwest of the project site. Additionally, the project includes on-site amenities including private open space on second-floor balconies and shared outdoor open space which would include benches, a passive recreation area, shade trellis area, picnic and BBQ areas, and an exercise structure. As discussed in Section 14, *Population and Housing,* population growth facilitated by the proposed project would be within with General Plan population growth forecasts and the project is consistent with type of use and density assumed for the site in the General Plan EIR. Pursuant to MHMC Section 3.56.030, the project applicant would be required to pay a development related park impact fee that would be used to cover the cost of new facilities and maintenance of existing facilities. This in lieu fee would ensure adequate parks and recreational facilities would be maintained with the proposed increase in population. Therefore, the increased use resulting from the project would not lead to a substantial physical deterioration of existing parks and recreational facilities. Impacts would be less than significant. The project would not result in new or more severe adverse impacts than discussed in the General Plan EIR.

b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

The project would include development of shared outdoor open space which would include benches, a passive recreation area, shade trellis area, picnic and BBQ areas, and an exercise structure. The impacts associated with provision of this recreational space for on-site residents are analyzed throughout this report as part of overall project construction and operation. As determined in this document, the provision of these amenities would not result in an adverse effect on the environment. This impact would be less than significant. The project would not result in new or more severe adverse impacts than discussed in the General Plan EIR.

Conclusion

The project would have no new significant or substantially more severe or peculiar impacts to recreation, nor would there be potentially significant off-site impacts, cumulative impacts, or previously identified significant effects that were not discussed in the prior environmental document. Further, there are no previously identified significant effects which, as a result of substantial new information not known at the time of the previous environmental review, have been determined to have a more severe adverse impact than those discussed in the previous environmental documents. Accordingly, no additional review is required.

17 Transportation and Traffic

	Significant Impact	Less than Significant	No Impact	Analyzed in the Prior EIR	Substantially Mitigated by Uniformly Applicable Development Policies
Would the project:					
a. Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	☐	■	☐	■	☐
b. Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	☐	■	☐	☐	☐
c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible use (e.g., farm equipment)?	☐	■	☐	■	☐
d. Result in inadequate emergency access?	☐	■	☐	■	☐

This analysis is primarily based upon the results of the project's *Trip Generation and Operations Analysis* and *Supplemental VMT Evaluation* completed by Hexagon Transportation Consultants in March 2025 (both in Appendix H).

Analysis in Previous Environmental Documents

The General Plan EIR evaluated transportation impacts on pages 4.14-1 through 4.14-56. According to the EIR, traffic volumes as a result of General Plan implementation would result in an exceedance of the City standard for intersection performance at two intersections and would contribute to unacceptable operations of the 101 freeway resulting in significant impacts. The EIR included mitigation for these traffic level-of-service impacts. Impacts relating to increased pedestrian activity and facilities, bicycle use and facilities, transit ridership and service were found to be less than significant. Additionally, impacts relating to air traffic patterns, transportation network design feature hazards, and emergency access were found to be less than significant.

The General Plan EIR was prepared and certified prior to adoption of the final CEQA guidelines that changed the metric of transportation analyses under CEQA from level of service (LOS) to vehicle miles traveled (VMT). LOS, a measure of traffic congestion, was replaced as the metric of transportation analyses by VMT pursuant to Senate Bill 743. However, because the City of Morgan Hill used LOS to evaluate the effects of new development at the time the General Plan EIR was created, LOS is the metric used in this analysis.

Changes in regulations after approval of the original EIR do not constitute new information triggering a supplemental or subsequent EIR (Concerned Dublin Citizens v. City of Dublin [2013] 214 Cal.App.4th 1301, 1320). Nor does it require previously analyzed topics, such as the change from the LOS standard to the VMT standard for traffic, to be reassessed under the new requirements (Olen Properties Corp. v. City of Newport Beach [2023] 93 Cal.App.5th 270, 280–281). In conformance with this standard, the following analysis is presented in terms of LOS to demonstrate consistency with the Final EIR. A brief VMT analysis is also included to demonstrate consistency with the City's VMT policy.

The following describes applicable analysis in the General Plan EIR and provides a review to determine whether there would be project-specific impacts that 1) are peculiar to the project or the parcel on which the project is located; 2) were not previously analyzed in previous environmental documents as significant effects; 3) are potentially significant off-site impacts and cumulative impacts that were not previously discussed in the previous environmental documents; and 4) are now determined to have a more severe impact than discussed in the previous environmental documents due to substantial new information.

Project-Specific Impacts

a. Would the project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

As stated in the General Plan EIR, new development would increase bicycle and pedestrian trips on the existing streets, trails, paths, and sidewalks, including during peak commute hours which would result exceed level of service standards at two intersections. General Plan policies and programs encourage and support alternative modes and requirements for development project applicants or the City to provide roadway improvements based on service standards. The project would involve infill development and would not directly impact transit, bicycle, or pedestrian facilities. The project would include a new driveway from Diana Avenue and internal roadways and walkways. The project site is located across Butterfield Boulevard from the Morgan Hill CalTrain Station, which provides access to Caltrain and the Express 121 bus line. Bus stops at East Dunne Avenue and Monterey Road; Monterey Road and Bisceglia Avenue; Monterey Road and Spring Avenue; and East Main Avenue and Calle Mazatan are also within 0.5 mile of the project site. The project site is adjacent to an existing bicycle and pedestrian path along Butterfield Boulevard. As the project is of the same type analyzed in the General Plan for the project site, and there are no site-specific issues with the capacity, performance and safety of transit, bicycle, or pedestrian infrastructure (see Appendix H), impacts would be less than significant. The project would not result in new or more severe adverse impacts than discussed in the General Plan EIR.

b. Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

As discussed above, SB 743 and the subsequent amendment of the CEQA Guidelines was not incorporated into CEQA at the time the General Plan EIR was prepared and certified, and therefore significance conclusions in this analysis are based on LOS.

Level of Service

Consistent with CEQA Guidelines Section 15183, no additional VMT analysis is required if a project can demonstrate through a study using level of service (LOS) that project impacts were adequately covered under the original (General Plan) EIR. Consistent with this, the project's effects on

intersection operations were evaluated by Hexagon Transportation Consultants (Appendix H). Traffic conditions at the following study intersections were analyzed for the weekday morning and afternoon peak hours of traffic:

1. Butterfield Boulevard and Main Avenue
2. Butterfield Boulevard and Diana Avenue
3. Butterfield Boulevard and Dunne Avenue
4. Calle Mazatan and Main Avenue
5. Calle Mazatan and Diana Avenue (unsignalized)

Hexagon determined that the proposed project would result in the addition of 43 net new morning peak-hour trips and 52 net new afternoon peak-hour trips to the roadway system under existing plus project conditions, and that the addition of project traffic would not result in the degradation of the study intersections' levels of service during the morning or afternoon peak hours. The project would not cause any study intersection to degrade to unacceptable conditions. Impacts would be less than significant. The project would not result in new or more severe adverse impacts than discussed in the General Plan EIR.

Vehicle Miles Traveled

Hexagon also evaluated project-generated VMT for the proposed project. As described in Appendix H, the project's VMT per capita would be 23.29. In November 2024, the City of Morgan Hill adopted its VMT policy which identifies VMT screening criteria and significance thresholds to be consistent with SB 743. Pursuant to the City's VMT policy, projects located within 0.5-mile of an existing major transit stop or an existing stop along a high-quality transit corridor can be considered to have a less-than-significant impact on VMT. The project site is located well within 0.5-mile of the Morgan Hill Caltrain Station. Thus, the proposed project could be considered to have a less-than significant impact on VMT under the City's VMT policy.

c. Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible use (e.g., farm equipment)?

d. Would the project result in inadequate emergency access?

As stated in the General Plan EIR, new streets or developments that would result from implementation of the proposed General Plan would be subject to City engineering standards and the General Plan policies regarding emergency access. In addition, newly-constructed driveways and street modifications are required to conform to applicable City street design standards, which are developed in coordination with the Fire Marshall pursuant to Morgan Hill Code of Ordinances Chapter 17.34 to ensure emergency access needs are met. Obstructions to visibility would be prohibited pursuant to Morgan Hill Code of Ordinances Chapter 10.36. The proposed 26-foot wide private street was designed to accommodate emergency vehicle access and would not obstruct emergency access. Compliance with Section 15.44.090 of the Morgan Hill Code of Ordinances would ensure fire access to the project site is adequate.

Hexagon also evaluated site access and circulation for potential safety concerns. Site access was evaluated in accordance with generally accepted traffic engineering standards and transportation planning to determine the adequacy of the site's access points with regard to traffic volume, geometric design, and sight distance. Hexagon determined that neither on- or off-site queuing for the proposed project driveway would result in safety hazards (Appendix H). In addition, sight

distance would be adequate to ensure safe turning out of the site, and proposed internal roadways would be adequate for emergency vehicle access and truck access (Appendix H). Finally, by its nature the project would not require or facilitate incompatible uses during operation. Impacts would be less than significant. There would be no impact beyond those identified in the General Plan EIR.

Conclusion

The project would have no new significant or substantially more severe or peculiar impacts to transportation, nor would there be potentially significant off-site impacts, cumulative impacts, or previously identified significant effects that were not discussed in the prior environmental document. Further, there are no previously identified significant effects which, as a result of substantial new information not known at the time of the previous environmental review, have been determined to have a more severe adverse impact than those discussed in the previous environmental documents. Accordingly, no additional review is required.

18 Tribal Cultural Resources

	Significant Impact	Less than Significant	No Impact	Analyzed in the Prior EIR	Substantially Mitigated by Uniformly Applicable Development Policies
Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in a Public Resources Code Section 21074 as either a site, feature, place, or cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:					
a. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k), or	□	□	□	■	■
b. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Cod Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	□	□	□	■	■

As of July 1, 2015, California Assembly Bill 52 of 2014 (AB 52) was enacted and expands CEQA by defining a new resource category, "tribal cultural resources." AB 52 establishes that "a project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment" (PRC Section 21084.2). It further states that the lead agency shall establish measures to avoid impacts that would alter the significant characteristics of a tribal cultural resource, when feasible (PRC Section 21084.3).

PRC Section 21074 (a)(1)(A) and (B) defines tribal cultural resources as "sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe" and is:

1. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or

2. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying these criteria, the lead agency shall consider the significance of the resource to a California Native American tribe.

AB 52 also establishes a formal consultation process for California tribes regarding those resources. The consultation process must be completed before a CEQA document can be certified. Under AB 52, lead agencies are required to "begin consultation with a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project." Native American tribes to be included in the process are those that have requested notice of projects proposed within the jurisdiction of the lead agency.

Analysis in Previous Environmental Documents

At the time of the General Plan, Tribal Cultural Resource discussion was captured under the Cultural Resources section. However, this section was subsequently added as a standalone section to the *CEQA Guidelines* checklist.

At the time of the General Plan, the City of Morgan Hill contacted the tribes listed by the NAHC including the Muwekma Ohlone Indian Tribe, Ohlone Indian Tribe, Amah Mutsun Tribal Band of Mission San Juan Bautista, Indian Canyon Mutsun Band of Costanoan, in compliance with AB 52 for the General Plan. None of these tribes requested consultation. Since adoption of the General Plan EIR, the Tamien Nation Tribe has requested consultation under AB 52. The City's consultation with the Tamien Nation Tribe resulted in the recognition of the Tamien Nation Tribe for AB 52 consultation.

The General Plan EIR analyzed cultural resources on pages 4.5-1 through 4.5-22 which included discussion relevant to Tribal Cultural Resources regarding potentially significant cultural resources and procedural compliance if human remains of Native American origin are found. The General Plan EIR found that compliance with existing national, state, and local laws as well as policies in the General Plan would reduce potential impacts to less-than-significant levels.

Project-Specific Impacts

a. Would the project cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code Section 21074 that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)?

b. Would the project cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code Section 21074 that is a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1?

A Notice of Preparation was not prepared for this consistency checklist. Therefore, consultation in compliance with AB 52 was not required in support of this checklist. However, as discussed in Section 5, *Cultural Resources*, FirstCarbon Solutions prepared a Cultural Resources Assessment of the site, which is included as Appendix C to this checklist. The CRA included a search of the CHRIS at the NWIC, a NAHC SLF search, and an archaeological survey and sensitivity assessment of the project site. The CRA did not identify cultural resources of Native American origin within the project

site, and it concluded that the project site has a low to moderate degree of sensitivity for buried archaeological resources.

Because no Tribal cultural resources were identified in the City during preparation of the General Plan EIR and there is no indication that the site has high sensitivity for archaeological resources, no Tribal cultural resources are anticipated to occur at the site. Although tribal cultural resources are not anticipated to occur at the site, required implementation of the City of Morgan Hill's Standard Condition of Approval for cultural resources would ensure that impacts related to tribal cultural resources from the proposed project's construction would be less than significant. The project would not result in new or more severe adverse impacts than discussed in the General Plan EIR.

CITY OF MORGAN HILL STANDARD CONDITIONS OF APPROVAL

CULTURAL RESOURCES

A. Significant historic or archaeological materials: A moderate potential exists for unrecorded historic-period archaeological resources to be within the project area. The developer shall enter into written contracts with an archaeologist and the Tamien Nation Tribe, and pay all fees associated with the activities required by this condition. The following policies and procedures for treatment and disposition of inadvertently discovered human remains or archaeological materials shall apply:
    1. Prior to start of grading or earthmoving activity on the "first day of construction", the archaeologist and Tamien Nation Tribal Monitor shall hold a pre-construction meeting for the purposes of "cultural sensitivity training" with the general contractor and subcontractors.
    2. A Tamien Nation Tribal Monitor shall be present on-site to monitor all ground-disturbing activities and an archaeologist shall be on-call. Where historical or archaeological artifacts are found, work in areas where remains or artifacts are found will be restricted or stopped until proper protocols are met, as described below:
        a. Work at the location of the find will halt immediately within fifty feet of the find. If an archaeologist is not present at the time of the discovery, the applicant shall contact an archaeologist for evaluation of the find to determine whether it qualifies as a unique archaeological resource as defined by this chapter;
        b. If the find is determined not to be a Unique Archaeological Resource, construction can continue. The archaeologist will prepare a brief informal memo/letter in collaboration with a tribal representative that describes and assesses the significance of the resource, including a discussion of the methods used to determine significance for the find;
        c. If the find appears significant and to qualify as a unique archaeological resource, the archaeologist will determine if the resource can be avoided and will detail avoidance procedures in a formal memo/letter; and
        d. If the resource cannot be avoided, the archaeologist in collaboration with a tribal representative shall develop within forty-eight hours an action plan to avoid or minimize impacts. The field crew shall not proceed until the action plan is approved by the Development Services Director. The action plan shall be in conformance with California Public Resources Code 21083.2.

3. The following policies and procedures for treatment and disposition of inadvertently discovered human remains or archaeological materials shall apply. If human remains are discovered, it is probable they are the remains of Native Americans,
    a. If human remains are encountered, they shall be treated with dignity and respect as due to them. Discovery of Native American remains is a very sensitive issue and serious concern. Information about such a discovery shall be held in confidence by all project personnel on a need to know basis. The rights of Native Americans to practice ceremonial observances on sites, in labs and around artifacts shall be upheld.
    b. Remains should not be held by human hands. Surgical gloves should be worn if remains need to be handled.
    c. Surgical mask should also be worn to prevent exposure to pathogens that may be associated with the remains.

4. In the event that known or suspected Native American remains are encountered, or significant historic or archaeological materials are discovered, ground-disturbing activities shall be immediately stopped. Examples of significant historic or archaeological materials include, but are not limited to, concentrations of historic artifacts (e.g., bottles, ceramics) or prehistoric artifacts (chipped chert or obsidian, arrow points, ground stone mortars and pestles), culturally altered ash stained midden soils associated with pre-contact Native American habitation sites, concentrations of fire-altered rock and/or burned or charred organic materials and historic structure remains such as stone lined building foundations, wells or privy pits. Ground-disturbing project activities may continue in other areas that are outside the exclusion zone as defined below.
5. An "exclusion zone" where unauthorized equipment and personnel are not permitted shall be established (e.g., taped off) around the discovery area plus a reasonable buffer zone by the contractor foreman or authorized representative, or party who made the discovery and initiated these protocols, or if on-site at the time or discovery, by the monitoring archaeologist and tribal representative (typically twenty-five to fifty feet for single burial or archaeological find).
6. The discovery locale shall be secured (e.g., 24-hour surveillance) as directed by the City or County if considered prudent to avoid further disturbances.
7. The Contractor Foreman or authorized representative, or party who made the discovery and initiated these protocols shall be responsible for immediately contacting by telephone the parties listed below to report the find and initiate the consultation process for treatment and disposition:
    - The City of Morgan Hill Development Services Director (408) 779-7247
    - The Contractor's Point(s) of Contact
    - The Coroner of the County of Santa Clara (if human remains found) (408) 793-1900
    - The Native American Heritage Commission (NAHC) in Sacramento (916) 653-4082
    - The Amah Mutsun Tribal Band (916) 481-5785 (H) or (916) 743-5833 (C)
    - The Tamien Nation (707)295-4011 (office) and (925)336-5359 (THPO)

8. The Coroner has two working days to examine the remains after being notified of the discovery. If the remains are Native American the Coroner has 24 hours to notify the NAHC.
9. The NAHC is responsible for identifying and immediately notifying the Most Likely Descendant (MLD). (Note: NAHC policy holds that the Native American Monitor will not be designated the MLD.)
10. Within 24 hours of their notification by the NAHC, the MLD will be granted permission to inspect the discovery site if they so choose.
11. Within 24 hours of their notification by the NAHC, the MLD may recommend to the City's Development Services Director the recommended means for treating or disposing, with appropriate dignity, the human remains and any associated grave goods. The recommendation may include the scientific removal and non-destructive or destructive analysis of human remains and items associated with Native American burials. Only those osteological analyses or DNA analyses recommended by the appropriate tribe may be considered and carried out.
12. If the MLD recommendation is rejected by the City of Morgan Hill the parties will attempt to mediate the disagreement with the NAHC. If mediation fails then the remains and all associated grave offerings shall be reburied with appropriate dignity on the property in a location not subject to further subsurface disturbance.

Conclusion

The project would have no new significant or substantially more severe or peculiar impacts to tribal cultural resources, nor are there potentially significant off-site impacts, cumulative impacts, or previously identified significant effects that were not discussed in the prior environmental document. Further, there are no previously identified significant effects which, as a result of substantial new information not known at the time of the previous environmental review, have been determined to have a more severe adverse impact than those discussed in the previous environmental documents. Accordingly, no additional review is required.

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19 Utilities and Service Systems

	Significant Impact	Less than Significant	No Impact	Analyzed in the Prior EIR	Substantially Mitigated by Uniformly Applicable Development Policies
Would the project:					
a. Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☐	■	■
b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	☐	■	☐	■	☐
c. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	■	☐	■	☐
d. Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	☐	■	☐	■	☐
e. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	■	☐	■	☐

Analysis in Previous Environmental Documents

The General Plan EIR analyzed impacts on utilities and service systems on pages 4.15-1 through 4.15-60. This discussion addressed the issues of water supply and delivery, wastewater collection and treatment, and solid waste disposal, recycling, and composting. The General Plan EIR identified impacts to all utilities and service systems as less than significant.

The following describes applicable analysis in the General Plan EIR and provides a review to determine whether there would be project-specific impacts that 1) are peculiar to the project or the parcel on which the project is located; 2) were not previously analyzed in previous environmental documents as significant effects; 3) are potentially significant off-site impacts and cumulative impacts that were not previously discussed in the previous environmental documents; and 4) are now determined to have a more severe impact than discussed in the previous environmental documents due to substantial new information.

Project-Specific Impacts

a. Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

b. Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

c. Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

Water

The General Plan EIR determined that, in accordance with applicable regulations listed and water conservation policies and actions of the General Plan, impacts under normal, single-dry and multiple-dry years would be less than significant. Valley Water (previously referred to in the General Plan EIR as Santa Clara Valley Water District) supplies water to the city, and the City of Morgan Hill provides water services to the project site (City of Morgan Hill 2021). The General Plan EIR states that future replacement of local distribution pipes or new groundwater wells may be required to support General Plan buildout. These improvements or expansions would require permitting and review in accordance with CEQA, which would ensure environmental impacts are disclosed and mitigated to the extent possible. As discussed in Section 14, *Population and Housing,* population growth facilitated by the proposed project would be within with General Plan population growth forecasts and the project is consistent with type of use and density assumed for the site in the General Plan EIR. The proposed project would not generate growth beyond that anticipated in the General Plan. Therefore, water demand resulting from implementation of the proposed project was evaluated in the General Plan EIR and it is not anticipated that the project would require new or expanded entitlements or facilities beyond what was previously analyzed. With implementation of General Plan policies, sufficient water supplies would be available for the project demand, and impacts would be less than significant. The project would not result in new or more severe adverse impacts than discussed in the General Plan EIR.

Wastewater

The General Plan EIR concluded that build out of the General Plan is not anticipated to generate wastewater in exceedance of the treatment requirements of the Central Coast Regional Water Quality Control Board (RWQCB). The proposed project would connect to the City of Morgan Hills sewer collection system. Sanitary sewage from the proposed project would be treated at a water treatment plant owned and operated by the South County Regional Wastewater Authority (SCRWA). The treatment facility discharges into the Pajaro River basin under a permit with the RWQCB. Compliance with conditions or permit requirements established by the City as well as water discharge requirements outlined by the RWQCB would ensure that wastewater discharges coming from the project site are treated by the SCRWA system would not exceed applicable RWQCB wastewater treatment requirements.

As discussed in Section 15, *Population and Housing,* population growth facilitated by the proposed project would be within with General Plan population growth forecasts and the project is consistent with type of use and density assumed for the site in the General Plan EIR. The proposed project would not generate growth beyond that anticipated in the General Plan. The General Plan EIR found that there would be adequate capacity at the SCRWA facility to serve development under the General Plan. Further, the SCRWA facility expansion project is underway, which would increase the capacity of the SCRWA facility from 8.5 million gallons per day (MGD) to 11 MGD. Completion of the SCRWA facility expansion project would ensure that there would be adequate capacity to serve development under the General Plan, including the proposed project. Therefore, there is adequate capacity at the SCRWA to service the project and no expansion of wastewater facilities would be required. Impacts would be less than significant. The project would not result in new or more severe adverse impacts than discussed in the General Plan EIR.

Stormwater

The General Plan EIR concluded that compliance with City development requirements related stormwater, impacts would be less than significant. The proposed project would connect to the City's storm drain system. As required by the General Plan EIR, a Preliminary Stormwater Mitigation Plan, which includes hydrologic and hydraulic calculations, has been prepared for the proposed project by MH Engineering Co. in July 2024 (Appendix F). The Preliminary Stormwater Mitigation Plan determined that the proposed project would not exceed the capacity of the City's storm drain system. In addition, because the project would disturb more than one acre of land, the project would be required to obtain coverage under the General Permit for Discharges of Storm Water and would be subject to the City's following Standard Conditions of Approval regarding discharges of stormwater associated with construction activity, as detailed in Section 10, *Hydrology and Water Quality*. As the project involves development of a site with residential uses consistent with the development envisioned for the site under the General Plan, and the project would be required to adhere to the General Permit for Discharges of Storm Water and the City's Standard Conditions of Approval. With implementation of these measures, as described in Section 10, *Hydrology and Water Quality*, impacts to stormwater facilities would be substantially mitigated by uniformly applicable development policies. The project would not result in new or more severe adverse impacts than discussed in the General Plan EIR.

Gas/Electricity/Telecommunications

The General Plan EIR concluded that with compliance with applicable energy efficiency standards and regulations, future development would result in less than significant impacts related to natural gas, electricity, and telecommunications.

Silicon Valley Clean Energy provides electricity services to the city via Pacific Gas and Electric (PG&E) infrastructure. The proposed project does not involve natural gas infrastructure. As discussed in Section 6, *Energy*, and Section 15, *Population and Housing,* population growth facilitated by the proposed project would be within with General Plan population growth forecasts and the project is consistent with type of use and density assumed for the site in the General Plan EIR. The proposed project would not generate growth beyond that anticipated in the General Plan. The General Plan EIR found that there would be adequate capacity at the SCRWA facility to serve development under the General Plan. Therefore, there is adequate natural gas, electricity, and telecommunications infrastructure to serve the General Plan buildout and no expansion of natural gas, electricity, or telecommunications facilities would be required. Further, the proposed project would comply with Title 24, Part 6, Subchapter 8 of the CBC, which requires the installation of rooftop solar panels, and indoor and outdoor lighting would be modern energy-efficient lighting, as required under the CBC. Therefore, impacts would be less than significant. The project would not result in new or more severe adverse impacts than discussed in the General Plan EIR.

d. Would the project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

According to the General Plan EIR, compliance with applicable regulations and policies and actions proposed in the General Plan would ensure that solid waste generated from development allowed under the General Plan would not exceed the landfill capacity available to the City and impacts would be less than significant.

The General Plan EIR identified that Recology South Valley collects garbage and recycling within Morgan Hill, including the project site, and solid waste is primarily disposed at Kirby Canyon Landfill and Monterey Peninsula Landfill.

Construction

Development of the proposed project would generate solid waste, including construction debris. This construction debris would include materials such as scrap wood, concrete, and plaster materials. Construction debris would be removed and disposed of in a timely manner and in accordance with all applicable laws and regulations. The handling of all debris and waste generated during construction of the project would be subject to CALGreen requirements and the California Integrated Waste Management Act of 1989 (AB 939) requirements for salvaging, recycling, and reuse of materials from construction activity on the project site. In accordance with CALGreen requirements, the project would be required to achieve a minimum of 65 percent diversion rate for construction waste. The removal of construction debris would only occur during the construction period and would be hauled to a facility that allows the inert debris (gravel, rocks, soil, etc.) that is currently on the project site. Therefore, construction of the proposed project would not contribute to an exceedance of the permitted capacity of any local landfill. Impacts related to the construction of the project would be less than significant. The project would not result in new or more severe adverse impacts than discussed in the General Plan EIR.

Operation

The proposed project would generate solid waste during operation. The proposed project would comply with state and local regulations and policies relating to solid waste, recycling, and organic waste reduction. Additional population facilitated by the 93 new residential units constructed under the proposed project are included in and consistent with the population growth forecasts of the General Plan. Therefore, solid waste generation resulting from the proposed project was evaluated in the General Plan EIR and it is not anticipated that the project would require new or expanded entitlements or facilities beyond what was previously analyzed. Impacts would be less than significant. The project would not result in new or more severe adverse impacts than discussed in the General Plan EIR.

e. Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

According to the General Plan EIR, the development under the General Plan would comply with state requirements and proposed General Plan policies to reduce the volume of solid waste through recycling and reuse of solid waste and there would be no impact. As detailed under impact d, the handling of all debris and waste generated during construction of the project would be subject to CALGreen requirements and AB 939 requirements for salvaging, recycling, and reuse of materials from construction activity on the project site. In accordance with CALGreen requirements, the project would be required to achieve a minimum of 65 percent diversion rate for construction waste. The proposed project would also comply with MHMC Chapter 13.28 which includes requirements relating to solid waste, recycling, and organic waste reduction and MHMC Chapter 15.65 which outlines sustainable building regulations designed to reduce waste generated by construction projects. Therefore, the proposed project would not conflict with federal, state or local management and reduction statues related to solid waste. Impacts would be less than significant. The project would not result in new or more severe adverse impacts than discussed in the General Plan EIR.

Conclusion

The project would have no new significant or substantially more severe or peculiar impacts to utilities and service systems, nor would there be potentially significant off-site impacts, cumulative impacts, or previously identified significant effects that were not discussed in the prior environmental document. Further, there are no previously identified significant effects which, as a result of substantial new information not known at the time of the previous environmental review, have been determined to have a more severe adverse impact than those discussed in the previous environmental documents. Accordingly, no additional review is required.

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20 Wildfire

	Significant Impact	Less than Significant	No Impact	Analyzed in the Prior EIR	Substantially Mitigated by Uniformly Applicable Development Policies
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:					
a. Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	■	☐	☐	☐
b. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	■	☐	☐	☐
c. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	■	☐	☐	☐
d. Expose people or structures to significant risks, including downslopes or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	■	☐	☐	☐

The updated CEQA Appendix G guidelines require that environmental analysis include a discussion of the potential wildfire impacts of proposed projects, with particular emphasis on the exposure of people and structures to as well as the exacerbation of wildfire risks.

Analysis in Previous Environmental Documents

At the time of the General Plan, Wildfire discussion was captured under the Hazards and Hazardous Materials section on pages 4.8-30 through 4.8-32. However, this section was subsequently added as a standalone section to the *CEQA Guidelines* checklist. The General Plan EIR identified impacts to wildland fires as less than significant.

The following provides a review to determine whether there would be project-specific impacts that 1) are peculiar to the project or the parcel on which the project is located; 2) were not previously analyzed in previous environmental documents as significant effects; 3) are potentially significant

off-site impacts and cumulative impacts that were not previously discussed in the previous environmental documents; and 4) are now determined to have a more severe impact than discussed in the previous environmental documents due to substantial new information.

a. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project substantially impair an adopted emergency response plan or emergency evacuation plan?

The project site is not within or near a state responsibility area (SRA) or lands classified as very high fire hazard severity zone (VHFHSZ) (CAL FIRE 2025). The nearest SRA or land classified as VHFHSZ is located approximately 0.55-mile southwest of the project site. The project site is generally flat and surrounded by numerous firebreaks such as roads and urban development. Undeveloped wildland areas are not located near the project site. Construction of the proposed project would maintain emergency access to the site and on area roadways and would not include any components, such as road closures, that would interfere with an emergency response plan or evacuation route. The risk of wildfire on the project site would be low and the proposed project would not substantially impair an adopted emergency response plan or emergency evacuation plan. Impacts would be less than significant. The project would not result in new or more severe adverse impacts than discussed in the General Plan EIR.

b. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project, due to slope, prevailing winds, and other factors, exacerbate wildfire risks and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

c. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

As detailed under impact a, the project site is not within or near a SRA or lands classified as VHFHSZ (CAL FIRE 2025). The project site is developed within an urbanized area served by existing infrastructure, including roads and utilities. The project would be served by Butterfield Boulevard as the primary access road and the existing utilities in the project area and would not require the installation or maintenance of associated infrastructure within FHSZs that may exacerbate fire risk. Further, prior to the issuance of the final building permits for the project, the City would review final site plans for the proposed project to ensure that design features would not exacerbate fire risk. Therefore, the proposed project would not result in temporary or ongoing impacts related to the installation or maintenance or infrastructure that would exacerbate fire risk. Impacts would be less than significant. The project would not result in new or more severe adverse impacts than discussed in the General Plan EIR.

d. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project expose people or structures to significant risks, including downslopes or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

As detailed under impact a, the project site is not within or near a SRA or lands classified as VHFHSZ (CAL FIRE 2025). There are no streams or rivers located on or adjacent to the project site, and the project site and surrounding areas are relatively flat, and not at high risk of downslope or downstream flooding or landslides. The proposed project does not involve uses that could

exacerbate wildfire risks. Risks to project occupants would be addressed through conformance with the 2022 California Fire Code, 2022 CBC, and California Health and Safety Code, which establishes provisions for fire safety related to construction, maintenance and design of building, and land uses. Therefore, the project would not exacerbate wildfire risks or expose people or structures to risk due to runoff, post-fire slope instability, or drainage changes. Therefore, the risk of wildfire on the project site would be low and the project would not exacerbate wildfire risks. Impacts would be less than significant. The project would not result in new or more severe adverse impacts than discussed in the General Plan EIR.

Conclusion

The project would have no new significant or substantially more severe or peculiar impacts with regard to wildfire risks, nor would there be potentially significant off-site impacts, cumulative impacts, or previously identified significant effects that were not discussed in the prior environmental document. Further, there are no previously identified significant effects which, as a result of substantial new information not known at the time of the previous environmental review, have been determined to have a more severe adverse impact than those discussed in the previous environmental documents. Accordingly, no additional review is required.

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21 Mandatory Findings of Significance

	Significant Impact	Less than Significant	No Impact	Analyzed in the Prior EIR	Substantially Mitigated by Uniformly Applicable Development Policies
Does the project:					
a. Have the potential to substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☐	☐	☐	■
b. Have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☐	☐	■	☐
c. Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☐	☐	■

Project-Specific Impacts

a. Does the project have the potential to substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

Consistent with the findings of the General Plan EIR and as discussed in Section 4, *Biological Resources*, with incorporation of the Standard Conditions of Approval related to avoidance of Contra Costa goldfields, and species that are fully protected by CFGC (Sections 3511 and 4700), the MBTA,

and Bald and Golden Eagle Protection Act, the project would not substantially reduce the habitat of a fish or wildlife species; cause a fish or wildlife species population to drop below self-sustaining levels; threaten to eliminate a plant or animal community; or reduce the number or restrict the range of a rare or endangered plant or animal.

As discussed in Section 5, *Cultural Resources*, and Section 18, *Tribal Cultural Resources,* the project would not eliminate important examples of the major periods of California history or prehistory, including archaeological or paleontological resources. As such, the project would not result in impacts peculiar to the project beyond those identified in the General Plan EIR and subsequent environmental documents.

b. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?

Required conformance with General Plan policies and standard conditions of approval specified in this document would ensure that potential impacts are individually limited and not cumulatively considerable in the context of impacts associated with other pending and planned development projects. As part of the General Plan EIR, cumulative impacts associated with buildout of infill projects were analyzed. The project involves residential development on a site designated for residential development under the General Plan and other existing and allowable land uses near the project are not significantly different than those studied in the cumulative analysis of the General Plan EIR. The General Plan is a document that establishes a land use scenario and goals, policies, and objectives for development and growth throughout the city, through the year 2035. Thus, the impact analyses in the General Plan EIR effectively constitute cumulative analyses of the approved land uses in the planning boundaries. The project would not result in significant impacts peculiar to the project site, as indicated in sections 1 through 20 above. Nearby development would be required to be consistent with the local planning documents or mitigation would be required to assess the impacts that were not addressed in the General Plan EIR. Therefore, the project's consistency with the General Plan and subsequent analysis above in sections 1 through 20 indicate that the project would not result in significant cumulative impacts that were not addressed in the General Plan EIR.

c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

In general, impacts to human beings are associated with air quality, geology and soils, hazards and hazardous materials, noise, traffic safety, and wildfire. As detailed in the preceding sections, the project would not result, either directly or indirectly, in substantial adverse impacts related to these issue areas. The project's effects on regional air quality, geology and soils, hazards and hazardous materials, noise, transportation/traffic, and wildfire would be less than significant with adherence to applicable regulations and the City's Standards Conditions of Approval. Therefore, the project would not have substantial direct or indirect adverse effects on human beings.

Conclusion

The proposed project would be consistent with the development density established by the site's General Plan land use designation and General Plan policies for which an EIR was certified.

Accordingly, based on the assessments presented in the environmental checklist, the project does not require additional environmental review as the impacts:

1. Are not peculiar to the project or the parcel on which the project would be located
2. Were analyzed as significant effects in a prior EIR on the zoning action, general plan, and specific plan, with which the project is consistent where applicable
3. Are not potentially significant off-site impacts and cumulative impacts which were not discussed in the prior EIR prepared for the general plan and specific plan
4. Are not previously identified significant effects which, as a result of substantial new information which was not known at the time the EIR was certified, are determined to have a more severe adverse impact than discussed in the prior EIR

The majority of impacts would be less than significant or were analyzed previously in the General Plan EIR. Additional impacts would be reduced or mitigated by the imposition of uniformly applied development policies or standards. Accordingly, implementation of the project complies with Section 15183 of the CEQA Guidelines and no further environmental review is required.

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Appendix A

Air Quality and Greenhouse Gas Emissions and Energy Technical Analysis

FCS
An ADEC Innovation

Memorandum

Date: September 17, 2024 *(Revised January 15, 2025)*

To: Jeff Aguilar, Partner, Diana MH Townhomes, LLC

From: Jackie Winkel, Senior Air Quality Scientist FirstCarbon Solutions
Philip Ault, Director of Noise and Air Quality, FirstCarbon Solutions

Subject: Air Quality and Greenhouse Gas Emissions and Energy Technical Analysis for the North Diana Residential Project, Santa Clara County, California

At the request of Diana MH Townhomes, LLC (project applicant), FirstCarbon Solutions (FCS) prepared this memorandum to summarize the findings of the Air Quality and Greenhouse Gas Emissions and Energy analysis prepared for the proposed Diana Morgan Hill Townhomes Project (proposed project). The proposed project site is located at 375 Diana Avenue in the City of Morgan Hill, in Santa Clara County (County), California.

Recommendations to avoid or minimize potential project-related impacts to sensitive receptors in the project vicinity are included in this memorandum as appropriate.

PROJECT DESCRIPTION

The project site is located at 375 Diana Avenue in the City of Morgan Hill, California. The project site consists of Assessor's Parcel Numbers (APNs) 726-12-001 and 726-12-004. The project applicant proposes to demolish all existing on-site structures and one tree and construct 93 townhome residential units in 15 separate buildings. The townhomes would be grouped into buildings of six or seven units, with a total building construction area of approximately 223,515 square feet. In addition, the proposed project would provide approximately 75,065 square feet of common open space and private open space, including 6,317 square feet of bioretention basins. The proposed common open space would include various amenities such as barbeque areas, benches, exercise structures, etc. The site would be accessed via a driveway connecting to Diana Avenue in the northeast corner of the project site, and internal circulation would be provided by an internal road. Additionally, the proposed project would provide 218 residential parking spaces, and 31 visitor parking spaces.

The project site is surrounded to the north, east, and south by residential uses, and is surrounded by public and commercial uses to the south and west. The project site is designated as "Residential Attached Medium" by the Morgan Hill 2035 General Plan (General Plan) and the City's Zoning Ordinance zones the project site as Residential Attached Medium Density (RAM).

SETTING AND REGULATORY FRAMEWORK

Air Quality Regulatory Framework

The proposed project is in Santa Clara County and within the jurisdiction of the Bay Area Air Quality Management District (BAAQMD), which regulates air quality in the San Francisco Bay Area Air Basin (Air Basin). Within the Air Basin, ambient air quality standards for ozone, carbon monoxide (CO), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), particulate matter with an aerodynamic diameter of 2.5 microns and smaller ($PM_{2.5}$) and 10 microns and smaller (PM_{10}), and lead (Pb) have been established by both the California Environmental Protection Agency (Cal/EPA) and the United States Environmental Protection Agency (EPA).[1] California has also set standards for sulfate concentrations and atmospheric visibility.

The EPA and the California Air Resources Board (ARB) designate air basins, or specific areas within an air basin, as "nonattainment" where ambient air quality standards are exceeded. If standards are met, the area is designated as "attainment." If there is inadequate or inconclusive data to make a definitive attainment designation, they are considered "unclassified." National nonattainment areas are further designated as marginal, moderate, serious, severe, or extreme as a function of deviation from standards.

The Air Basin is classified as a nonattainment area for the State ozone and particulate matter standards and as nonattainment for federal ozone 8-hour and particulate matter less than 2.5 microns in diameter ($PM_{2.5}$) 24-hour standards. This indicates that the BAAQMD has not achieved compliance with these State and federal standards in the Air Basin.

In addition to regulating criteria pollutants for attainment of State and federal standards, the ARB and BAAQMD regulate and control emissions of toxic air contaminants (TACs) to further protect human health. TACs are a class of pollutants that includes hundreds of chemicals hazardous to human health. Long-term exposure to TACs may cause more severe health effects, such as neurological damage, hormone disruption, developmental defects, and cancer. TAC emissions are highly localized and are emitted from mobile sources such as cars, trucks, and marine and rail sources as well as stationary and area sources. The ARB and BAAQMD address emissions via mobile source strategies, stationary source permitting requirements, and health risk thresholds for new development under review in the California Environmental Quality Act (CEQA) process.

Particulate Matter (PM) is the most important health risk driver from Bay Area air quality,[2] both as fine particulate matter ($PM_{2.5}$) and as diesel PM, a toxic air contaminant. Studies indicate that diesel particulate matter (DPM) poses the greatest health risk among airborne TACs. The ARB conducted a 10-year research program that demonstrated that DPM from diesel-fueled engines is a human carcinogen

[1] The United States Environmental Protection Agency (EPA) has established National Ambient Air Quality Standards (NAAQS) for six of the most common air pollutants—carbon monoxide, lead, ground level ozone, particulate matter, nitrogen dioxide, and sulfur dioxide—known as "criteria" air pollutants (or simply "criteria pollutants").

[2] Bay Area Air Quality Management District (BAAQMD). 2020. Particulate Matter: Spotlight on Health Protection. Advisory Council Particulate Matter Reduction Strategy Report. https://www.baaqmd.gov/~/media/files/board-of-directors/advisory-council/2020/ac_particulate_matter_reduction_strategy_report.pdf?la=en&rev=570867c8b25e4ca0b2f93f80c4c1ef02. Accessed September 16, 2024.

and that chronic (long-term) inhalation exposure to DPM poses a chronic long-term health risk. Although DPM is emitted by diesel-fueled internal combustion engines, the composition of the emissions varies depending on engine type, operating conditions, fuel composition, lubricating oil, and whether an emission control system is present. This has serious adverse health impacts because $PM_{2.5}$ can travel deep into lungs and enter the bloodstream. Fine PM originates from a variety of sources, including fossil fuel combustion, residential wood-burning, cooking, wildfires, and dust.

Researchers established long ago that exposure to $PM_{2.5}$ has negative effects on the respiratory system, such as triggering asthma attacks, aggravating bronchitis, and diminishing lung function. More recent studies have found that $PM_{2.5}$ can also harm the cardiovascular system and studies have found a clear correlation between $PM_{2.5}$ levels, exposure, and mortality. Studies also indicate that exposure to $PM_{2.5}$ may be related to other negative health effects, including impacts on the brain, such as reduced cognitive function, as well as increased risk of diabetes. Exposure to $PM_{2.5}$ remains the leading public health risk and contributor to premature death from air pollution in the Bay Area.

For CEQA, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the proposed project's significance impact determinations related to air quality from criteria pollutants and TACs.

Thresholds of Significance

The significance criteria established or recommended by the BAAQMD were used to make CEQA significance determinations related to the proposed project's impacts on air quality. The BAAQMD has adopted standards of significance for construction and operation. Table 1 shows the thresholds of significance. In developing the thresholds of significance for air pollutants, the BAAQMD considered the emission levels for which a project's individual emissions would be cumulatively considerable. If a project exceeds the identified significance thresholds, its emissions would be cumulatively considerable, resulting in significant adverse air quality impacts on the region's existing air quality conditions.

Table 1: BAAQMD Thresholds of Significance

Pollutant	Construction Thresholds Average Daily Emissions (pounds/day)	Operational Thresholds	
		Average Daily Emissions (pounds/day)	Maximum Annual Emissions (tons/year)
Criteria Air Pollutants			
ROG	54	54	10
NO_X	54	54	10
PM_{10}	82 (exhaust)	82	15
$PM_{2.5}$	54 (exhaust)	54	10
CO	Not applicable	9.0 ppm (8-hour average) or 20.0 ppm (1-hour average)	

Pollutant	Construction Thresholds Average Daily Emissions (pounds/day)	Operational Thresholds	
		Average Daily Emissions (pounds/day)	Maximum Annual Emissions (tons/year)
Fugitive Dust	Construction Dust Ordinance, other Best Management Practices (BAAQMD Basic Construction Measures)	Not applicable	
Health Risks and Hazards for New Sources			
Excess Cancer Risk	10 per one million	10 per one million	
Chronic or 1-hour Acute Hazard Index	1.0	1.0	
Incremental annual average $PM_{2.5}$	0.3 µg/m^3	0.3 µg/m^3	
Health Risks and Hazards for Sensitive Receptors (Cumulative from All Sources within 1,000-Foot Zone of Influence) and Cumulative Thresholds for New Sources			
Excess Cancer Risk	100 per 1 million		
Chronic Hazard Index	10.0		
Annual Average $PM_{2.5}$	0.8 µg/m^3		

Notes:
µg/m^3 = micrograms per cubic meter
CO = carbon monoxide
NO_X = nitrogen oxides
PM_{10} = particulate matter less than 10 microns in diameter
$PM_{2.5}$ = particulate matter less than 2.5 microns in diameter
ROG = reactive organic gases
Source: Bay Area Air Quality Management District (BAAQMD). 2022. CEQA Air Quality Guidelines. April. Website: https://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa-guidelines-2022/ceqa-guidelines-chapter-3-thresholds_final_v2-pdf.pdf?la=en. Accessed September 16, 2024.

City of Morgan Hill Standard Conditions of Approval

In evaluating the potential for adverse environmental impacts, the lead agency must identify and apply uniformly applicable development policies or standards that have been adopted by the lead agency, or city or county, and evaluate whether they would reduce potential impacts to below a level of significant. If impacts would be reduced with the application of standard conditions, the project has a less than significant impact.

Pursuant to CEQA Guidelines Section 15183.3(f)(7), "Uniformly applicable development policies or standards" are policies or standards or enacted by a city or county, or by a lead agency, that reduce one or more adverse environmental effects."

The following measures (specific to air quality), provided as Standard Conditions of Approval (SCAs) by the City of Morgan Hill, will be required to be implemented by the project applicant as a part of the development approval process:

AIR QUALITY

SCA AIR-1 Dust, Noise, Vibration and Materials Management Plan: A management plan detailing strategies for control of noise, dust and vibration, and storage of hazardous materials during construction of the project shall be submitted for review prior issuance of a grading permit and requirements shall be included on all site development and grading plans. The intent of this condition is to minimize construction-related disturbance of residents of the nearby or adjacent properties. (MHMC 18.76)

SCA AIR-2 Basic Construction Measures Related to Dust Suppression. The following measures shall be implemented with the project:

1. All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
2. All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
3. All visible mud or dirt trackout onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
4. All vehicle speeds on unpaved roads shall be limited to 15 mph.
5. All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
6. Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of [CCR]). Clear signage shall be provided for construction workers at all access points.
7. All construction equipment shall be maintained and properly tuned in accordance with the manufacturer's specifications. All equipment shall be checked by a certified visible emissions evaluator.
8. Post a publicly visible sign with the telephone number and person to contact at the lead agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations.

SCA AIR-3 For projects that exceed BAAQMD thresholds:

1. All exposed surfaces shall be watered at a frequency adequate to maintain minimum soil moisture of 12 percent. Moisture content can be verified by lab samples or moisture probe.
2. All excavation, grading, and/or demolition activities shall be suspended when average wind speeds exceed 20 mph.

3. Wind breaks (e.g., trees, fences) shall be installed on the windward side(s) of actively disturbed areas of construction. Wind breaks should have at maximum 50 percent air porosity.
4. Vegetative ground cover (e.g., fast-germinating native grass seed) shall be planted in disturbed areas as soon as possible and watered appropriately until vegetation is established.
5. The simultaneous occurrence of excavation, grading, and ground-disturbing construction activities on the same area at any one time shall be limited. Activities shall be phased to reduce the amount of disturbed surfaces at any one time.
6. All trucks and equipment, including their tires, shall be washed off prior to leaving the site.
7. Site accesses to a distance of 100 feet from the paved road shall be treated with a 6 to 12-inch compacted layer of wood chips, mulch, or gravel.
8. Sandbags or other erosion control measures shall be installed to prevent silt runoff to public roadways from sites with a slope greater than 1 percent.
9. Minimizing the idling time of diesel-powered construction equipment to 2 minutes.
10. The project shall develop a plan demonstrating that the off-road equipment (more than 50 horsepower) to be used in the construction project (i.e., owned, leased, and subcontractor vehicles) would achieve a project-wide fleet average 20 percent NO_X reduction and 45 percent PM reduction compared to the most recent ARB fleet average. Acceptable options for reducing emissions include the use of late model engines, low-emission diesel products, alternative fuels, engine retrofit technology, after-treatment products, add-on devices such as particulate filters, and/or other options as such become available.
11. Use low VOC (i.e., ROG) coatings beyond the local requirements (i.e., Regulation 8, Rule 3: Architectural Coatings).
12. Requiring that all construction equipment, diesel trucks, and generators be equipped with Best Available Control Technology for emission reductions of NOx and PM.
13. Requiring all contractors use equipment that meets ARB's most recent certification standard for off-road heavy-duty diesel engines.

Additional Relevant Local Regulations

City of Morgan Hill General Plan

The General Plan includes policies to avoid or mitigate impacts resulting from planned development projects within the City.[3] The following policies are specific to air quality and apply to the proposed project.

[3] City of Morgan Hill 2035 General Plan. July 2016. Website: https://www.morganhill.ca.gov/DocumentCenter/View/22839/MH2035-General-Plan---December-2017?bidId=. Accessed September 9, 2024.

Air Quality

Goal NRE-10 Reduced air pollution emissions.

Policy NRE-10.3 **Automobile Emissions.** Encourage the use of and infrastructure for alternative fuel, hybrid and electric vehicles. Encourage new and existing public and private development to include electric vehicle charging stations.

Policy NRE-10.4 **Reduced Automobile Use.** To reduce air pollution the frequency and length of automobile trips and the amount of traffic congestion by controlling sprawl, promoting infill development, and encouraging mixed uses and higher density development near transit. Support the expansion and improvement of alternative modes of transportation. Encourage development project designs that protect and improve air quality and minimize direct and indirect air pollutant emissions by including components that reduce vehicle trips.

Goal NRE-11 Minimized exposure of people to toxic air contaminants such as ozone, carbon monoxide, lead, and particulate matter.

Policy NRE-11.1 **TACs and Proposed Sensitive Uses.** Require modeling for sensitive land uses, such as residential development, proposed near sources of pollution such as freeways and industrial uses. Require new residential development and projects categorized as sensitive receptors to incorporate effective mitigation measures into project designs or be located adequate distances from sources of TACs to avoid significant risk to health and safety.

Policy NRE-11.2 **TACs and Existing Sensitive Uses.** Encourage the installation of appropriate air filtration mechanisms at existing schools, residences, and other sensitive receptors adversely affected by existing or proposed pollution sources.

Policy NRE-11.6 **Vegetation Buffers.** Encourage the use of pollution-absorbing trees and vegetation in buffer areas between substantial sources of toxic air contaminants and sensitive receptors.

Goal NRE-12 Minimized air pollutant emissions from demolition and construction activities.

Policy NRE-12.1 **Best Practices.** Requirement that development projects implement best management practices to reduce air pollutant emissions associated with construction and operation of the project.

Policy NRE-12.2 **Conditions of Approval.** Include dust, particulate matter, and construction equipment exhaust control measures as conditions of approval for subdivision maps, site development and planned development permits, grading permits, and demolition permits. At a minimum, conditions shall conform to construction mitigation measures

recommended in the current Bay Area Air Quality Management District CEQA Guidelines.

Policy NRE-12.3 **Control Measures.** Require construction and demolition projects that have the potential to disturb asbestos (from soil or building material) to comply with all the requirements of the California Air Resource Board's Air Toxics Control Measures (ATCMs) for Construction, Grading, Quarrying, and Surface Mining Operations.

Policy NRE-12.4 **Grading.** Require subdivision designs and site planning to minimize grading and use landform grading in hillside areas.

Action NRE-12.A **Standard Measures for Demolition and Grading.** Adopt and periodically update dust, particulate matter, and exhaust control standard measures for demolition, grading, and construction activities to include on project plans mitigation measures as conditions of approval based on Bay Area Air Quality Management District CEQA Guidelines. Include measures to prevent silt loading on roadways that generates particulate matter air pollution by prohibiting unpaved or unprotected access to public roadways from construction sites.

Action NRE-12.B **Grading Ordinance.** Revise the grading ordinance and condition grading permits to require that graded areas be stabilized from the completion of grading to commencement and construction.

Goal NRE-13 Use of green building practices in new and existing development to promote a healthful indoor environment.

Policy NRE-13.1 **Building Materials.** Promote the use of building materials that maintain healthful indoor air quality in an effort to reduce irritation and exposure to toxins and allergens for building occupants.

Policy NRE-13.2 **Construction and Pre-Occupancy Practices.** Encourage construction and pre-occupancy practices to improve indoor air quality for new development upon occupancy of the structure.

Action NRE-13.A **Building Materials Ordinance.** Develop and implement ordinances to promote the use of building materials, furniture, and paint that maintain healthful indoor air quality and to discourage the use of materials that degrade indoor air quality.

Action NRE-13.B **Construction and Pre-Occupancy Practices Ordinance.** Develop and implement ordinances to promote construction and pre-occupancy practices beneficial to indoor air quality, such as sealing of the HVAC system during construction, air flush outs prior to occupancy, and/or air quality testing and corrections prior to occupancy.

Goal NRE-14 Minimum exposure of residents to objectionable odors.

Action NRE-14.1 **Odors and Proposed Sensitive Uses.** Require new residential development projects and projects categorized as sensitive receptors to be located an adequate distance from facilities that are existing or potential sources of odor. Determine the adequate separation distance based on the type, size, and operations of the facility.

City of Morgan Hill Municipal Code

The City's Municipal Code includes ordinances to avoid or mitigate impacts resulting from planned development projects within the City.[4] The following ordinances are specific to air quality and apply to the proposed project.

- Wood-Burning Devices (Chapter 15.64)

Greenhouse Gas Regulatory Framework

California Assembly Bill 32 and Executive Order S-3-05

Assembly Bill (AB) 32, also known as the Global Warming Solutions Act, was passed in 2006 and established a goal to reduce greenhouse gas (GHG) emissions to 1990 levels by 2020. Prior to the adoption of AB 32, the Governor of California also signed Executive Order S-3-05 into law, which set a long-term objective to reduce GHG emissions to 90 percent below 1990 levels by 2050. Cal/EPA is the State agency responsible for coordinating the GHG emissions reduction effort and establishing targets along the way.

In December 2008, the ARB approved the Climate Change Scoping Plan, which proposed a comprehensive set of actions designed to reduce California's dependence on oil, diversify energy sources, save energy, and enhance public health, among other goals. Per AB 32, the Scoping Plan must be updated every five years to evaluate the mix of AB 32 policies to ensure that California is on track to achieve the 2020 GHG reduction goal. The First Update to the Scoping Plan was approved on May 22, 2014, and builds upon the Scoping Plan with new strategies and recommendations. The First Update defined the ARB's priorities over the next 5 years and lays the groundwork to reach long-term goals set forth in Executive Order S-3-05.[5]

California Senate Bill 375

Senate Bill (SB) 375, known as the Sustainable Communities Strategy and Climate Protection Act, was signed into law in September 2008. It builds on AB 32 by requiring the ARB to develop regional GHG reduction targets to be achieved from the automobile and light truck sectors for 2020 and 2035 compared to 2005 emissions. The per capita reduction targets for passenger vehicles in the San

[4] MuniCode Library, City of Morgan Hill. June 2024. Website: https://library.municode.com/ca/morgan_hill/codes/code_of_ordinances. Accessed September 9, 2024.

[5] California Environmental Protection Agency (Cal/EPA) California Air Resources Board (ARB). First Update to the AB 32 Scoping Plan. Website: http://www.arb.ca.gov/cc/scopingplan/document/updatedscopingplan2013.htm. Accessed September 16, 2024.

Francisco Bay Area include a 7 percent reduction by 2020 and a 15 percent reduction by 2035.[6] The four major requirements of SB 375 are:

1. Metropolitan Planning Organizations (MPOs) must meet GHG emission reduction targets for automobiles and light trucks through land use and transportation strategies.
2. MPOs must create a Sustainable Communities Strategy (SCS) to provide an integrated land use/transportation plan for meeting regional targets consistent with the Regional Transportation Plan (RTP).
3. Regional housing elements and transportation plans must be synchronized on 8-year schedules, with Regional Housing Needs Assessment (RHNA) allocation numbers conforming to the SCS.
4. MPOs must use transportation and air emissions modeling techniques consistent with guidelines prepared by the California Transportation Commission (CTC).

Metropolitan Transportation Commission (MTC) and Association of Bay Area Governments (ABAG) adopted Plan Bay Area in July 2013. The strategies in the plan are intended to promote compact, mixed-use development close to public transit, jobs, schools, shopping, parks, recreation, and other amenities, particularly within Priority Development Areas (PDAs) identified by local jurisdictions. The MTC and ABAG adopted Plan Bay Area 2050 in October 2021.

2022 ARB Scoping Plan

The 2022 Scoping Plan reaffirms and clarifies the role of local governments in achieving the State's climate goals, particularly as it concerns the approval of new land use development projects and their environmental review under CEQA. It encourages local governments to adopt a CEQA-qualified Clean Air Plan addressing three Priority Areas: (1) transportation electrification, (2) Vehicle Miles Traveled (VMT) reduction, and (3) building decarbonization. By prioritizing climate action in these three Priority Areas, local governments can address the largest sources of GHGs within their jurisdictions. Local governments that prepare qualified Clean Air Plans that include strategies in these areas are contributing to alignment between local climate action and the State's climate goals.

Absent consistency with an adequate, geographically specific GHG reduction plan such as a CEQA-qualified Clean Air Plan, the Scoping Plan outlines three distinct approaches that lead agencies may consider for evaluating the consistency of proposed plans and residential and mixed-use development projects with the State's climate goals. The approaches which may be used to evaluate whether a project may have a less than significant impact on GHG emissions include (1) assessing a project's consistency with key project attributes that have been demonstrated to reduce operational GHG emissions while advancing fair housing, (2) adopting a Net-Zero Threshold of Significance, and (3) utilizing Recommended Thresholds of Significance developed by the applicable air district or other lead agencies.

[6] The emission reduction targets are for those associated with land use and transportation strategies only. Emission reductions due to the California Low Carbon Fuel Standards or Pavley emission control standards are not included in the targets.

These approaches are recommendations only and do not supplant lead agencies' discretion to develop their own evidence-based approaches for determining whether a project would result in a potentially significant impact on GHG emissions. The ARB notes that while a net-zero threshold may be an appropriate overall objective, it may not be feasible or appropriate metric for evaluating individual projects. For example, a net-zero target may incorrectly imply that the GHG emissions of any project that are not reduced or offset to zero would be considered potentially significant. This may lead to undue burdens and frustrate project approval processes, which may be particularly problematic for residential development in climate-smart infill areas. A net-zero policy that prohibits or complicates projects that are needed to support the State's climate goals, like infill development or solar arrays, is ultimately not consistent with the State's goals.

Plan Bay Area 2050

Plan Bay Area 2050 is a State-mandated, integrated, long-range transportation and land use plan for the San Francisco Bay Area. As required by SB 375, all metropolitan regions in California must complete an SCS as part of an RTP. This strategy integrates transportation, land use, and housing to meet GHG reduction targets set by the ARB. Plan Bay Area 2050 meets those requirements. In addition, the plan sets a roadmap for future transportation investments and identifies what it would take to accommodate expected growth. The plan neither funds specific transportation projects nor changes local land use policies.

In the San Francisco Bay Area, the MTC and ABAG adopted Plan Bay Area 2050 in October 2021. To meet the GHG reduction targets, the plan identifies four growth geographies where future growth in housing and jobs should be focused: PDAs, Priority Production Areas (PPAs), Transit-Rich Areas (TRAs), and High Resource Areas. The agencies estimate more than 80 percent of housing growth would occur within TRAs and nearly 30 percent would be within High Resource Areas, and more than 60 percent of job growth would be within walking distance of high-quality transit between 2015 and 2050.

BAAQMD GHG Guidelines

The BAAQMD's 2022 CEQA Air Quality Guidelines provides recommended significance thresholds for GHGs for land use development projects and plans. The new thresholds state that, if a project would contribute its "fair share" of what will be required to achieve California's long-term climate goal of carbon neutrality by 2045, then a reviewing agency can find that the impact will not be significant because the project will help to solve the problem of global climate change. The thresholds for new land use projects require projects to meet either of one of two enumerated Criteria "A" or "B" detailed in Table 2. If a land use development project cannot demonstrate consistency with Criterion A or Criterion B, then that project would result in a potentially significant impact related to the generation of direct and indirect GHG emissions.

Table 2: BAAQMD Thresholds of Significance for Greenhouse Gases

Thresholds for Land Use Projects (Must Include A or B)
A. Projects must include, at a minimum, the following project design elements: 1. Buildings a. The project will not include natural gas appliances or natural gas plumbing (in both residential and nonresidential development). b. The project will not result in any wasteful, inefficient, or unnecessary energy usage as determined by the analysis required under CEQA Section 21100(b)(3) and Section 15126.2(b) of the State CEQA Guidelines. 2. Transportation a. Achieve a reduction in project-generated Vehicle Miles Traveled (VMT) below the regional average consistent with the current version of the California Climate Change Scoping Plan (currently 15 percent) or meet a locally adopted Senate Bill 743 VMT target, reflecting the recommendations provided in the Governor's Office of Planning and Research's Technical Advisory on Evaluating Transportation Impacts in CEQA: i. Residential projects: 15 percent below the existing VMT per capita ii. Office projects: 15 percent below the existing VMT per employee iii. Retail projects: no net increase in existing VMT b. Achieve compliance with off-street electric vehicle requirements in the most recently adopted version of CALGreen Tier 2. **B. Projects must be consistent with a local GHG reduction strategy that meets the criteria under State CEQA Guidelines Section 15183.5(b).**
Source: Bay Area Air Quality Management District (BAAQMD). 2022. CEQA Guidelines. April 20.

Project consistency with Criteria A is based on incorporating project design criteria based on key attributes consistent with the 2022 Scoping Plan and states long-term carbon neutrality goals. Projects incorporating these elements would be contributing their "fair share" of what will be required to achieve California's long-term climate goal of carbon neutrality by 2045. These include criteria for building energy design (elimination of natural gas) as well as criteria related to reduction in transportation emissions via VMT reductions and installation of electrical vehicle (EV) charging infrastructure.

Project consistency with Criterion B involves demonstrating compliance with a local "qualified" GHG plan. CEQA Guidelines Section 15183.5(b) allows projects and plans to be analyzed through a streamlined or tiered approach utilizing an adopted Greenhouse Gas Reduction Plan. A "qualified" reduction strategy capable of being utilized for a streamlined or tiered analysis under CEQA must meet the following requirements:

- Quantify GHG emissions, both existing and projected over a specified time period, resulting from activities within a defined geographic area;
- Establish a level, based on substantial evidence, below which the contribution to GHG emissions from activities covered by the plan would not be cumulatively considerable;

- Identify and analyze the GHG emissions resulting from specific actions or categories of actions anticipated within the geographic area;
- Specify measures or a group of measures, including performance standards, that substantial evidence demonstrates, if implemented on a project-by-project basis, would collectively achieve the specified emissions level;
- Establish a mechanism to monitor the plan's progress toward achieving the level and to require amendments if the plan is not achieving specified levels; and
- Be adopted in a public process following environmental review.

The City adopted a Climate Action Plan (CAP) in 2021; however, the CAP does not include all mandatory measures, and therefore the potential GHG reductions associated with the CAP cannot be assured to occur. Accordingly, the CAP does not meet all the aforementioned criteria of a qualified GHG reduction plan or Climate Action Plan.

City of Morgan Hill General Plan

The City's General Plan includes policies to avoid or mitigate impacts resulting from planned development projects within City limits. In addition to the relevant policies discussed under the Air Quality section, the following policies are specific to reducing GHG emissions and relevant to the proposed project.

Climate Change

Policy NRE-15.2 **Linking Land Use and Transportation.** Encourage land use and transportation patterns that reduce dependence on automobiles.

Policy NRE 15.9 **Urban Forest.** Support development and maintenance of a healthy, vibrant urban forest through outreach, incentives, and strategic leadership.

Policy NRE 15.11 **Green Building.** Promote green building practices in new development.

City of Morgan Hill Municipal Code

The City's Municipal Code includes the following regulations that would reduce GHG emissions from future development:

- Small Residential Rooftop Solar (Chapter 15.36)
- Electric Vehicle Charging Station Permitting (Chapter 15.37)
- Electric Vehicle Charging Infrastructure (Chapter 15.62)
- Prohibition of Natural Gas Infrastructure in New Buildings (Chapter 15.63)
- Sustainable Building Regulations (Chapter 15.65)

City of Morgan Hill Reach Codes

Chapter 15.63 of the City's Municipal Code requires the prohibition of natural gas infrastructure in all newly constructed buildings in the City of Morgan Hill, with the following 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. To the extent that natural gas 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. Newly constructed buildings shall nonetheless be required at a minimum to have sufficient electric capacity, wiring and conduit to facilitate future full building electrification.

Chapter 15.62 of the City's Municipal Code requires electric vehicle charging infrastructure. Provisions of the ordinance apply to all parking that will serve newly constructed buildings within the City, and also for parking that will serve existing buildings. Exceptions apply on a case-by-case basis where the City has determined EV charging and infrastructure are not feasible. Accessory Dwelling Units (ADUs) and Junior Accessory Dwelling Units (JADUs) without additional parking facilities and without electrical panel upgrade or new panel installation are also subject to exceptions. Requirements for EV infrastructure include:

- Residential buildings include a minimum of one Level 2 EV Ready space (if a second parking space is provided, it must be Level 1 EV Ready) in new construction; parking additions to new or expanded garages or electrical panel upgrades must have reserved breaker spaces to accommodate parking in existing buildings at retrofit.
- Requirements for multi-family residential in new construction include requirements that the total number of EV charging spaces be one hundred percent of dwelling units or one hundred percent of residential parking spaces, whichever is less; visitor parking is not included.
  - New Construction: 40 percent of parking spaces shall be EVCS [Electric Vehicle Charging Station] with Level 2 EV Ready. Sixty percent of parking spaces shall be provided with at minimum a Level 1 EV Ready space. ALMS [Automatic Load Management Systems] shall be permitted to reduce load when multiple vehicles are charging.
  - Existing Buildings at Retrofit. When a Building Permit is required for a retrofit project at a multi-family complex and the construction valuation exceeds one million dollars then either 30 percent of the total number of parking spaces shall be upgraded to EVCS or 10 percent of the cost of the retrofit shall be spent toward meeting that goal, whichever costs less. When new parking facilities are added and ALMS is installed, the ALMS system shall be designed to deliver no less than 2.2 kVa (110/120 volt, 20-ampere).

City of Morgan Climate Action Plan

The City of Morgan Hill adopted the Morgan Hill 2021 CAP in December 2021.[7] The CAP's primary goal is to reduce Morgan Hill's net CO_2 emissions in the building and transportation sectors 35 percent below

[7] City of Morgan Hill. 2021. Morgan Hill 2021 Climate Action Plan. Website: https://ca-morganhill2.civicplus.com/DocumentCenter/View/43467/CAP-Final---Adopted-121521. Accessed September 5, 2024.

the 2020 baseline level by 2030 and 100 percent below the 2020 baseline level by 2045. The CAP outlines sub-goals (Section 3.2) and actions for implementation (Section 3.3) to support this primary goal.

Energy Regulatory Framework

EPA Off-Road Diesel Engine Emissions Standards

The EPA regulates nonroad diesel engines that power mobile equipment (bulldozers, scrapers, front-end loaders, etc.) and stationary equipment (generators, pumps, compressors, etc.). The EPA has no formal fuel economy standards for nonroad (e.g., construction) diesel engines but does regulate diesel emissions, which indirectly affects fuel economy. In 1994, the EPA adopted the first set of emission standards ("Tier 1") for all new nonroad diesel engines greater than 37 kilowatts (kW [50 horsepower]). The Tier 1 standards were phased in for different engine sizes between 1996 and 2000, reducing NO_X emissions from these engines by 30 percent. Subsequently, the EPA adopted more stringent emission standards for NO_X, hydrocarbons, and PM from new nonroad diesel engines. This program included the first set of standards for nonroad diesel engines less than 37 kW. It also phased in more stringent "Tier 2" emission standards from 2001 to 2006 for all engine sizes and added yet more stringent "Tier 3" standards for engines between 37 and 560 kW (50 and 750 horsepower, respectively) from 2006 to 2008. These standards further reduced nonroad diesel engine emissions by 60 percent for NO_X and 40 percent for PM from Tier 1 emission levels. In 2004, the EPA issued the Clean Air Nonroad Diesel Rule. This rule cut emissions from nonroad diesel engines by more than 90 percent and was phased in between 2008 and 2014. These emission standards are intended to promote advanced clean technologies for nonroad diesel engines that improve fuel combustion, but they also result in slight decreases in fuel economy.

California Renewable Energy Standards

Established in 2002 under SB 1078, and accelerated by SB 107 (2006), SB X 1-2 (2011), and SB 100 (2018), California's Renewable Portfolio Standard (RPS) obligates investor-owned utilities, energy service providers, and community choice aggregators to procure 33 percent total retail sales of electricity from renewable energy sources by 2020; 60 percent by 2030; and 100 percent by 2045. SB 100 also states "that it is the policy of the State that eligible renewable energy resources and zero-carbon resources supply 100 percent of retail sales of electricity to California end-use customers and 100 percent of electricity procured to serve all State agencies by December 31, 2045." The California Public Utilities Commission and the CEC are jointly responsible for implementing the program.

California Building Standards Code

The Building Energy Efficiency Standards were first adopted in 1976 and have been updated periodically since then as directed by statute. The Standards contain energy and water efficiency requirements (and indoor air quality requirements) for newly constructed buildings, additions to existing buildings, and alterations to existing buildings. The Standards are conceptually divided into three basic sets. The first set is a basic set of mandatory requirements that apply to all buildings. The second set is a set of performance standards—the energy budgets—that vary by climate zone (of which there are 16 in

California) and building type; thus, the Standards are tailored to local conditions and provide flexibility in how energy efficiency in buildings can be achieved. Finally, the third set constitutes an alternative to the performance standards, which is a set of prescriptive packages that provide a recipe or a checklist compliance approach.

City of Morgan Hill General Plan

The City's General Plan includes policies to avoid or mitigate impacts resulting from planned development projects within City limits. In addition to the relevant policies discussed under the GHG section, the following policies are specific to reducing energy consumption and promoting renewable energy resources and are relevant to the proposed project.

Goal NRE-16 **Conservation of energy resources.**

Policy NRE-16.1 **Energy Standards for New Development.** New development, including public buildings, should be designed to exceed State standards for the use of energy.

Policy NRE-16.2 **Energy Conservation.** Promote energy conservation techniques and energy efficiency in building design, orientation, and construction.

Policy NRE-16.5 **Energy Efficiency.** Encourage development project designs that protect and improve air quality and minimize direct and indirect air pollutant emissions by including components that promote energy efficiency.

Policy NRE-16.6 **Landscaping for Energy Conservation.** Encourage landscaping plans for new development to address the planting of trees and shrubs that will provide shade to reduce the need for cooling systems and allow for winter daylighting.

Policy NRE-16.7 **Renewable Energy.** Encourage new and existing development to incorporate renewable energy generating features, like solar panels and solar hot water heaters.

City of Morgan Hill Municipal Code

City's Municipal Code includes the following regulations that would reduce energy consumption and promote renewable energy production from future development:

- Small Residential Rooftop Solar (Chapter 15.36)
- Electric Vehicle Charging Station Permitting (Chapter 15.37)
- Electric Vehicle Charging Infrastructure (Chapter 15.62)
- Prohibition of Natural Gas Infrastructure in New Buildings (Chapter 15.63)
- Sustainable Building Regulations (Chapter 15.65)

AIR QUALITY EMISSIONS IMPACT ANALYSIS

According to CEQA Guidelines Appendix G, to determine whether impacts related to air quality are significant environmental effects, the following questions are analyzed and evaluated.

Impact AIR-1:	**Would the proposed project conflict with or obstruct implementation of the applicable air quality plan?**

Less than significant impact . The project site is located in the San Francisco Bay Area Air Basin (Air Basin), where the BAAQMD regulates air quality. The EPA is responsible for identifying nonattainment and attainment areas for each criteria pollutant within the Air Basin. The Air Basin is designated nonattainment for State standards for 1-hour and 8-hour ozone, 24-hour respirable PM_{10}, annual PM_{10}, and annual $PM_{2.5}$.[8]

The BAAQMD has adopted several air quality policies and plans to address regional air quality standards, the most recent of which is the 2017 Clean Air Plan. The 2017 Clean Air Plan was adopted in April of 2017 and serves as the regional Air Quality Plan (AQP) for the Air Basin for attaining NAAQS. The primary goals of the 2017 Clean Air Plan are to protect public health and protect the climate. The 2017 Clean Air Plan acknowledges that the BAAQMD's two stated goals of protection are closely related. As such, the 2017 Clean Air Plan identifies a wide range of control measures intended to decrease both criteria pollutants[9] and GHG emissions.[10] The 2017 Clean Air Plan also accounts for projections of population growth provided by ABAG and VMT provided by the MTC and identifies strategies to bring regional emissions into compliance with federal and State air quality standards. A project would be judged to conflict with or obstruct implementation of the 2017 Clean Air Plan if it would result in substantial new regional emissions not foreseen in the air quality planning process.

The BAAQMD does not provide a numerical threshold of significance for project-level consistency analysis with AQPs. Therefore, the following criteria will be used for determining a project's consistency with the AQP.

- **Criterion 1:** Does the project support the primary goals of the AQP?
- **Criterion 2:** Does the project include applicable control measures from the AQP?
- **Criterion 3:** Does the project disrupt or hinder the implementation of any AQP control measures?

[8] Bay Area Air Quality Management District (BAAQMD). 2022. CEQA Air Quality Guidelines. April. Website: https://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa-guidelines-2022/ceqa-guidelines-chapter-3-thresholds_final_v2-pdf.pdf?la=en. Accessed September 16, 2024.

[9] The EPA has established National Ambient Air Quality Standards (NAAQS) for six of the most common air pollutants—carbon monoxide, lead, ground level ozone, particulate matter, nitrogen dioxide, and sulfur dioxide—known as "criteria" air pollutants (or simply "criteria pollutants").

[10] A greenhouse gas (GHG) is any gaseous compound in the atmosphere that is capable of absorbing infrared radiation, thereby trapping and holding heat in the atmosphere. By increasing the heat in the atmosphere, GHGs are responsible for the greenhouse effect, which ultimately leads to global warming.

Criterion 1

The primary goals of the 2017 Clean Air Plan, the current AQP to date, are to:

- Attain air quality standards;
- Reduce population exposure to unhealthy air and protect public health in the Bay Area; and
- Reduce GHG emissions and protect the climate.

A measure for determining whether the proposed project supports the primary goals of the AQP is if the project would not result in an increase in the frequency or severity of existing air quality violations, cause or contribute to new violations, or delay timely attainment of air quality standards or the interim emission reductions specified in the air quality plans. This measure is determined by comparing project emissions to the significance thresholds identified by the BAAQMD for construction- and operation-related pollutants. These significance thresholds are applied in the evaluation of Impact AIR-2, below. As discussed under Impact AIR-2 and Impact AIR-3, the proposed project would not significantly contribute to cumulative nonattainment pollutant violations or expose sensitive receptors to substantial pollutant concentrations. Pursuant to the City's SCA for Air Quality, basic construction measures related to dust suppression would be required to be implemented during the construction of the proposed project in order to reduce localized dust impacts. Implementation of SCA AIR-1 ensures that impacts related to fugitive dust from the proposed project's construction would be less than significant. Construction exhaust emissions would result in less than significant health risk impacts with the implementation of the City's SCA AIR-3, for projects that exceed BAAQMD thresholds, which requires that all construction equipment, diesel trucks and generators be equipped with Best Available Control Technology for emission reductions of NOx and PM. Pursuant to this SCA, the proposed project would mandate the use of Tier 4 (interim or final) engines for construction equipment equal to or greater than 25 horsepower. With the implementation of the City's SCAs for Air Quality, the proposed project would be consistent with Criterion 1.

Criterion 2

Another measure for determining whether a project is consistent with the AQP is to determine whether the project is inconsistent with the growth assumptions incorporated into the AQP and, thus, whether it would interfere with the region's ability to comply with federal and California air quality standards. The development of the AQP is based in part on the land use general plan determinations of the various cities and counties that constitute the Air Basin. The City's 2035 General Plan (General Plan) designates the project site as "Residential Attached Medium,", and the City's Zoning Ordinance zones the project site as RAM. As such, the proposed project falls within the land uses contemplated for development by the City. Considering this information, the proposed project would not directly or indirectly result in substantial unplanned population growth. Therefore, the overall development of the project site would generally be consistent with the growth assumptions incorporated into the Clean Air Plan.

The AQPs also assume that all mandatory regulations to reduce air pollution would be adhered to. Therefore, to conform to the assumptions in the AQP, a project must be consistent with all applicable measures contained in the applicable AQP. The Clean Air Plan contains 85 control measures to reduce air

pollutants and GHGs at the local, regional, and global levels. Along with the traditional stationary, area, mobile source, and transportation control measures, the Clean Air Plan contains several control measures designed to protect the climate, promote mixed-use, and compact development to reduce vehicle emissions and exposure to pollutants from stationary and mobile sources. The Clean Air Plan also includes an account of the implementation status of control measures identified in the 2010 Clean Air Plan.

Table 3 lists the relevant Clean Air Plan policies to the proposed project and evaluates the proposed project's consistency with the policies. As shown below, the proposed project would be consistent with applicable measures.

Table 3: Project Consistency with Applicable Clean Air Plan Control Measures

Control Measure	Project Consistency
Buildings Control Measures	
BL1: Green Buildings	**Consistent**. The proposed project would not conflict with the implementation of this measure. The proposed project would comply with the latest energy efficiency standards and incorporate applicable energy efficiency features designed to reduce project energy consumption.
BL4: Urban Heat Island Mitigation	**Consistent.** The proposed project would incorporate landscaping throughout the site. The proposed project would provide landscaping, including trees, that would reduce the urban heat island effect.
Energy Control Measures	
EN1: Decarbonize Electricity Generation	**Consistent.** The proposed project would not conflict with the implementation of this measure. The proposed project would comply with the City's Reach Code and is designed to be all electric and without natural gas plumbing. Furthermore, the proposed project would comply with the latest energy efficiency standards and incorporate applicable energy efficiency features designed to reduce project energy consumption.
EN2: Decrease Electricity Demand	**Consistent.** The proposed project would be required to conform to the energy efficiency requirements of the California Building Standards Code (CBC), also known as Title 24, which was adopted to meet an Executive Order in the Green Building Initiative to improve the energy efficiency of buildings through aggressive standards. The 2022 Title 24 Standards are the current State building regulations, which went into effect on January 1, 2023. Proposed buildings that would receive building permits after January 1, 2023 would be subject to the 2022 Title 24 Standards, including the proposed project.
Natural and Working Lands Control Measures	
NW2: Urban Tree Planting	**Consistent.** The proposed project would incorporate new landscaping throughout the site.
WA3: Green Waste Diversion	**Consistent.** The waste service provider for the proposed project will be required to meet AB 341, SB 939, and SB 1374 requirements that require

Control Measure	Project Consistency
	waste service providers to divert green waste. All plant refuse generated during operations of the proposed project would be recycled off-site.
WA4: Recycling and Waste Reduction	**Consistent.** The waste service provider for the proposed project will be required to meet the AB 341, SB 939, and SB 1374 requirements that require waste to be recycled.
Stationary Control Measures	
SS36: Particulate Matter from Trackout	**Consistent.** Mud and dirt that may be tracked out onto the nearby public roads during construction activities shall be removed promptly by the contractor based on the Bay Area Air Quality Management District's (BAAQMD's) requirements. The City's Standard Conditions of Approval for Air Quality require the proposed project to implement BMPs recommended by the BAAQMD for fugitive dust emissions during construction.
Transportation Control Measures	
TR9: Bicycle and Pedestrian Access and Facilities	**Consistent.** Pedestrian access would be provided via the proposed internal walkways. Bicycle parking and internal circulation will be provided via the proposed internal streets. In addition, the proposed project will include a pedestrian pathway along Diana Avenue, connecting the proposed project to the existing road/pedestrian network. Therefore, the proposed project would not conflict with, and would be consistent with the BAAQMD's effort to encourage planning for bicycle and pedestrian facilities.
Source: Bay Area Air Quality Management District (BAAQMD). 2017. Final 2017 Clean Air Plan.	

In summary, the proposed project would not conflict with any applicable measures under the 2017 Clean Air Plan with implementation of the City's SCAs for Air Quality..

Criterion 3

The proposed project would not preclude extension of a transit line or bike path, propose excessive parking beyond parking requirements, or otherwise create an impediment or disruption to implementation of any AQP control measures. As shown in Table 3 above, the proposed project would incorporate several AQP control measures as project design features, such as conforming with energy efficiency standards contained in the 2022 California Building Code, and installing landscaping and bicycle and pedestrian connections across the project site. Considering this information, the proposed project would not disrupt or hinder the implementation of any AQP control measures. The proposed project is therefore consistent with Criterion 3.

Summary

As discussed above, the proposed project would be consistent with all three criteria after implementing the City's SCAs for Air Quality. Thus, the proposed project would not conflict with the 2017 Clean Air Plan. Therefore, impacts associated with conflicting with or obstructing the 2017 Clean Air Plan would be less than significant.

Impact AIR-2:	**Would the proposed project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or State ambient air quality standard (including releasing emissions, which exceed quantitative thresholds for ozone precursors)?**

Less than significant impact. This impact is related to the cumulative effect of a project's criteria pollutant emissions. By its nature, air pollution is largely a cumulative impact resulting from emissions generated over a large geographic region. The nonattainment status of regional pollutants results from past and present development within the Air Basin, and this regional impact is a cumulative impact. Therefore, new development projects (such as the proposed project) within the Air Basin would contribute to this impact only on a cumulative basis. No single project would be sufficient in size, by itself, to result in nonattainment of regional air quality standards. Instead, a project's emissions may be individually limited but cumulatively considerable when evaluated in combination with past, present, and future development projects.

Potential regional impacts could result in exceedances of State or federal standards for NO_X, particulate matter (PM_{10} and $PM_{2.5}$), or CO. NO_X emissions are of concern because of potential health impacts from exposure to NO_X emissions during both construction and operation and as a precursor in the formation of airborne ozone. PM_{10} and $PM_{2.5}$ are of concern during construction because of the potential to emit exhaust emissions from the operation of off-road construction equipment and fugitive dust during earth-disturbing activities. CO emissions are of concern during project operation because operational CO hotspots are related to increases in on-road vehicle congestion and resulting health effects.

ROG emissions are also important because of their participation in the formation of ground level ozone. Ozone is a respiratory irritant and an oxidant that increases susceptibility to respiratory infections and that can cause substantial damage to vegetation and other materials. Elevated ozone concentrations result in reduced lung function, particularly during vigorous physical activity. This health problem is particularly acute in sensitive receptors such as the sick, elderly, and young children.

The cumulative analysis focuses on whether a specific project would result in cumulatively considerable emissions. According to Section 15064(h)(4) of the CEQA Guidelines, the existence of significant cumulative impacts caused by other projects alone does not constitute substantial evidence that the project's incremental effects would be cumulatively considerable. Rather, the determination of cumulative air quality impacts for construction and operational emissions is based on whether the proposed project would result in emissions that exceed the BAAQMD thresholds of significance for construction and operations on a project level. The thresholds of significance represent the allowable emissions each project can generate without generating a cumulatively considerable contribution to regional air quality impacts. Therefore, a project that would not exceed the BAAQMD thresholds of significance on the project level also would not be considered to result in a cumulatively considerable contribution to these regional air quality impacts. Construction and operational emissions are discussed separately below.

Construction Emissions

During construction, fugitive dust would principally be generated from demolition, site grading and other earthmoving activities. The majority of fugitive dust would remain localized and would be deposited near the project site; however, the potential for impacts from fugitive dust exists unless control measures are implemented to reduce the emissions from this source. Exhaust emissions would also be generated from the operation of the off-road construction equipment and on-road construction vehicles.

Construction Fugitive Dust

PM_{10}/$PM_{2.5}$ (fugitive dust) is recognized to impact local communities. Construction-related activities, such as soil disturbance, demolition, grading, and material hauling, can also result in fugitive dust emissions (e.g., $PM_{2.5}$ and PM_{10}). The BAAQMD does not have a numerical threshold for fugitive dust PM emissions. Instead, the BAAQMD bases the determination of significance for fugitive dust on implementing effective control measures. For a project to have a less than significant criteria air pollutant impact related to construction-related fugitive dust emissions, it must implement all BAAQMD basic BMPs. Air pollution control measures shall be implemented during construction activities as required by the City's SCAs for Air Quality. In addition, the proposed project would comply with all applicable district rules, including Regulation 6, Rule 1 (General Requirements) and Regulation 6, Rule 6 (Prohibition of Trackout), which require dust generating operations to limit PM emissions. Therefore, short-term construction fugitive dust impacts would be less than significant.

Construction Air Pollutant Emissions: ROG, NO_X, Exhaust PM_{10}, and Exhaust $PM_{2.5}$

California Emissions Estimator Model (CalEEMod) Version 2022.1 was used to estimate the proposed project's construction emissions. CalEEMod provides a consistent platform for estimating construction and operational emissions from a wide variety of land use projects and is the model recommended by the BAAQMD for estimating project emissions. Estimated construction emissions are compared with the applicable thresholds of significance established by the BAAQMD to assess ROG, NO_X, exhaust PM_{10}, and exhaust $PM_{2.5}$ construction emissions to determine significance for this criterion.

For the purpose of this analysis, construction of the proposed project is expected to begin in January 2026 and conclude in March 2027. Note that construction emissions would likely decrease if the construction schedule were deferred to later years because of improvements in technology and more stringent regulatory requirements. The duration of construction activity and associated equipment represents a reasonable approximation of the expected construction fleet as CEQA Guidelines require. Details of the assumptions and equipment are in the CalEEMod output files in Appendix A. Applicant-provided information indicates that the asphalt paving construction trips would be 9.5 total per day; however, the modeling conservatively utilized the worst-case scenario of 17 one-way trips per day during the paving phase.

Table 4: Preliminary Construction Schedule

Phase	Phase Start Date	Phase End Date	Working Days per Week	Total Number of Working Days
Demolition	1/5/2026	1/30/2026	5	20
Site Preparation	2/2/2026	2/13/2026	5	10
Grading	2/16/2026	3/13/2026	5	20
Building Construction	3/16/2026	1/29/2027	5	230
Paving	2/1/2027	2/26/2027	5	20
Architectural Coating	3/1/2027	3/26/2027	5	20

The calculations of pollutant emissions from the construction equipment account for the type of equipment, horsepower and load factors of the equipment, and the duration of equipment use. Unmitigated average daily construction emissions are compared with the significance thresholds in Table 5. In addition, Table 5 shows the average daily construction emissions compared with the significance thresholds with implementation of the City's SCA AIR-3 for Air Quality, which requires the use of a Clean Fleet (Best Available Control Technology [BACT] for emission reductions of NOx and PM for all construction equipment, diesel trucks and generators) for projects that exceed BAAQMD thresholds. Use of Clean Fleet is analyzed because, as identified in the Health Risk Assessment (HRA) conducted below, DPM emissions generated by the project construction could result in an exceedance of cancer risk thresholds and would therefore require implementation of a Clean Fleet. The City's SCA AIR-3 for Air Quality thus ensure impacts are less than significant.

Table 5: Construction Emissions with Clean Fleet Equipment

Parameter	Air Pollutants[1] (tons/year)				
	Year	ROG	NO_X	PM_{10} (Exhaust)	$PM_{2.5}$ (Exhaust)
Project Construction					
Demolition	2026	0.005	0.121	0.002	0.002
Site Preparation	2026	0.003	0.074	0.000	0.000
Grading	2026	0.005	0.120	0.001	0.001
Building Construction	2026	0.063	1.043	0.013	0.012
Building Construction	2027	0.006	0.104	0.001	0.001
Paving	2027	0.005	0.080	0.001	0.001
Architectural Coating	2027	1.586	0.011	0.000	0.000
Total Emissions (tons/year)[1]		**1.673**	**1.552**	**0.019**	**0.018**

Parameter	Air Pollutants[1] (tons/year)				
	Year	ROG	NO_X	PM_{10} (Exhaust)	$PM_{2.5}$ (Exhaust)
Daily Average					
Total emissions (tons)		**1.673**	**1.552**	**0.019**	**0.018**
Total emissions (lbs)		**3,346.1**	**3,103.1**	**37.5**	**35.7**
Average Daily Emissions (lbs/day)[2]		**10.46**	**9.70**	**0.12**	**0.11**
Significance Threshold (lbs/day)		**54**	**54**	**82**	**54**
Exceeds Significance Threshold?		**No**	**No**	**No**	**No**

Notes:
lbs = pounds
NO_X = oxides of nitrogen
PM_{10} = particulate matter less than 10 microns in diameter
$PM_{2.5}$ = particulate matter less than 2.5 microns in diameter
ROG = reactive organic gases
[1] Totals may not appear to add up exactly due to rounding. Calculations use unrounded totals.
[2] Average daily emissions equal total emissions divided by working days (320 workdays).
Source: CalEEMod Output (see Appendix A).

As indicated in Table 5, the construction emissions from all construction activities are below the recommended thresholds of significance with implementation of the Clean Fleet equipment required by the City's SCA AIR-3 for Air Quality. Therefore, the proposed project's construction would have a less than significant impact related to emissions of ROG, NO_X, exhaust PM_{10}, and exhaust $PM_{2.5}$.

Operational Emissions

Operational Air Pollutant Emissions: ROG, NO_X, PM_{10}, and $PM_{2.5}$

Operational emissions would include area, energy, mobile, and stationary sources. Area sources would include emissions from architectural coatings, consumer products, and landscape equipment. In compliance with the City's Reach Code, the proposed project would be all electric and would not have any natural gas infrastructure. Therefore, there are no direct emissions related to building energy use for space or water heating. Mobile sources include exhaust, brake and tire wear, and road dust emissions from the vehicles that would travel to and from the project site. Stationary sources (if applicable) include boilers, pumps, and generators at a project site fired by fossil fuels (diesel gasoline or natural gas). There are no stationary sources associated with the proposed project site; accordingly, stationary source emissions in Table 6 are zero. Pollutants of concern include ROG, NO_X, PM_{10}, and $PM_{2.5}$.

Operational emissions were also calculated using CalEEMod (Version 2022.1) and compared to the BAAQMD-recommended regional thresholds of significance. For detailed assumptions used to estimate emissions, see Appendix A. Table 6 presents the annual and average daily emissions generated during project operation.

Table 6: Operational Emissions

Emissions Source	Air Pollutants [1]			
	ROG	NO_X	PM_{10} (Total)	$PM_{2.5}$ (Total)
Annual Emissions				
Mobile	0.35	0.26	0.59	0.15
Area	1.07	0.00	0.00	0.00
Energy	–	–	–	–
Stationary (Stand by generators)	–	–	–	–
Total (tons/year)	**1.42**	**0.26**	**0.59**	**0.15**
Significance Threshold (tons/year)	**10**	**10**	**15**	**10**
Exceeds Significance Threshold?	**No**	**No**	**No**	**No**
Daily Average Emissions				
Total Emissions (pounds/year)	**2,836**	**525**	**1,189**	**307**
Average Daily Emissions (pounds/day)[1]	**7.77**	**1.44**	**3.26**	**0.84**
Significance Threshold (pounds/day)	**54**	**54**	**82**	**54**
Exceeds Significance Threshold?	**No**	**No**	**No**	**No**

Notes:
NO_X = nitrous oxides
PM_{10} = particulate matter less than 10 microns in diameter
$PM_{2.5}$ = particulate matter less than 2.5 microns in diameter
ROG = reactive organic gases
[1] Calculated by dividing the total pounds of emissions by 365 days in a typical year.
Source: CalEEMod Output (see Appendix A).

As shown in Table 6 above, the proposed project would not result in operational air pollutants or precursor emissions that would exceed the BAAQMD's thresholds of significance. Therefore, the ongoing, long-term project operations would not have the potential to generate a significant quantity of air pollutants.

Operational Carbon Monoxide Hotspot

The CO emissions from traffic generated by the proposed project are a concern at the local level because congested intersections can result in high, localized concentrations of CO (referred to as a CO hotspot).

The BAAQMD screening criteria[11] were used to determine whether implementing the proposed project could result in local carbon monoxide emissions that exceed the thresholds of significance. If all the following screening criteria are met, operation of the proposed project would result in a less than significant impact related to carbon monoxide:

- The project is consistent with an applicable congestion management program established by the county congestion management agency for designated roads or highways, the RTP, and local congestion management agency plans.
- Project-generated traffic would not increase traffic volumes at affected intersections to more than 44,000 vehicles per hour.
- Project-generated traffic would not increase traffic volumes at affected intersections to more than 24,000 vehicles per hour where vertical and/or horizontal mixing is substantially limited (e.g., tunnel, parking garage, bridge underpass, natural or urban street canyon, below-grade roadway).

Based on the trip generation defaults generated by CalEEMod (derived from the proposed project's site location and use), the traffic volumes on these local residential streets are significantly below threshold levels of 24,000 and 44,000 vehicles per hour cited in the BAAQMD criteria. Specifically, according to California Department of Transportation traffic volumes (2017), the intersection of Dunne Avenue and Hwy 101 receives approximately 10,300–10,900 trips during peak hours.[12] The proposed 93 townhomes would generate approximately 757 average daily weekday trips, which, combined with existing traffic, is significantly lower than the threshold levels of 24,000 and 44,000 vehicles per hour. Therefore, the proposed project would meet all the CO screening criteria and would result in a less than significant impact related to carbon monoxide.

Summary

In summary, the proposed project would not result in construction or operation impacts related to criteria pollutants. Impacts would be less than significant.

Impact AIR-3:	**Would the proposed project expose sensitive receptors to substantial pollutant concentrations?**

Less than significant impact. The BAAQMD defines a sensitive receptor as the following: "Facilities or land uses that include members of the population that are particularly sensitive to the effects of air pollutants, such as children, the elderly, and people with illnesses. Examples include schools, hospitals, and residential areas." As specified by the BAAQMD, health risk and hazard should be analyzed for

[11] Bay Area Air Quality Management District (BAAQMD). 2022. CEQA Air Quality Guidelines. April. Website: https://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa-guidelines-2022/ceqa-guidelines-chapter-3-thresholds_final_v2-pdf.pdf?la=en. Accessed September 16, 2024.

[12] California Department of Transportation (Caltrans) Traffic Census Program. 2024. Website: https://dot.ca.gov/programs/traffic-operations/census. Accessed September 9, 2024.

sensitive receptors within a 1,000-foot radius of the project site.[13] The closest existing sensitive receptors include the following:

- Residential dwellings immediately adjacent to the project boundaries on the north, south, and east.
- Worker receptors, across Butterfield Boulevard to the west of the project boundaries.

The proposed project would result in a potentially significant impact on sensitive receptors if any of the following criteria are met:

- **Criterion 1:** Construction of the proposed project would exceed the BAAQMD health risk significance thresholds.
- **Criterion 2:** Operation of the proposed project would exceed the BAAQMD health risk significance thresholds.

In addition, Criterion 3 is assessed for purposes of demonstrating consistency with the City's General Plan Policy NRE-11.1, which requires modeling for sensitive land uses, such as residential development, within sources of pollution such as freeways and industrial uses. As previously stated, General Plan Policy NRE-11.1 also requires new residential development to incorporate appropriate features into project designs or be located adequate distances from sources of TACs to avoid significant risk to health and safety. Furthermore, the City's SCA AIR-3 for Air Quality require the implementation of a Clean Fleet for "projects that exceed BAAQMD thresholds."

- **Criterion 3:** The proposed project would locate new sensitive receptors (residents) that could be exposed to existing sources of TACs at the project site which exceed the BAAQMD cumulative health risk significance thresholds.

Criterion 1: Project Construction Toxic Air Pollutants and $PM_{2.5}$ Concentrations

An assessment was made of the potential health impacts to surrounding sensitive receptors resulting from TAC and/or $PM_{2.5}$ emissions during construction. The assessment is provided below, while Appendix A provides the detailed assumptions and modeling parameters.

DPM has been identified by the ARB as a carcinogenic substance. Major sources of DPM include off-road construction equipment and heavy-duty delivery and vendor trucks and worker activities. For purposes of this analysis, DPM is represented as exhaust emissions of PM_{10}. $PM_{2.5}$ concentrations were calculated using the $PM_{2.5}$ emission rates for the maximum annual year for $PM_{2.5}$ emissions, including fugitive dust and brake and tire wear from the site and nearby roadway sources.

[13] Bay Area Air Quality Management District (BAAQMD). 2022. CEQA Air Quality Guidelines. April. Website: https://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa-guidelines-2022/ceqa-guidelines-chapter-3-thresholds_final_v2-pdf.pdf?la=en. Accessed September 16, 2024.

Estimation of Construction DPM and $PM_{2.5}$ Emissions

Construction DPM exhaust emissions were estimated using CalEEMod, Version 2022.1, as described under Impact AIR-2. Construction was assumed to begin in January 2026 and conclude in March 2027. Project construction emissions were assumed to be distributed over the project site with a working schedule of 8 hours per day, 5 days per week. Table 7 summarizes the emission rates of DPM emissions during construction of the proposed project with and without the use of Clean Fleet construction equipment. Because standard construction fleet use would result in a potential exceedance of cancer risk thresholds, the use of Clean Fleet is required by the City's SCA AIR-3 for Air Quality.

Table 7: Project DPM Construction Emissions Over Construction Period

Scenario	On-site DPM—Area (lbs)	Off-site DPM—Road Segments (lbs)
Without Clean Fleet	134.23	1.32
With Clean Fleet	36.18	1.32

Notes:
DPM = diesel particulate matter
Emissions occur over project construction period of 320 workdays and 2,560 working hours.
Emissions Source: Appendix A.

Table 8 summarizes the annual $PM_{2.5}$ emissions for the maximum annual period (2026) for both the construction of the proposed project with a statewide construction fleet as defined by CalEEMod and with the assumption of a Clean Fleet meeting Tier 4 (Interim or Final) Off-Road Standards.

Table 8: Maximum Annual Project $PM_{2.5}$ Construction Emissions (2026)

Scenario	On-site PM2.5—Area (lbs)	Off-site PM2.5—Road Segments (lbs)
Without Clean Fleet	177.59	34.93
With Clean Fleet	96.17	34.93

Notes:
$PM_{2.5}$ = particulate matter less than 2.5 microns in diameter
Emissions occur over project construction period of 260 workdays and 2,080 working hours for the 2026 construction year.
Emissions Source: Appendix A.

Estimation of DPM and PM2.5 Concentrations

To assess health impacts to off-site sensitive receptors, the American Meteorological Society/EPA Regulatory Model (AERMOD) air dispersion model was used to simulate the dispersal of the emissions from the DPM and $PM_{2.5}$ project emissions and to estimate the concentrations of these pollutants at sensitive receptors within 1,000 feet of the project site.

The dispersion modeling incorporated release characteristics of the sources and accounted for terrain influence at receptors by using base elevations from United States Geological Survey (USGS) digital

elevation models. Meteorological data provided by BAAQMD from the San Martin meteorological station from 2013-2017 was used to model the local wind patterns that would influence the dispersion of TACs from the project site and haul road emissions. The prevailing wind is predominantly from the northwest.

HRA outputs in Appendix A include local maps showing the project site, locations of sources modeled, and identification of sensitive receptors within 1,000 feet of the site. AERMOD dispersion model reports are also included.

Estimation of Cancer Risks

Cancer risks are estimated as the upper-bound incremental probability that an individual will develop cancer as a direct result of exposure to potential carcinogens over a specified exposure duration. The cancer risk attributed to a chemical is calculated by multiplying the chemical intake or dose at the human exchange boundaries (e.g., lungs) by the chemical-specific cancer potency factor (CPF). The inhalation dose is determined by factors such as the concentration of the pollutant in the air, an individual's breathing rate, and the amount of time they inhale the contaminated air.

A risk level of 10 in a million implies a likelihood (or risk) that up to 10 persons, out of one million equally exposed people, would contract cancer if exposed continuously (24 hours per day) to the levels of TACs over a specified duration of time. This risk would be an excess cancer risk that is in addition to any environmental cancer risk borne by a person not exposed to these air toxics. It should be noted that the risk of cancer described here is an increased probability of contracting cancer during a lifetime as a result of exposure to toxics from a project. It does not represent an actual incidence of cancer in an exposed population, nor does it equate to deaths from cancer, because not every cancer case results in death.

The BAAQMD 2022 CEQA Air Quality Guidelines[14] provides detailed guidance on estimating cancer risks resulting from exposure to TACs. The methodology used for this HRA is consistent with the BAAQMD Guidance which follows the Cal/EPA Office of Environmental Health Hazard Assessment (OEHHA) guidance.[15] Health impacts are calculated by age groups representing the third trimester to birth, infant, child and adult age groups. OEHHA-developed age sensitivity factors (ASFs) which account for the increased sensitivity to carcinogens during early-in-life exposures are applied to the different age groups. An ASF of 10 is used to multiply the risks for the third trimester and infants less than age 2, an ASF of 3 is applied for ages 2 to 16 years old, and an ASF of 1 for ages 16 and older. The estimated risk for each age group is summed to estimate the potential cancer risk for the exposure duration of interest.

[14] Bay Area Air Quality Management District (BAAQMD). 2022. California Environmental Quality Act – Air Quality Guidelines Appendix E: Recommended Methods for Screening and Modeling Local Risks and Hazards. Website: https://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa-guidelines-2022/appendix-e-recommended-methods-for-screening-and-modeling-local-risks-and-hazards_final-pdf.pdf?rev=b8917a27345a4a629fc18fc8650951e4&sc_lang=en. Accessed September 16, 2024.

[15] Office of Environmental Health Hazard Assessment (OEHHA). 2015. The Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments. Website: https://oehha.ca.gov/media/downloads/crnr/2015guidancemanual.pdf. Accessed September 16, 2024.

See Appendix A for discussion of the exposure parameters used in the HRA that determine the inhalation dose and potential health risks from the project. The HRA follows BAAQMD and OEHHA guidance and represents a conservative estimate of exposure and health risk.

Estimation of Non-Cancer Chronic Hazards

Adverse health effects are evaluated by comparing the annual receptor concentration of each chemical compound with the appropriate reference exposure limit. Available reference exposure limits promulgated by the OEHHA and contained within the ARB Hot Spots Analysis and Reporting Program (HARP) Version 2 (or HARP2), were utilized in the assessment.

Risk characterization for non-cancer health hazards from TACs is expressed as a hazard index (HI). HI is a ratio of the predicted concentration of the proposed project's emissions to a concentration considered acceptable to public health professionals, termed the reference exposure limit. The HI assumes that chronic sub-threshold exposures adversely affect a specific organ or organ system (toxicological endpoint). For each discrete chemical exposure, target organs presented in regulatory guidance were used. Each chemical concentration or dose is divided by the appropriate toxicity reference exposure level to calculate the HI. For compounds affecting the same toxicological endpoint, this ratio is summed up. Where the total equals or exceeds 1, a health hazard is presumed to exist. For purposes of this assessment, the TAC of concern is DPM for which the OEHHA has defined a reference exposure limit for DPM of 5 micrograms per cubic meter ($\mu g/m^3$). The principal toxicological endpoint assumed in this assessment was through inhalation.

An HI of 1.0 is the target threshold for assessing non-cancer hazards by project, although a value greater than 1.0 does not necessarily correlate to a statistical probability of harm.

Significant Impact Levels for $PM_{2.5}$

Fine particulate matter ($PM_{2.5}$) is a complex pollutant composed of a diverse assortment of extremely small airborne particles that originate from sources such as fossil fuel combustion, brake and tire wear, road dust, and residential wood-burning. Exposure to $PM_{2.5}$ has serious health impacts; it can penetrate deep into the lungs and enter the bloodstream, causing respiratory and cardiovascular issues, including aggravated asthma, decreased lung function, and increased risk of heart attacks. To date, researchers have not been able to establish a safe threshold for population exposure to $PM_{2.5}$. Epidemiological studies have shown that there are health effects from $PM_{2.5}$ exposure even at concentrations below current standards. In response, the EPA lowered the federal ambient air quality standards for $PM_{2.5}$ from 12.0 $\mu g/m^3$ to 9.0 $\mu g/m^3$.

Nearby Sensitive Receptors and Modeling Tools Used

Consistent with BAAQMD Guidance, cancer and chronic non-cancer health risks and $PM_{2.5}$ concentrations were calculated for off-site residents and off-site workers within 1,000 feet of the project site. The project site is surrounded to the north, east and south by residential uses, and is surrounded by public and commercial uses to the south and west.

This HRA utilizes Tier 2 (user-specified, non-default) HRA procedures utilizing HARP2. HARP2 is the recommended model by BAAQMD for calculating and presenting HRA results because it follows the risk assessment guidance methodology and is consistent with the Air District's Regulation 2-5.

The HARP Risk Assessment Stand-alone Tool (HARP-RAST) was used since the DPM air concentrations were calculated directly in AERMOD dispersion model. HARP-RAST allows the user to estimate the single- or multi-pathway health impacts at multiple receptor locations from one or more pollutants released from one or more emission points. Both carcinogenic and non-carcinogenic impacts may be evaluated.

Project Construction HRA Summary

Table 9 summarizes the cancer risk, chronic HI and $PM_{2.5}$ concentrations for unmitigated project construction at the maximally exposed individual resident (MEIR), a multi-family apartment complex southeast of the project site, across Diana Avenue. The homes within the project footprint and southeast of the disturbance area are listed as on-site receptors. The chronic hazards from DPM and $PM_{2.5}$ concentrations are below the BAAQMD thresholds of significance. However, DPM (characterized by PM_{10} exhaust) emissions would result in an incremental cancer risk of approximately 19.3 individuals per one million at the MEIR, which exceeds the BAAQMD's significance threshold of 10 individuals per one million. Therefore, emission reductions would be required from construction equipment by utilizing BACT for NOx and PM emission reductions in order to reduce this impact to less than significant.

Table 9: Estimated Cancer Risks, Chronic Non-Cancer Hazards and $PM_{2.5}$ Concentrations (Without Clean Fleet Construction Scenario)

Cancer Risk Scenario[1]	Average DPM ($\mu g/m^3$)	DPM Cancer Risk (risk per million)	DPM Chronic Non-Cancer Hazard Index	Annual $PM_{2.5}$ ($\mu g/m^3$)
Off-Site Maximum Exposed Individual Resident (MEIR)[2]	0.15458	19.27	0.031	0.252
Maximum Exposed Individual Off-Site Worker	0.02822	0.41	0.006	0.046
Thresholds of Significance		**10**	**1**	**0.3**
Exceeds Individual Source Threshold?		**Yes**	**No**	**No**

Notes:
$\mu g/m^3$ = micrograms per cubic meter
MEIR = Maximally Exposed Individual Receptor
DPM = Diesel Particulate Matter based in PM_{10} Exhaust= particulate matter less than 10 microns in diameter
$PM_{2.5}$ = particulate matter less than 2.5 microns in diameter (includes $PM_{2.5}$ exhaust, dust, brake wear and tire wear)
REL = reference Exposure Level
[1] The proposed project construction cancer risk and chronic non-cancer hazard estimates shown here are based on a construction fleet with a statewide average engine Tier distribution for the given calendar year.
[2] The MEIR was determined to be a multi-family apartment complex southeast of the project site, across Diana Avenue.
Emissions Source: Appendix A.
Thresholds Source: Bay Area Air Quality Management District (BAAQMD). 2022. CEQA Air Quality Guidelines. April. Website: https://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa-guidelines-2022/ceqa-guidelines-chapter-3-thresholds_final_v2-pdf.pdf?la=en. Accessed September 5, 2024.

Construction of the project with a Clean Fleet (Tier 4 Interim or Final Off-Road Engines for equipment greater than 25 hp) would reduce the cancer health impacts shown in Table 9to a less than significant level. The use of Tier 4 (Interim or Final) Off-Road engines would reduce the emissions of DPM by approximately 75 percent and the emissions of $PM_{2.5}$ by over 75 percent. Tier 4 equipment was phased in between 2006-2008, is widely available and is estimated to represent over 75 percent of the statewide construction fleet by 2025.[16]

As shown in Table 10 below, the implementation of Clean Fleet Off-Road Equipment (as required by the City's SCA AIR-3 for Air Quality) would ensure that construction DPM emissions generated by the proposed project would not result in an exceedance of BAAQMD cancer risk, chronic non-cancer HI or $PM_{2.5}$ concentration thresholds at any location. Therefore, project construction would not result in significant health impacts to nearby sensitive receptors.

Table 10: Estimated Cancer Risks, Chronic Non-Cancer Hazards and $PM_{2.5}$ Concentrations (with Clean Fleet)

Cancer Risk Scenario	Average DPM ($\mu g/m^3$)	Cancer Risk (risk per million)	Chronic Non-Cancer Hazard Index	Annual $PM_{2.5}$ ($\mu g/m^3$)
Off-Site Maximum Exposed Individual Resident (MEIR)[2]	0.04169	7.28	0.008	0.137
Maximum Exposed Individual Off-Site Worker	0.00762	0.11	0.002	0.025
Thresholds of Significance		**10**	**1**	**0.3**
Exceeds Individual Source Threshold?		**No**	**No**	**No**

Notes:
$\mu g/m^3$ = micrograms per cubic meter
DPM = Diesel Particulate Matter based in PM_{10} Exhaust= particulate matter less than 10 microns in diameter
MEIR = Maximally Exposed Individual Receptor
$PM_{2.5}$ = particulate matter less than 2.5 microns in diameter (includes $PM_{2.5}$ exhaust, dust, brake wear and tire wear)
REL = reference Exposure Level
[1] The proposed project construction cancer risk and chronic non-cancer hazard estimates shown here are based on a clean construction fleet
[2] The MEIR was determined to be a multi-family apartment complex southeast of the project site, across Diana Avenue
Emissions Source: Appendix A.
Thresholds Source: Bay Area Air Quality Management District (BAAQMD). 2022. CEQA Air Quality Guidelines. April. Website: https://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa-guidelines-2022/ceqa-guidelines-chapter-3-thresholds_final_v2-pdf.pdf?la=en. Accessed September 5, 2024.

Criterion 2: Project-Specific Operational Toxic Air Pollutants

The proposed project is a residential project, and primary emissions would be from traffic generated by the project residents. The residential traffic would consist of mostly light-duty gasoline-powered passenger vehicles, which are not a significant source of TAC and air pollutant emissions. Thus, the

[16] California Air Resources Board (ARB). 2024. ARB Off-Road Tool, Baseline Scenario Population for Construction Equipment by Tier. Website: https://arb.ca.gov/emfac/offroad/meta/off-road. Accessed September 16, 2024.

proposed project would not generate a significant amount of DPM or other TAC emissions during operation and would not result in significant health impacts to nearby sensitive receptors during operation.

Criterion 3: Cumulative Health Risk Assessment

The BAAQMD recommends assessing the potential cumulative impacts to the project from sources of TACs within 1,000 feet of a project. Accordingly, a cumulative screening-level HRA was performed that examined the cumulative impacts to the project site from the project's construction emissions and existing sources of TAC emissions located within 1,000 feet of the project. As previously discussed, the MEIR was determined to be a multi-family apartment complex southeast of the project site across Diana Avenue.

For a project-level analysis, BAAQMD provides several tools for use in screening potential sources of TACs. This includes the Stationary Source Screening Map[17] which provides all the stationary sources permitted by BAAQMD with risk and hazard estimates; Roadway Screening Data Layers providing estimated cancer risks, hazards, and $PM_{2.5}$ concentrations for all Bay Area highways and surface streets;[18] and Rail and Railyard Screening Data Layers[19] providing estimated cancer risks, hazards, and $PM_{2.5}$ concentrations from diesel locomotives and select railyards.

The cumulative health risk results at the MEIR during project construction, including health risks from the existing stationary sources, roadway, and rail data from the BAAQMD sources above, are summarized in Table 11. Outputs from the BAAQMD screening tools are documented in Appendix A, with the HRA results.

Table 11: Summary of the Cumulative Health Impacts at the MEIR during Construction

Source	Source Name/Type	Distance from MEIR[1] (feet)	Cancer Risk (per million)	Chronic Hazard Index	Maximum Annual $PM_{2.5}$ Concentration ($\mu g/m^3$)
Project					
Clean Fleet Construction[2]	Diesel Construction Equipment	25	7.28	0.008	0.137
Stationary Sources					
Facility ID 20861	Generator	25	2.78	0.00	0.00

[17] Bay Area Air Quality Management District (BAAQMD). 2023. Stationary Source Screening Map. Website: https://baaqmd.maps.arcgis.com/apps/webappviewer/index.html?id=845658c19eae4594b9f4b805fb9d89a3. Accessed September 19, 2024.

[18] Bay Area Air Quality Management District (BAAQMD). 2023. CEQA Roadway Screening Layers. Website: https://mtc.maps.arcgis.com/apps/instant/sidebar/index.html?appid=c5f9b1a40326409a89076bdc0d95e429. Accessed September 19, 2024.

[19] Bay Area Air Quality Management District (BAAQMD). 2022. CEQA Rail and Railyard Screening Layer. Website: https://mtc.maps.arcgis.com/apps/instant/sidebar/index.html?appid=c5f9b1a40326409a89076bdc0d95e429. Accessed September 19, 2024.

Source	Source Name/Type	Distance from MEIR[1] (feet)	Cancer Risk (per million)	Chronic Hazard Index	Maximum Annual $PM_{2.5}$ Concentration ($\mu g/m^3$)
Facility ID 17708	Generator	25	1.47	0.00	0.00
Existing Roadways[3]		See footnote	7.80	0.028	0.19
Existing Rail Lines[3]		See footnote	1.46	0.00	0.00
Cumulative Health Risks					
Cumulative Total with Project Construction utilizing Clean Fleet			20.78	0.069	0.33
BAAQMD Cumulative Thresholds of Significance			**100**	**10**	**0.8**
Threshold Exceedance?			**No**	**No**	**No**

Notes:
$\mu g/m^3$ = micrograms per cubic meter
BAAQMD = Bay Area Air Quality Management District
MEIR = Maximally Exposed Individual Receptor
$PM_{2.5}$ = particulate matter less than 2.5 microns in diameter
TAC = toxic air contaminant
[1] The MEIR was determined to be a multi-family apartment complex southeast of the project site, across Diana Avenue. The distance factor has **not** been applied to the health risk values and as such represents the most conservative, worst-case scenario.
[2] The project construction cancer risk and chronic non-cancer hazard estimates shown here incorporate the use of Tier 4 (Interim or Final) engines for all construction equipment rated for 25 horsepower or greater.
[3] BAAQMD Roadway layers provide results for the combined contribution of all freeways and surface streets at each receptor and therefore impacts are not from a single surface street or freeway but an aggregate of their impacts. The impact of the roadways will depend both on their traffic volume and proximity. High traffic roadways emit TACs at much higher rates than surface streets, but their impacts are dissipated by distance. Nearby surface streets have lower traffic volumes and emissions, but their impact is more localized. The same practice is applied to the rail lines.
Source: Appendix A

As noted in Table 11, the cumulative impacts from mitigated project construction and existing sources of TACs at the MEIR would be less than the BAAQMD cumulative thresholds of significance for cancer risk and non-cancer chronic hazard and annual $PM_{2.5}$ concentrations. Therefore, the proposed project, along with cumulative sources of TAC emissions within 1,000 feet, would be below the BAAQMD's cumulative thresholds of significance and would not be cumulatively considerable or result in a significant impact.

The Project as a Receptor (Non-CEQA Impact, Compliance with City Policy NRE-11.1)

The proposed project would locate new sensitive receptors (residents) that could be subject to existing sources of TACs at the project site. However, the California Supreme Court concluded in *California Building Industry Association v. BAAQMD* that agencies generally subject to CEQA are not required to analyze the impact of existing environmental conditions on a project's future users or residents. However, in some instances, it may be appropriate to evaluate impacts of existing surrounding source on a projects' future users using the BAAQMD risks and hazards thresholds for guidance. In this instance, the City's General Plan Policy NRE-11.1 requires modeling for sensitive land uses, such as residential development, within sources of pollution such as freeways and industrial uses. Policy NRE-11.1 also requires new residential

development to incorporate appropriate mitigation into project designs or be located adequate distances from sources of TACs to avoid significant risk to health and safety. Accordingly, a cumulative analysis was conducted and Table 12 summarizes the cumulative health impacts at the project site at project buildout. Table 12 summarizes the health risks based on outdoor air concentration. The table shows that the risks and hazards for new residents at the proposed project site would be below both the single source project threshold of 10 in a million and the cumulative threshold of 100 in a million.

It should be noted that the latest CBC update in 2022 requires heating, ventilation, and air conditioning (HVAC) systems with Minimum Efficiency Reporting Values (MERV)-13 or better filtration in newly constructed single-family homes, which serves to effectively mitigate the impacts of particulate TACs and $PM_{2.5}$ for indoor exposure. Accordingly, an 80 percent reduction from outdoor exposure is reflected in Table 12 as a result of implementation of MERV-13 filtration.[20]

To determine the necessity of measures beyond those already required for the proposed project through compliance with regulations, the BAAQMD screening analysis was applied at the project site to evaluate whether existing TACs could adversely affect individuals living within the proposed project. The BAAQMD-provided tools for screening potential sources of TACs were used for this purpose.

Table 12: Summary of the Cumulative Health Impacts at the Proposed Project Site

Source Name/Type	Distance from Project Site[1] (feet)	Cancer Risk (per million)	Chronic Hazard Index	Maximum Annual $PM_{2.5}$ Concentration ($\mu g/m^3$)
Stationary Sources				
Facility ID 20861–Generator	25	2.78	0.00	0.00
Facility ID 17708–Generator	25	1.47	0.00	0.00
Existing Roadways	See footnote[2]	7.80	0.028	0.19
Existing Rail Lines	See footnote[2]	1.46	0.00	0.00
Cumulative Health Risks				
Cumulative Total (outdoor air)		13.51	0.028	0.19
Cumulative Total with MERV filters		**2.70**	**0.005**	**0.038**
BAAQD Single Source Thresholds of Significance		**10**	**1**	**0.3**
BAAQMD Cumulative Thresholds of Significance		**100**	**10**	**0.8**
Threshold Exceedance?		**No**	**No**	**No**

Notes:
$\mu g/m^3$ = micrograms per cubic meter
BAAQMD = Bay Area Air Quality Management District
MERV = Minimum Efficiency Reporting Value
$PM_{2.5}$ = particulate matter less than 2.5 microns in diameter[1]

[20] United States Environmental Protection Agency. What is MERV Rating? March 5, 2024. Accessed December 9, 2024.

Source Name/Type	Distance from Project Site[1] (feet)	Cancer Risk (per million)	Chronic Hazard Index	Maximum Annual $PM_{2.5}$ Concentration ($\mu g/m^3$)

Assumes emissions remain constant with time.
[1] Measured from closest project boundary.
[2] BAAQMD Roadway layers provide results for the combined contribution of all freeways and surface streets at each receptor and therefore impacts are not from a single surface street or freeway but an aggregate of their impacts. The impact of the roadways will depend both on their traffic volume and proximity. High traffic roadways emit TACs at much higher rates than surface streets, but their impacts are dissipated by distance. Nearby surface streets have lower traffic volumes and emissions, but their impact is more localized. The same practice is applied to the rail lines.
Source: Appendix A.

As shown in Table 12, the cumulative health impacts to the future on-site residents from existing TAC emission sources located within 1,000 feet of the project site are below BAAQMD's cumulative significance threshold for cancer risk, chronic hazards and annual $PM_{2.5}$ concentrations. As such, the proposed project would result in a less than significant cumulative health impact related to exposing sensitive receptors to substantial concentrations of pollutants.

Impact AIR-4: Would the proposed project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Less than significant impact. The ability to detect odors varies considerably among the population and is subjective. The BAAQMD does not have a recommended odor threshold for construction activities. However, the BAAQMD recommends operational screening criteria based on the distance between receptors and types of sources known to generate odors.

Project construction would generate diesel exhaust and ROGs; however, these emissions would disperse rapidly from the project site and therefore would not create significant odors affecting a substantial number of people. As such, construction odor impacts would be less than significant.

Land uses typically associated with objectionable odors include wastewater treatment plants, compost facilities, landfills, solid waste transfer stations, fiberglass manufacturing facilities, paint/coating operations (e.g., auto body shops), dairy farms, petroleum refineries, asphalt batch plants, chemical manufacturing, and food manufacturing facilities, as shown in Table 5-4, Odor Screening Distances, in Chapter 5 Project-level Air Quality Impacts, 2022 BAAQMD CEQA Guidelines.[21] The proposed project would not involve any of the uses in Table 5-4 of the BAAQMD CEQA Guidelines. Minor sources of odors, such as exhaust from mobile sources, are not typically associated with numerous odor complaints, but are known to have temporary and not significant odors.

[21] Bay Area Air Quality Management District (BAAQMD). 2022. BAAQMD CEQA Guidelines, Chapter 5 Project-level Air Quality Impacts, Table 5-4, Odor Screening Distances.

GREENHOUSE GAS EMISSIONS IMPACT ANALYSIS

According to CEQA Guidelines Appendix G, to determine whether impacts related to GHG emissions are significant environmental effects, the following questions are analyzed and evaluated.

Would the proposed project:

a. **Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?**

Less than significant impact. Both construction and operational activities have the potential to generate GHG emissions. The proposed project would generate GHG emissions during temporary (short-term) construction activities, such as site grading, operation of construction equipment, operation of on-site heavy-duty construction vehicles, hauling of materials to and from the project site, asphalt paving, and construction worker vehicle trips. Construction activities would vary over the duration of project construction.

Long-term operational GHG emissions would result from project-generated vehicular traffic, operation of any landscaping equipment, natural gas combustion for space and water heating and off-site generation of electrical power over the life of the proposed project, the energy required to convey water to and wastewater from the project site, the emissions associated with the hauling and disposal of solid waste from the project site, and any fugitive refrigerants from air conditioning or refrigerators.

Global climate change is not confined to a particular project area and is generally accepted as the consequence of global industrialization over the last 200 years. A typical project, even a very large one, does not generate enough GHG emissions on its own to influence global climate change significantly; hence, the issue of global climate change is, by definition, a cumulative environmental impact. Therefore, this section measures the proposed project's incremental contribution to the cumulative environmental impact. The following is a discussion of the proposed project's contribution to GHG emissions during both the construction and operation phases. The proposed project is analyzed against BAAQMD's qualitative thresholds; therefore, the proposed project's GHG emissions quantified below are for informational purposes only.

Project Emissions (for Informational Purposes)

Construction Emissions

At the time of this analysis, the construction of the proposed project was anticipated to begin in January 2026 and end in March 2027. The proposed project's construction emissions are presented in Table 13. As vehicle and equipment fuel efficiencies and emission control standards continue to incrementally improve with each year, project construction emissions are likely to decrease nominally from what is shown in Table 13, should the construction schedule move to later years. Therefore, the construction GHG emissions contained in Table 13 represent a conservative assessment of project construction emissions. CalEEMod outputs which detail the GHG emissions during each construction phase are

provided in Appendix A. The proposed project would generate approximately 454 metric tons of carbon dioxide equivalents (MT CO_2e) during construction.

Table 13: Proposed Project Construction GHG Emissions

Construction Year	Total MT CO_2e per year (approx.)
2026	401.77
2027	51.88
Entire Construction Duration (2025-2026)	
Total	453.65
Amortized over 30 years	***15.12***
Notes: Because of rounding, total MT CO_2e may be marginally different from CalEEMod output. MT CO_2e = metric tons of carbon dioxide equivalents Source: Appendix A	

Operation Emissions

Operational or long-term emissions occur over the life of the project. Project operations were modeled for the 2027 operational year, immediately following the completion of construction. Sources for operational emissions are summarized below. Sources for operational GHG emissions include:

- **Motor Vehicles:** These emissions refer to GHG emissions contained in the exhaust from the cars and trucks that would travel to and from the project site.
- **Area Sources:** These emissions refer to those produced during activities such as landscape maintenance.
- **Energy-Electricity:** These emissions refer to those generated by off-site power plants to supply electricity required for the project.
- **Water Transport:** These emissions refer to those generated by the electricity required to transport and treat the water to be used on the project site.
- **Waste:** These emissions refer to the GHG emissions produced by decomposing waste generated by the project.

Table 14 presents the estimated annual GHG emissions from the proposed project's operational activities. As shown in Table 14, the proposed project would generate approximately 675 MT CO_2e per year after the inclusion of 15.12 MT CO_2e per year from project construction. CalEEMod outputs which detail the GHG emissions during operation are provided in Appendix A.

Table 14: Operational Greenhouse Gas Emissions

GHG Emissions Source	GHG Emissions (MT CO_2e per year)
Mobile	563.46
Area	1.16
Energy[1]	66.44
Water	7.06
Waste	21.46
Refrigerants	0.26
Amortized Construction Emissions	15.12
Total Annual Project Emissions	**674.96**

Notes:
MT CO_2e = metric tons carbon dioxide equivalent
[1] The proposed project would be all electric and would not include natural gas use.
Totals were summed using unrounded numbers and may not appear to sum exactly due to rounding.
Source: Appendix A.

Project Impacts

Construction

BAAQMD does not have thresholds of significance for construction-related GHG emissions. GHG emissions from construction activities are one time, short-term emissions and therefore would not significantly contribute to long-term cumulative GHG emissions impacts of the proposed project. Therefore, construction emissions would be less than significant.

Operation

As previously discussed, the BAAQMD's proposed 2022 GHG significance thresholds represent a method for determining whether the proposed project would be cumulatively considerable or whether the proposed project contributes to solving the cumulative problem of climate change, taking into consideration the State's long-term climate goal of carbon neutrality by 2045.

The City does not have a CAP that meets the criteria set forth in State CEQA Guidelines Section 15183.5(b) and the BAAQMD CEQA Air Quality Guidelines. Therefore, the proposed project is evaluated against the design elements in Criterion A of BAAQMD's 2022 GHG Significance thresholds:

> **All-electric design:** The City of Morgan Hill requires that all new construction include building electrification and EV infrastructure. All new construction must use electricity for water heating, space heating, cooking, clothes drying, indoor and outdoor fireplaces, and decorative

appliances. The proposed project would be an all-electric design and would therefore comply with this requirement.

Energy efficiency: As demonstrated in the Energy analysis below, the proposed project would not result in any wasteful, inefficient, or unnecessary energy usage; therefore, the proposed project is consistent with this design element.

VMT impact: The City is working with TJKM Transportation Consultants (TJKM) to develop VMT Screening Criteria to evaluate the potential VMT impacts from development projects. The proposed thresholds, based on substantial evidence, include areas identified within the City where VMT per capita is unmitigable, mitigable, or under the threshold.[22] The proposed project is located in an area that is identified as being under the threshold. Therefore, the proposed project's VMT impact is less than significant and is consistent with the third design element.

Tier 2 EV Charging Infrastructure: The last design element relates to implementation of CALGreen Tier 2 level of EV charging infrastructure, which is beyond the mandatory CALGreen requirement of EV charging spaces. Tier 2 level of EV charging infrastructure calls for a dedicated 208/240V branch circuit installed in raceway in each dwelling unit. The proposed project would comply with the City's Reach Code, which requires residential buildings to include a minimum of one Level 2 EV Ready space (if a second parking space is provided, it must be at minimum Level 1 EV Ready).[23] Therefore, the proposed project would exceed the Tier 2 EV charging criterion and would be consistent with this design element.

In summary, the proposed project would satisfy all four design elements as outlined in the BAAQMD GHG threshold Criterion A. Therefore, impacts would be less than significant.

b) Would the proposed project conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?

Less than significant impact. Consistency of the proposed project with respect to ARB's 2017 and 2022 Scoping Plan, Plan Bay Area 2050, the County's Sustainability Master Plan, CALGreen codes, and the City's Reach Code is discussed below.

ARB 2017 Scoping Plan Update, SB 32, and Executive Order S-3-05

The 2017 Scoping Plan Update adopted by the ARB establishes the framework for achieving the 2030 statewide GHG reduction target of 40 percent below 1990 levels. The 2017 Scoping Plan Update includes local actions that land use development projects and municipalities can implement to support the statewide goal. The 2017 Scoping Plan Update also states that achieving the 2030 target is consistent

[22] City of Morgan Hill Level of Service to Vehicle Miles Traveled. 2024. Website: https://www.morganhill.ca.gov/2062/LOS-to-VMT. Accessed September 9, 2024.

[23] A Level 1 EV Ready space is a parking space served by a complete electric circuit with a minimum of 110/120 volt, 20-ampere capacity, including electric panel capacity; an overprotection device; a minimum 1-inch diameter raceway that may include multiple circuits as allowed by the County Electrical Code; properly sized conductors; grounding and bonding; and either (a) a receptacle labeled "Electric Vehicle Outlet" with at least a 0.5-inch font adjacent to the parking space, or (b) labeled EVSE.

with progress toward achieving the 2050 level included in Executive Order S-3-05 and that depending on the success in achieving the 2030 target, it may be possible to achieve the 2050 target earlier than Executive Order S-3-05.[24] The 2017 Scoping Plan Update incorporates a range of regulations, policies, and State plans designed to reduce GHG emissions. Those that are applicable to the construction and operation of development provided for under the proposed project are listed in Table 15 below.

Table 15: 2017 Scoping Plan Consistency

Sector/Source	Category/Description	Consistency Determination
Energy and Water		
California Renewables Portfolio Standard (RPS) and SB 100	SB 100 requires that the proportion of electricity from renewable sources be 60 percent renewable power by 2030 and 100 percent renewable power by 2045.	**Consistent.** Electricity providers supplying electricity to the proposed project would be required to comply with SB 100 and the RPS.
California RPS and SB 350	SB 350 requires that the proportion of electricity from renewable sources be 50 percent renewable power by 2030 (superseded by SB 100). It also requires the State to double the energy efficiency savings in existing final end uses of electricity and natural gas by retail customers through energy efficiency and conservation.	**Consistent.** Electricity providers supplying electricity to the proposed project are required to comply with both the RPS and SB 350 and will meet these standards. Silicon Valley Clean Energy (SVCE) is ahead of the SB 350 target with 50 percent of its base energy supply presently coming from renewable sources.
California Building Efficiency Standards (California Code of Regulations [CCR] Title 24, Part 6)	Energy Efficiency Standards for Residential and Nonresidential Buildings	**Consistent.** The proposed project would be designed to comply with the most recent version of Title 24 Building Energy Efficiency Standards at the time of individual project review.
California Green Building Standards Code (CCR Title 24, Part 11–CALGreen)	California's Green Building Standards (CALGreen) Code includes energy and water efficiency requirements, as well as waste management and other design regulations that apply to residential and nonresidential buildings.	**Consistent.** The proposed project would comply with mandatory CALGreen requirements. Furthermore, the City's Reach Code has more stringent EV charging requirements that exceed CALGreen's Tier 2 EV Charging criteria.
Senate Bill X7-7	The Water Conservation Act of 2009 sets an overall goal of reducing per capita urban water use by 20 percent by December 31, 2020. Each urban retail water supplier shall	**Consistent.** The water service provider for the proposed project would be required to comply with SB X7-7 standards. In addition, CALGreen standards include

[24] California Air Resource Board (ARB). 2017. California's 2017 Climate Change Scoping Plan: The Strategy for Achieving California's 2030 Greenhouse Gas Target. Website: https://ww3.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf. Accessed September 16, 2024.

Sector/Source	Category/Description	Consistency Determination
	develop water use targets to meet this goal.	requirements for water efficiency and conservation. The proposed project would be required to comply with mandatory requirements which include prescriptive requirements for flow rate for plumbing fixtures and metering devices.
Mobile Sources		
Advanced Clean Cars Program (ACC) and Mobile Source Strategy (MSS)	In 2012, the ARB adopted the ACC program to reduce criteria pollutants and GHG emissions for model year vehicles 2015 through 2025. ACC requires the reduction of criteria pollutants and GHG emissions from light- and medium-duty vehicles. ACC also includes the Zero-Emission Vehicle (ZEV) regulation, which requires manufacturers to produce an increasing number of pure ZEVs (meaning battery-electric and fuel cell electric vehicles), with provisions to also produce plug-in hybrid electric vehicles (PHEV) in the 2018 through 2025 model years. The Mobile Source Strategy (2016) calls for 1.5 million ZEVs (including plug-in hybrid electric, battery-electric, and hydrogen fuel cell vehicles) on the road by 2025, and 4.2 million ZEVs by 2030.	**Consistent.** These standards would apply to all vehicles used by future residents of the proposed project, and to construction workers traveling to and from the construction site.
SB 375	SB 375 establishes mechanisms for the development of regional targets for reducing passenger vehicle GHG emissions. Under SB 375, the ARB is required, in consultation with the State's Metropolitan Planning Organizations (MPOs), to set regional GHG reduction targets for the passenger vehicle and light-duty truck sector for 2020 and 2035. ARB's current targets call for the Bay Area to reduce per capita vehicular GHG emissions 10 percent by 2020 and 19 percent by 2035 from a 2005 baseline.	**Consistent.** These standards would apply to all vehicles used by future residents of the proposed project, and to construction workers traveling to and from the construction site.

Sector/Source	Category/Description	Consistency Determination
Solid Waste		
California Integrated Waste Management Act (IWMA) of 1989 and AB 341	IWMA requires all California cities to divert 50 percent of all solid waste from landfill disposal through source reduction, recycling, and composting activities. AB 341 sets a statewide goal for 75 percent disposal reduction by the year 2020.	**Consistent.** The solid waste ordinance adopted by the City regulates the collection, disposal, and processing of organic waste in accordance with State law.
Source: California Air Resources Board (ARB). 2017. California's 2017 Climate Change Scoping Plan.		

As shown above, the proposed project would implement all applicable actions identified in the 2017 Scoping Plan Update to reduce energy use, conserve water, reduce waste generation, promote EV use, and reduce vehicle travel, consistent with statewide strategies and regulations.

AB 1279 and ARB 2022 Scoping Plan

The ARB 2022 Scoping Plan For Achieving Carbon Neutrality was approved in December 2022 and expands on prior scoping plans and recent legislation, such as AB 1279, by outlining a technologically feasible, cost-effective, and equity-focused path to achieve the State's climate target of reducing anthropogenic GHG emissions to 85 percent below 1990 levels and achieving carbon neutrality by 2045 or sooner.[25] To achieve carbon neutrality by 2045, the 2022 Scoping Plan contains GHG emissions reductions, technology, and clean energy mandated by statutes; reduction of short-lived climate pollutants; and mechanical CO_2 capture and sequestration actions. Table 16 below shows the consistency of the proposed project with the applicable reduction measures and recommendations contained in ARB's 2022 Scoping Plan.

Table 16: 2022 Scoping Plan Consistency

2022 Scoping Action Plan	Consistency Determination
Increase in Renewable Energy and Decrease in Oil and Gas Use Actions	**Consistent.** Consistent with the City's Reach Code, the proposed project would be constructed as all-electric buildings. Electricity supplied to the proposed project contains a minimum of 50 percent renewables with the percentage increasing in future years to meet SB 100 requirements.
Low Carbon Fuels Actions	**Consistent.** The Low Carbon Fuel Standard is designed to decrease the carbon intensity of California's transportation fuel pool and provide an increasing range of low carbon and renewable alternatives, which reduce petroleum dependency and achieve air quality benefits and is implemented at the State level.

[25] California Air Resources Board (ARB). 2022. 2022 Scoping Plan for Achieving Carbon Neutrality. Website: https://ww2.arb.ca.gov/sites/default/files/2022-12/2022-sp.pdf. Accessed September 16, 2024.

2022 Scoping Action Plan	Consistency Determination
Expansion of Electrical Infrastructure Actions	**Consistent.** The proposed project would comply with mandatory CALGreen requirements. Furthermore, the City's Reach Code has more stringent EV charging requirements that exceed CALGreen's Tier 2 EV Charging criteria.
Climate Ready and Climate-Friendly Buildings	**Consistent.** All development proposed as part of the project would comply with current Title 24 and CALGreen standards which promote energy efficiency, increased use of renewable energy and incorporation of sustainable design features in construction and operation.
Expanded Use of Zero-Emission Mobile Source Technology Actions	**Consistent.** The proposed project would comply with mandatory CALGreen requirements. Furthermore, the City's Reach Code has more stringent EV charging requirements that exceed CALGreen's Tier 2 EV Charging criteria.
Organic Waste Diversion and Composing Actions	**Consistent.** The solid waste ordinance adopted by the City regulates the collection, disposal, and processing of organic waste in accordance with State law.
Source: California Air Resources Board (ARB). 2022. 2022 Scoping Plan for Achieving Carbon Neutrality.	

Plan Bay Area 2050

Plan Bay Area 2050 is the Bay Area's regional plan that aims to improve housing, the economy, transportation, and the environment by making the Bay Area more equitable and resilient for all residents. Plan Bay Area 2050 identifies opportunities to reduce regional GHG emissions in housing, economic, and transportation sectors. The proposed project would be developed in an area with existing infrastructure on a developed project site. It would replace the older, less energy-efficient buildings with state-of-the-art structures, is located in an infill area of the City, where VMT impacts are anticipated to be less than significant, and would utilize renewable energy, consistent with the Plan Bay Area's aim of reducing regional GHG emissions. Plan Bay Area 2050 was prepared in coordination with Bay Area cities and the goals, policies, and programs within Plan Bay Area incorporate the existing land uses of those cities. Therefore, because the proposed project is consistent with the existing land use and zoning, this type of use was already assumed, and the proposed project would not conflict with the land use concept plan in Plan Bay Area 2050.

City of Morgan Hill Climate Action Plan

The City of Morgan Hill's CAP focuses on two main goals: the adoption of electric vehicles in the community, and decarbonizing existing buildings by reducing the use of fossil fuel. As discussed previously, the proposed project will be all-electric in design and will include the required EV Ready parking spaces. In addition, the proposed project is located in a low VMT area of the City. All development in the City, including the proposed project, would be required to comply with these strategies and therefore the proposed project would not conflict with the CAP.

CALGreen Code and City of Morgan Hill Reach Codes

The proposed project would be required to comply with the most recent update to the CALGreen Code as well as the City's Reach Codes that aim to achieve energy savings and GHG reductions beyond the State's minimum requirements.

Conclusion

The proposed project would be consistent with the reduction measures identified in the ARB's 2017 and 2022 Scoping Plans. In addition, the proposed project would not conflict with the land use concept plan in Plan Bay Area or the City's CAP and would be subject to measures in the CALGreen Code and the City's Reach Codes. Furthermore, the proposed project is located in a low VMT area of the City. Therefore, impacts would be less than significant.

ENERGY IMPACT ANALYSIS

According to CEQA Guidelines Appendix G, to determine whether impacts related to energy are significant environmental effects, the following questions are analyzed and evaluated.

Would the proposed project:

a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation? or

b) Conflict with or obstruct a State or local plan for renewable energy or energy efficiency?

Construction

The construction of the proposed project would result in energy expenditures from diesel and gasoline utilized to fuel off-road construction equipment and construction vehicles traveling to and from the project site. Off-road construction equipment would consume an estimated 35,082 gallons of diesel. Vehicles used by workers, vendors, and haul trucks would consume an estimated 11,716 gallons of diesel and gasoline combined. Detailed energy calculations for construction are included in Appendix A.

Construction practices would comply with all local and State regulatory requirements related to equipment age, operation, and design. Adherence with BAAQMD Basic Construction Measures for dust suppression would ensure that idling time of trucks is limited to 5 minutes. Construction equipment would be maintained and tuned according to manufacturer specifications which would promote fuel efficiency. Compliance with the ARB Regulation for In-Use Off-Road Diesel-Fueled Fleets (Off-Road Diesel Regulation) addresses unnecessary idling for off-road construction equipment, preventing the unnecessary or wasteful use of energy.

Operation

The BAAQMD GHG design elements of the proposed project would have the co-benefits of energy efficiency and reductions in fossil fuel consumption. The project would be designed to be all electric and

would not include natural gas usage. The 93 new residential townhome units would comply with Title 24, Part 6, Subchapter 8 of the CBC, which requires the installation of rooftop solar panels. In addition, all proposed indoor and outdoor lighting would be modern energy-efficient lighting, as required under the CBC. The proposed project would also be required to comply with the City's Reach Code, which requires all new residential dwellings to have installed a Level 2 EV Ready space and (and a Level 1 EV Ready space for a second parking space). Therefore, the proposed project would exceed CALGreen's Tier 2 EV charging criterion.

The proposed project would consume an estimated 711,031 kWh/yr of electricity from the residential land uses. Mobile source energy consumption for vehicle trips to the site consist of an estimated 62,403 gallons per year of fossil fuel, 265 gallons per year of natural gas, and 44,549 kWh of electricity for electric vehicles.

The electricity use associated with the proposed project would be provided by Silicon Valley Clean Energy (SVCE). SVCE is ahead of California's strong clean energy goals with half of the base energy supply coming from renewable resources and more new renewable projects underway to help meet long-term goals. In addition, SVCE has surpassed California's energy storage targets for all electricity providers by committing to more than 100 MW of utility-scale energy storage, and continues to support customers in adding home battery storage paired with rooftop solar. SVCE currently has a number of solar, solar + storage, wind, geothermal, battery storage, and long-duration storage projects in contract and under construction, with many already online. The continued growth in available renewable energy products and storage, combined with the proposed project's rooftop solar panels, means that the proposed project will not burden the existing energy infrastructure.

The project would be compliant with all State and local regulations for renewable energy and energy efficiency. The project design will result in a decreased reliance on fossil fuels and increased reliance on renewable energy sources, and energy impacts from operation of the project would be less than significant.

CONCLUSION

Based on the project understanding described above, the proposed project would result in less than significant impacts to air quality with implementation of the City's Standard Conditions of Approval (SCA AIR-1, AIR-2, and AIR-3) for Air Quality.

The analysis determined that the proposed project would not result in potentially significant impacts related to GHG emissions; nor would the project conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing emissions of greenhouse gases.

The analysis also determined that the proposed project would not result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation; nor would the proposed project conflict with or obstruct a State or local plan for renewable energy or energy efficiency.

Thank you for the opportunity to conduct an air quality and GHG emissions and energy impacts analysis. Please feel free to contact Phil Ault (559.930.6191 or pault@fcs-intl.com) should you have any questions.

Sincerely,

Philip Ault, Director of Noise and Air Quality
FirstCarbon Solutions
2999 Oak Road, Suite 250
Walnut Creek, CA 94597

Attachment A: Air Quality, Greenhouse Gas and Energy Supporting Information and Modeling Results

FCS
An ADEC Innovation

Attachment A:
Air Quality, Greenhouse Gas and Energy Supporting Information and Modeling Results

Air Quality, Greenhouse Gas Emissions, and Energy Supporting Information

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HARP Report

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BAAQMD Raster and MEIR and MEIW

BAAQMD Raster at MEIR

Supporting Energy Calculations – Construction

Supporting Energy Calculations - Operations

Project Number:	6050.0001	**Construction Start Date:**	1/5/2026
Official Project Name	Diana Morgan Hill Townhomes		Monday
Address	375 Diana Avenue	**Working Days per Week:**	5
City	Morgan Hill		
County	Santa Clara	**Demolition?**	Yes
		Soil Import/Export?	Yes
CEC Electricity Demand Forecast Zone (EDFZ)	1		
Electric Utility Provider:	Pacific Gas and Electric Company	**Operational Start Date/Year**	2027
		Emergency Generator?	No
Air District	Bay Area AQMD	**All-Electric Project?**	Yes
Air Basin	San Francisco Bay Area		

6050.0001 - Diana Morgan Hill Townhomes

Landuse	Subtype	Unit	Number or Size	Lot Acreage	Building SF	Landscaping (sq ft)	Special Landscaping (sq ft)	Description
Residential	Condo/Townhouse	Dwelling Unit	93	1.85	223,515			
Parking	Other Asphalt Surfaces	Acre	3.580	1.88				
Recreational	User Defined Recreational	User Defined	50,220	1.72	-	71,065	6,317	Combined landscape + bioretention area; bioretention is classified as special landscaping
		Total		5.13	223,515	71,065	6,317	

Construction Starts 2026

Default — Construction Construction Phases

Phase Name	Phase Type	Start Date	End Date	Acres × Days Per Week	1.0 CalEEMod Default Work Days	Modeled Work Days	Override Default / Notes
Demolition	Demolition	1/5/2026	1/30/2026	5	20	20	
Site Preparation	Site Preparation	2/2/2026	2/13/2026	5	10	10	
Grading	Grading	2/16/2026	3/13/2026	5	20	20	
Building Construction	Building Construction	3/16/2026	1/29/2027	5	230	230	
Paving	Paving	2/1/2027	2/26/2027	5	20	20	
Architectural Coating	Architectural Coating	3/1/2027	3/26/2027	5	20	20	

Default — Construction Off-Road Equipment

Construction Off-Road Equipment	Changes to Defaults
Demolition	
Site Preparation	
Grading	
Building Construction	
Paving	
Architectural Coating	

Default — Construction Off-Road Equipment Emission Factors

Construction Off-Road Equipment	Changes to Defaults
Demolition	
Site Preparation	
Grading	
Building Construction	
Paving	
Architectural Coating	

Changes to Default — Construction Material Movement

Water Disturbed Area: Achieve: 2 times per day

Phase Type	Size Metric	Import	Export
Site Preparation	CY		
Grading	CY		2,995

Changes to Default — Construction Demolition

Water Demolished Area: + Times Per Day: 2

Construction Demolition	Amount
tons of debris	111

Changes to Default — Construction Trips and VMT (Edits only)

Construction Activity	Add'l One-Way Trips/Day	Trip Type	Trip Length	Vehicle Class
Paving	19	Vendor	default	HHDT

Note: VOC Content (g/L) (left side of column on calemod page) is based on district rule and regulations and is not edited. the interior/exterior area split as shown below is for the right side of the columns in CalEEMOD.

Default — Construction Architectural Coatings

Construction Activity	Interior Area (sq ft)		Exterior Area (sq ft)		Notes
	Residential	Non-Residential	Residential	Non-Residential	
Architectural Coating	default	default	default	default	Not Applicable

Default — Construction Paved Area

Construction Activity	Paved Area Acres	% Asphalt	VOC Off-gassing Emission Factor
Condo/Townhouse	default	default	default
Other Asphalt Surfaces	default	default	default
User Defined Recreational	default	default	default

Default — Construction Electricity

Construction Year	GHG Intensity Factor lb/MWhr			Construction Electricity kWhr
	CO2	CH4	N2O	
2026	default	default	default	0
2027	default	default	default	0
2028	default	default	default	
2029	default	default	default	

Default — Operations GHG Emission Factors

Pacific Gas and Electric Company	GHG Intensity Factor		
	CO2	CH4	N2O
2027 Forecasted	CalEEMod	CalEEMod	CalEEMod
2019 Reported	default	default	default

Default — Operations Vehicle Data: Rates and Lengths

Land Use Subtype	Size	Units	Weekday Trip Rate (veh/day)	Saturday Trip Rate (veh/day)	Sunday Trip Rate (veh/day)	Res H-W Trip Length (miles)	Res H-S Trip Length (miles)	Res H-O Trip Length (miles)	Non Res H-W Trip Length (miles)	Non Res W-O Trip Length (miles)	Non Res O-O Trip Length (miles)
Condo/Townhouse	93	Dwelling Units	default	default	default	default	default	default	default	default	default
Other Asphalt Surfaces	3.580	Acre	default	default	default	default	default	default	default	default	default
User Defined Recreational	50220.000	User Defined Unit	default	default	default	default	default	default	default	default	default

Default — Operations Vehicle Data: Purposes and Percentages

Land Use Subtype	Size	Size	Weekday Primary Trip %	Weekday Divert Trip %	Weekday Pass-by Trip %	Saturday Primary Trip %	Saturday Divert Trip %	Saturday Pass-by Trip %	Sunday Primary Trip %	Sunday Divert Trip %	Sunday Pass-by Trip %
Condo/Townhouse	93	Dwelling Units									
Other Asphalt Surfaces	3.580	Acre									
User Defined Recreational	50220.000	User Defined Unit									

Default — Operations Fleet Mix

Land Use Subtype	Season	MHDT	LDA	LDT1	LDT2	LHDT1	LHDT2	MCY	MDV	MH	HHDT	OBUS	SBUS	UBUS
Condo/Townhouse	A,S,W	0.76%	52.26%	3.82%	23.43%	2.36%	0.59%	2.20%	13.16%	0.24%	0.95%	0.11%	0.07%	0.04%
Other Asphalt Surfaces	A,S,W	0.76%	52.26%	3.82%	23.43%	2.36%	0.59%	2.20%	13.16%	0.24%	0.95%	0.11%	0.07%	0.04%
User Defined Recreational	A,S,W	0.76%	52.26%	3.82%	23.43%	2.36%	0.59%	2.20%	13.16%	0.24%	0.95%	0.11%	0.07%	0.04%

Changes to Default — Operations Hearths

Fireplaces

Land Use Subtype	# Wood	# Gas	# Propane	# Electric	# Without	Hours/ Day	Days/ Yr	Wood mass/ hr
Zero This	0	0	0	0	0	0	0	0

Woodstoves

Land Use Subtype	# Wood	# Gas	# Propane	# Electric	# Without	Hours/ Day	Days/ Yr	Wood mass/ hr
Zero This	0	0	0	0	0	0	0	0

Default — Operations Consumer Products

Emission Factors (lb VOC/sq ft/day)	
General Cateatory	default
City Park/Golf Course, Pesticide/Fertilizers	default
Parking Degreaser	default

Changes to Default — Operations Energy Use

Land Use Subtype	Electricity (kW/yr)	NG (BTU/yr)
Condo/Townhouse	711,031	0
Other Asphalt Surfaces	0	0
User Defined Recreational	0	0

More notes - replace xx with 711.031

Default — Operations Water and Wastewater

Land Use Subtype	Indoor Use (gal/yr)	Outdoor Use (gal/yr)	% of Total WS by Process			% of WW Solids by Process	
			Septic	Aerobic	Lagoons	Combust	Codes
Condo/Townhouse	default	default	default	default	default	default	default
Other Asphalt Surfaces	default	default	default	default	default	default	default
User Defined Recreational	default	default	default	default	default	default	default

Default — Operations Solid Waste

Land Use Subtype	Unit	Size	Generation Rate		Landfill Gas Treatment		
			ton/yr/Unit	ton/yr	No Con%	Con %	Recovery%
Condo/Townhouse	Dwelling Units	93	default	default	default	default	default
Other Asphalt Surfaces	Acre	3.580	default	default	default	default	default
User Defined Recreational	User Defined Unit	50220.000	default	default	default	default	default

Default — Operations Emergency Generators and Fire Pumps

Equipment Type	Fuel	#	Hrs/day	Hrs/Yr	HP	Load	Description

Default — Generators and Fire Pumps Emission Factors

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10e	PM2.5e	CO2	CH4	N2O

Add something here for the mitigated construction run. Hit "Measures" --> Construction --> C5 (Use Advanced Tiers). Use Tier 4 Interim.

Diana Morgan Hill Townhomes
Demolition Debris Calculations

Description	Area [1] (square feet)	height/depth (ft)	Volume (ft3)	Demolition Waste Fraction	Demolition Volume[1] (ft^3)	Demolition Waste Density (tons/cy)	Demolition Weight (tons)
Buildings[2]	2,000	10	20,000	0.25	5,000	0.50	93
Pavement	480	0.5	240	1	240	2.025	18
Totals	**2,480**	-	-		-		**111**

Notes: cy = cubic yard
cf = cubic feet
sf = square feet

Building demolition estimates are based on methods used in CalEEMod (CAPCOA, 2022), based on 1 story building , assume 10 ft per floor where 1 sf = 10 cf of building volume, and 1 cf of building volume = 0.25 cf of waste. This approach can be used to estimate demolition for multiple story buildings. It also assumes 1 cubic yard building waste = 0.5 ton weight

1 cubic yard of asphalt = 2.025 tons or 4050 lbs.

[1] Source: FCS. 2024. Building and Pavement Demolition Quantities obtained from Applicant.

[1] Source: California Air Pollution Control Officers Association (CAPCOA). 2022. Appendix C Emission Calculation Details for CalEEMod. April.

*480 derived from CalEEMod default for single family home driveway

Diana Morgan Hill Townhomes
Asphalt Paving Construction Trips Calculation

Paved area (sf)	81,802
Asphalt volume (cube feet) assume 6 inch pavement	40,901
Asphalt volume (cy)	1,515
Capacity per vendor truck (CY per truck)	16
Trips	**189.36**
Days in paving phase	**20**
One-way Vendor Trips per day	19

Diana Morgan Hill Townhomes Custom Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Diana Morgan Hill Townhomes
Construction Start Date	1/5/2026
Operational Year	2027
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	1.80
Precipitation (days)	32.8
Location	375 Diana Ave, Morgan Hill, CA 95037, USA
County	Santa Clara
City	Morgan Hill
Air District	Bay Area AQMD
Air Basin	San Francisco Bay Area
TAZ	1909
EDFZ	1
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.26

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Condo/Townhouse	93.0	Dwelling Unit	1.85	223,515	0.00	0.00	278	—

Other Asphalt Surfaces	1.88	Acre	1.88	0.00	0.00	0.00	—	—
User Defined Recreational	1.72	User Defined Unit	1.72	0.00	75,065	6,317	—	Landscaping includes irrigated landscape + bioretention area (bioretention counted as special landscaping)

2. Emissions Summary

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	1.52	1.29	10.3	15.7	0.03	0.38	0.62	1.01	0.35	0.15	0.50	—	3,224	3,224	0.12	0.08	2.70	3,253
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	3.80	3.19	29.2	29.4	0.05	1.24	7.81	9.05	1.14	3.97	5.12	—	5,434	5,434	0.23	0.24	0.08	5,454
2027	159	159	9.88	15.1	0.03	0.34	0.62	0.96	0.31	0.15	0.46	—	3,168	3,168	0.12	0.10	0.06	3,194
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	1.23	1.03	8.75	11.6	0.02	0.33	0.75	1.09	0.31	0.27	0.58	—	2,405	2,405	0.10	0.06	0.76	2,427
2027	8.85	8.82	1.03	1.53	< 0.005	0.04	0.05	0.09	0.03	0.01	0.05	—	310	310	0.01	0.01	0.10	313
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.23	0.19	1.60	2.12	< 0.005	0.06	0.14	0.20	0.06	0.05	0.11	—	398	398	0.02	0.01	0.13	402
2027	1.61	1.61	0.19	0.28	< 0.005	0.01	0.01	0.02	0.01	< 0.005	0.01	—	51.3	51.3	< 0.005	< 0.005	0.02	51.9

2.3. Construction Emissions by Year, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.68	0.63	10.00	17.5	0.03	0.12	0.62	0.75	0.12	0.15	0.27	—	3,224	3,224	0.12	0.08	2.70	3,253
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.70	0.69	14.8	28.9	0.05	0.20	7.81	7.91	0.19	3.97	4.07	—	5,434	5,434	0.23	0.24	0.08	5,454
2027	159	159	10.0	17.0	0.03	0.12	0.62	0.75	0.12	0.15	0.26	—	3,168	3,168	0.12	0.10	0.06	3,194
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.46	0.41	7.44	12.6	0.02	0.09	0.75	0.84	0.08	0.27	0.36	—	2,405	2,405	0.10	0.06	0.76	2,427
2027	8.76	8.75	1.07	1.67	< 0.005	0.01	0.05	0.07	0.01	0.01	0.03	—	310	310	0.01	0.01	0.10	313
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.08	0.08	1.36	2.30	< 0.005	0.02	0.14	0.15	0.02	0.05	0.07	—	398	398	0.02	0.01	0.13	402
2027	1.60	1.60	0.19	0.30	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	51.3	51.3	< 0.005	< 0.005	0.02	51.9

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	2.41	2.25	1.43	16.2	0.04	0.02	3.69	3.72	0.02	0.94	0.96	—	3,943	3,943	0.17	0.16	12.7	4,007
Area	6.15	6.12	0.05	5.28	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	14.1	14.1	< 0.005	< 0.005	—	14.2
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	397	397	0.06	0.01	—	401
Water	—	—	—	—	—	—	—	—	—	—	—	6.46	14.6	21.1	0.67	0.02	—	42.5

Waste	—	—	—	—	—	—	—	—	—	—	—	37.1	0.00	37.1	3.70	0.00	—	130
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.60	1.60
Total	8.55	8.37	1.48	21.5	0.04	0.03	3.69	3.72	0.02	0.94	0.96	43.5	4,369	4,412	4.60	0.18	14.3	4,596
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	2.31	2.15	1.68	15.5	0.04	0.02	3.69	3.72	0.02	0.94	0.96	—	3,709	3,709	0.20	0.17	0.33	3,766
Area	5.66	5.66	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	397	397	0.06	0.01	—	401
Water	—	—	—	—	—	—	—	—	—	—	—	6.46	14.6	21.1	0.67	0.02	—	42.5
Waste	—	—	—	—	—	—	—	—	—	—	—	37.1	0.00	37.1	3.70	0.00	—	130
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.60	1.60
Total	7.97	7.80	1.68	15.5	0.04	0.02	3.69	3.72	0.02	0.94	0.96	43.5	4,121	4,165	4.63	0.20	1.93	4,341
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	2.04	1.90	1.41	13.4	0.03	0.02	3.24	3.26	0.02	0.82	0.84	—	3,349	3,349	0.17	0.15	4.90	3,403
Area	5.90	5.89	0.02	2.60	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	6.96	6.96	< 0.005	< 0.005	—	6.98
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	397	397	0.06	0.01	—	401
Water	—	—	—	—	—	—	—	—	—	—	—	6.46	14.6	21.1	0.67	0.02	—	42.5
Waste	—	—	—	—	—	—	—	—	—	—	—	37.1	0.00	37.1	3.70	0.00	—	130
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.60	1.60
Total	7.94	7.79	1.44	16.0	0.03	0.02	3.24	3.26	0.02	0.82	0.84	43.5	3,768	3,812	4.60	0.17	6.50	3,985
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.37	0.35	0.26	2.45	0.01	< 0.005	0.59	0.59	< 0.005	0.15	0.15	—	555	555	0.03	0.02	0.81	563
Area	1.08	1.07	< 0.005	0.48	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	1.15	1.15	< 0.005	< 0.005	—	1.16
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	65.8	65.8	0.01	< 0.005	—	66.4
Water	—	—	—	—	—	—	—	—	—	—	—	1.07	2.42	3.49	0.11	< 0.005	—	7.04
Waste	—	—	—	—	—	—	—	—	—	—	—	6.13	0.00	6.13	0.61	0.00	—	21.5
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.27	0.27

Total	1.45	1.42	0.26	2.92	0.01	< 0.005	0.59	0.59	< 0.005	0.15	0.15	7.20	624	631	0.76	0.03	1.08	660

2.6. Operations Emissions by Sector, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	2.41	2.25	1.43	16.2	0.04	0.02	3.69	3.72	0.02	0.94	0.96	—	3,943	3,943	0.17	0.16	12.7	4,007
Area	6.15	6.12	0.05	5.28	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	14.1	14.1	< 0.005	< 0.005	—	14.2
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	397	397	0.06	0.01	—	401
Water	—	—	—	—	—	—	—	—	—	—	—	6.46	14.6	21.1	0.67	0.02	—	42.5
Waste	—	—	—	—	—	—	—	—	—	—	—	37.1	0.00	37.1	3.70	0.00	—	130
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.60	1.60
Total	8.55	8.37	1.48	21.5	0.04	0.03	3.69	3.72	0.02	0.94	0.96	43.5	4,369	4,412	4.60	0.18	14.3	4,596
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	2.31	2.15	1.68	15.5	0.04	0.02	3.69	3.72	0.02	0.94	0.96	—	3,709	3,709	0.20	0.17	0.33	3,766
Area	5.66	5.66	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	397	397	0.06	0.01	—	401
Water	—	—	—	—	—	—	—	—	—	—	—	6.46	14.6	21.1	0.67	0.02	—	42.5
Waste	—	—	—	—	—	—	—	—	—	—	—	37.1	0.00	37.1	3.70	0.00	—	130
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.60	1.60
Total	7.97	7.80	1.68	15.5	0.04	0.02	3.69	3.72	0.02	0.94	0.96	43.5	4,121	4,165	4.63	0.20	1.93	4,341
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	2.04	1.90	1.41	13.4	0.03	0.02	3.24	3.26	0.02	0.82	0.84	—	3,349	3,349	0.17	0.15	4.90	3,403
Area	5.90	5.89	0.02	2.60	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	6.96	6.96	< 0.005	< 0.005	—	6.98
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	397	397	0.06	0.01	—	401

Water	—	—	—	—	—	—	—	—	—	—	—	6.46	14.6	21.1	0.67	0.02	—	42.5
Waste	—	—	—	—	—	—	—	—	—	—	—	37.1	0.00	37.1	3.70	0.00	—	130
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.60	1.60
Total	7.94	7.79	1.44	16.0	0.03	0.02	3.24	3.26	0.02	0.82	0.84	43.5	3,768	3,812	4.60	0.17	6.50	3,985
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.37	0.35	0.26	2.45	0.01	< 0.005	0.59	0.59	< 0.005	0.15	0.15	—	555	555	0.03	0.02	0.81	563
Area	1.08	1.07	< 0.005	0.48	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	1.15	1.15	< 0.005	< 0.005	—	1.16
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	65.8	65.8	0.01	< 0.005	—	66.4
Water	—	—	—	—	—	—	—	—	—	—	—	1.07	2.42	3.49	0.11	< 0.005	—	7.04
Waste	—	—	—	—	—	—	—	—	—	—	—	6.13	0.00	6.13	0.61	0.00	—	21.5
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.27	0.27
Total	1.45	1.42	0.26	2.92	0.01	< 0.005	0.59	0.59	< 0.005	0.15	0.15	7.20	624	631	0.76	0.03	1.08	660

3. Construction Emissions Details

3.1. Demolition (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.72	2.29	20.7	19.0	0.03	0.84	—	0.84	0.78	—	0.78	—	3,427	3,427	0.14	0.03	—	3,438
Demolition	—	—	—	—	—	—	0.08	0.08	—	0.01	0.01	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.13	1.13	1.04	< 0.005	0.05	—	0.05	0.04	—	0.04	—	188	188	0.01	< 0.005	—	188
Demolition	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.02	0.21	0.19	< 0.005	0.01	—	0.01	0.01	—	0.01	—	31.1	31.1	< 0.005	< 0.005	—	31.2
Demolition	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.04	0.49	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	117	117	< 0.005	0.01	0.01	118
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.01	< 0.005	0.13	0.06	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	98.3	98.3	0.01	0.02	0.01	103
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.47	6.47	< 0.005	< 0.005	0.01	6.57
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	5.39	5.39	< 0.005	< 0.005	< 0.005	5.66
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.07	1.07	< 0.005	< 0.005	< 0.005	1.09
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.89	0.89	< 0.005	< 0.005	< 0.005	0.94

3.2. Demolition (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.41	0.41	11.9	18.2	0.03	0.20	—	0.20	0.19	—	0.19	—	3,427	3,427	0.14	0.03	—	3,438
Demolition	—	—	—	—	—	—	0.08	0.08	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.65	1.00	< 0.005	0.01	—	0.01	0.01	—	0.01	—	188	188	0.01	< 0.005	—	188
Demolition	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.12	0.18	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	31.1	31.1	< 0.005	< 0.005	—	31.2
Demolition	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.04	0.49	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	117	117	< 0.005	0.01	0.01	118
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.01	< 0.005	0.13	0.06	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	98.3	98.3	0.01	0.02	0.01	103
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.47	6.47	< 0.005	< 0.005	0.01	6.57
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	5.39	5.39	< 0.005	< 0.005	< 0.005	5.66
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.07	1.07	< 0.005	< 0.005	< 0.005	1.09
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.89	0.89	< 0.005	< 0.005	< 0.005	0.94

3.3. Site Preparation (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.74	3.14	29.2	28.8	0.05	1.24	—	1.24	1.14	—	1.14	—	5,298	5,298	0.21	0.04	—	5,316
Dust From Material Movement	—	—	—	—	—	—	7.67	7.67	—	3.94	3.94	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.09	0.80	0.79	< 0.005	0.03	—	0.03	0.03	—	0.03	—	145	145	0.01	< 0.005	—	146
Dust From Material Movement	—	—	—	—	—	—	0.21	0.21	—	0.11	0.11	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.15	0.14	< 0.005	0.01	—	0.01	0.01	—	0.01	—	24.0	24.0	< 0.005	< 0.005	—	24.1
Dust From Material Movement	—	—	—	—	—	—	0.04	0.04	—	0.02	0.02	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.05	0.57	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	136	136	< 0.005	0.01	0.01	138
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.78	3.78	< 0.005	< 0.005	0.01	3.83
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.63	0.63	< 0.005	< 0.005	< 0.005	0.63
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.4. Site Preparation (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.64	0.64	14.7	28.3	0.05	0.10	—	0.10	0.10	—	0.10	—	5,298	5,298	0.21	0.04	—	5,316
Dust From Material Movement	—	—	—	—	—	—	7.67	7.67	—	3.94	3.94	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.02	0.02	0.40	0.78	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	145	145	0.01	< 0.005	—	146
Dust From Material Movement	—	—	—	—	—	—	0.21	0.21	—	0.11	0.11	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	< 0.005	< 0.005	0.07	0.14	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	24.0	24.0	< 0.005	< 0.005	—	24.1
Dust From Material Movement	—	—	—	—	—	—	0.04	0.04	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.05	0.57	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	136	136	< 0.005	0.01	0.01	138
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.78	3.78	< 0.005	< 0.005	0.01	3.83
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.63	0.63	< 0.005	< 0.005	< 0.005	0.63
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.5. Grading (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.96	1.65	15.0	17.4	0.03	0.65	—	0.65	0.59	—	0.59	—	2,960	2,960	0.12	0.02	—	2,970

Dust From Material Movement	—	—	—	—	—	—	2.76	2.76	—	1.34	1.34	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.82	0.96	< 0.005	0.04	—	0.04	0.03	—	0.03	—	162	162	0.01	< 0.005	—	163
Dust From Material Movement	—	—	—	—	—	—	0.15	0.15	—	0.07	0.07	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.15	0.17	< 0.005	0.01	—	0.01	0.01	—	0.01	—	26.8	26.8	< 0.005	< 0.005	—	26.9
Dust From Material Movement	—	—	—	—	—	—	0.03	0.03	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.04	0.49	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	117	117	< 0.005	0.01	0.01	118

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.13	0.03	1.71	0.80	0.01	0.02	0.35	0.36	0.02	0.10	0.11	—	1,317	1,317	0.10	0.21	0.07	1,382
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.47	6.47	< 0.005	< 0.005	0.01	6.57
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.01	< 0.005	0.09	0.04	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	72.1	72.1	0.01	0.01	0.06	75.8
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.07	1.07	< 0.005	< 0.005	< 0.005	1.09
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	11.9	11.9	< 0.005	< 0.005	0.01	12.5

3.6. Grading (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.39	0.39	10.3	17.8	0.03	0.08	—	0.08	0.08	—	0.08	—	2,960	2,960	0.12	0.02	—	2,970
Dust From Material Movement	—	—	—	—	—	—	2.76	2.76	—	1.34	1.34	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.56	0.97	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	162	162	0.01	< 0.005	—	163
Dust From Material Movement	—	—	—	—	—	—	0.15	0.15	—	0.07	0.07	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.10	0.18	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	26.8	26.8	< 0.005	< 0.005	—	26.9
Dust From Material Movement	—	—	—	—	—	—	0.03	0.03	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.04	0.49	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	117	117	< 0.005	0.01	0.01	118
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.13	0.03	1.71	0.80	0.01	0.02	0.35	0.36	0.02	0.10	0.11	—	1,317	1,317	0.10	0.21	0.07	1,382
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.47	6.47	< 0.005	< 0.005	0.01	6.57

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.01	< 0.005	0.09	0.04	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	72.1	72.1	0.01	0.01	0.06	75.8
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.07	1.07	< 0.005	< 0.005	< 0.005	1.09
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	11.9	11.9	< 0.005	< 0.005	0.01	12.5

3.7. Building Construction (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.28	1.07	9.85	13.0	0.02	0.38	—	0.38	0.35	—	0.35	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.28	1.07	9.85	13.0	0.02	0.38	—	0.38	0.35	—	0.35	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.73	0.61	5.61	7.38	0.01	0.22	—	0.22	0.20	—	0.20	—	1,365	1,365	0.06	0.01	—	1,370
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.11	1.02	1.35	< 0.005	0.04	—	0.04	0.04	—	0.04	—	226	226	0.01	< 0.005	—	227
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.22	0.21	0.14	2.55	0.00	0.00	0.55	0.55	0.00	0.13	0.13	—	563	563	0.01	0.02	2.05	572
Vendor	0.02	0.01	0.33	0.16	< 0.005	< 0.005	0.07	0.07	< 0.005	0.02	0.02	—	264	264	0.01	0.04	0.64	276
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.21	0.19	0.19	2.18	0.00	0.00	0.55	0.55	0.00	0.13	0.13	—	522	522	0.01	0.02	0.05	529
Vendor	0.02	0.01	0.35	0.16	< 0.005	< 0.005	0.07	0.07	< 0.005	0.02	0.02	—	264	264	0.01	0.04	0.02	276
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.12	0.10	0.09	1.23	0.00	0.00	0.31	0.31	0.00	0.07	0.07	—	300	300	0.01	0.01	0.50	305
Vendor	0.01	< 0.005	0.19	0.09	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	150	150	0.01	0.02	0.16	157
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.22	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	49.7	49.7	< 0.005	< 0.005	0.08	50.4

Vendor	< 0.005	< 0.005	0.04	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	24.9	24.9	< 0.005	< 0.005	0.03	26.0
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.8. Building Construction (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.44	0.41	9.53	14.8	0.02	0.12	—	0.12	0.11	—	0.11	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.44	0.41	9.53	14.8	0.02	0.12	—	0.12	0.11	—	0.11	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.25	0.24	5.43	8.44	0.01	0.07	—	0.07	0.06	—	0.06	—	1,365	1,365	0.06	0.01	—	1,370
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.05	0.04	0.99	1.54	< 0.005	0.01	—	0.01	0.01	—	0.01	—	226	226	0.01	< 0.005	—	227
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.22	0.21	0.14	2.55	0.00	0.00	0.55	0.55	0.00	0.13	0.13	—	563	563	0.01	0.02	2.05	572
Vendor	0.02	0.01	0.33	0.16	< 0.005	< 0.005	0.07	0.07	< 0.005	0.02	0.02	—	264	264	0.01	0.04	0.64	276
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.21	0.19	0.19	2.18	0.00	0.00	0.55	0.55	0.00	0.13	0.13	—	522	522	0.01	0.02	0.05	529
Vendor	0.02	0.01	0.35	0.16	< 0.005	< 0.005	0.07	0.07	< 0.005	0.02	0.02	—	264	264	0.01	0.04	0.02	276
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.12	0.10	0.09	1.23	0.00	0.00	0.31	0.31	0.00	0.07	0.07	—	300	300	0.01	0.01	0.50	305
Vendor	0.01	< 0.005	0.19	0.09	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	150	150	0.01	0.02	0.16	157
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.22	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	49.7	49.7	< 0.005	< 0.005	0.08	50.4
Vendor	< 0.005	< 0.005	0.04	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	24.9	24.9	< 0.005	< 0.005	0.03	26.0
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Building Construction (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.23	1.03	9.39	12.9	0.02	0.34	—	0.34	0.31	—	0.31	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.06	0.53	0.73	< 0.005	0.02	—	0.02	0.02	—	0.02	—	136	136	0.01	< 0.005	—	137
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.10	0.13	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	22.5	22.5	< 0.005	< 0.005	—	22.6
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.20	0.18	0.17	2.04	0.00	0.00	0.55	0.55	0.00	0.13	0.13	—	512	512	0.01	0.02	0.05	519
Vendor	0.02	0.01	0.33	0.16	< 0.005	< 0.005	0.07	0.07	< 0.005	0.02	0.02	—	258	258	0.01	0.04	0.01	270

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.11	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	29.4	29.4	< 0.005	< 0.005	0.05	29.8
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	14.7	14.7	< 0.005	< 0.005	0.01	15.3
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	4.86	4.86	< 0.005	< 0.005	0.01	4.93
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.43	2.43	< 0.005	< 0.005	< 0.005	2.54
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.10. Building Construction (2027) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.43	0.41	9.53	14.8	0.02	0.12	—	0.12	0.11	—	0.11	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.54	0.84	< 0.005	0.01	—	0.01	0.01	—	0.01	—	136	136	0.01	< 0.005	—	137

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.10	0.15	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	22.5	22.5	< 0.005	< 0.005	—	22.6
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.20	0.18	0.17	2.04	0.00	0.00	0.55	0.55	0.00	0.13	0.13	—	512	512	0.01	0.02	0.05	519
Vendor	0.02	0.01	0.33	0.16	< 0.005	< 0.005	0.07	0.07	< 0.005	0.02	0.02	—	258	258	0.01	0.04	0.01	270
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.11	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	29.4	29.4	< 0.005	< 0.005	0.05	29.8
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	14.7	14.7	< 0.005	< 0.005	0.01	15.3
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	4.86	4.86	< 0.005	< 0.005	0.01	4.93
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.43	2.43	< 0.005	< 0.005	< 0.005	2.54
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Paving (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.88	0.74	6.94	9.95	0.01	0.30	—	0.30	0.27	—	0.27	—	1,511	1,511	0.06	0.01	—	1,516
Paving	0.25	0.25	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.38	0.55	< 0.005	0.02	—	0.02	0.02	—	0.02	—	82.8	82.8	< 0.005	< 0.005	—	83.1
Paving	0.01	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.07	0.10	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	13.7	13.7	< 0.005	< 0.005	—	13.8
Paving	< 0.005	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.04	0.46	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	115	115	< 0.005	< 0.005	0.01	116
Vendor	0.06	0.02	0.77	0.40	< 0.005	0.01	0.13	0.14	0.01	0.04	0.04	—	506	506	0.05	0.08	0.02	531
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.35	6.35	< 0.005	< 0.005	0.01	6.45
Vendor	< 0.005	< 0.005	0.04	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	27.7	27.7	< 0.005	< 0.005	0.02	29.1
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.05	1.05	< 0.005	< 0.005	< 0.005	1.07
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	4.59	4.59	< 0.005	< 0.005	< 0.005	4.82
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.12. Paving (2027) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.23	0.23	7.21	10.6	0.01	0.09	—	0.09	0.08	—	0.08	—	1,511	1,511	0.06	0.01	—	1,516
Paving	0.25	0.25	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.39	0.58	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	82.8	82.8	< 0.005	< 0.005	—	83.1
Paving	0.01	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.07	0.11	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	13.7	13.7	< 0.005	< 0.005	—	13.8
Paving	< 0.005	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.04	0.46	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	115	115	< 0.005	< 0.005	0.01	116
Vendor	0.06	0.02	0.77	0.40	< 0.005	0.01	0.13	0.14	0.01	0.04	0.04	—	506	506	0.05	0.08	0.02	531
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.35	6.35	< 0.005	< 0.005	0.01	6.45
Vendor	< 0.005	< 0.005	0.04	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	27.7	27.7	< 0.005	< 0.005	0.02	29.1
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.05	1.05	< 0.005	< 0.005	< 0.005	1.07
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	4.59	4.59	< 0.005	< 0.005	< 0.005	4.82
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.13. Architectural Coating (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.11	0.83	1.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	159	159	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.05	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.32	7.32	< 0.005	< 0.005	—	7.34
Architectural Coatings	8.69	8.69	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.21	1.21	< 0.005	< 0.005	—	1.22
Architectural Coatings	1.59	1.59	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.41	0.00	0.00	0.11	0.11	0.00	0.03	0.03	—	102	102	< 0.005	< 0.005	0.01	104
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.67	5.67	< 0.005	< 0.005	0.01	5.76
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.94	0.94	< 0.005	< 0.005	< 0.005	0.95
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.14. Architectural Coating (2027) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	1.07	0.96	< 0.005	0.03	—	0.03	0.03	—	0.03	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	159	159	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.06	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.32	7.32	< 0.005	< 0.005	—	7.34
Architectural Coatings	8.69	8.69	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.21	1.21	< 0.005	< 0.005	—	1.22
Architectural Coatings	1.59	1.59	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.41	0.00	0.00	0.11	0.11	0.00	0.03	0.03	—	102	102	< 0.005	< 0.005	0.01	104
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.67	5.67	< 0.005	< 0.005	0.01	5.76
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.94	0.94	< 0.005	< 0.005	< 0.005	0.95
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	2.41	2.25	1.43	16.2	0.04	0.02	3.69	3.72	0.02	0.94	0.96	—	3,943	3,943	0.17	0.16	12.7	4,007
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
User Defined Recreational	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	2.41	2.25	1.43	16.2	0.04	0.02	3.69	3.72	0.02	0.94	0.96	—	3,943	3,943	0.17	0.16	12.7	4,007
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	2.31	2.15	1.68	15.5	0.04	0.02	3.69	3.72	0.02	0.94	0.96	—	3,709	3,709	0.20	0.17	0.33	3,766
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
User Defined Recreational	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	2.31	2.15	1.68	15.5	0.04	0.02	3.69	3.72	0.02	0.94	0.96	—	3,709	3,709	0.20	0.17	0.33	3,766
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Condo/Townhouse	0.37	0.35	0.26	2.45	0.01	< 0.005	0.59	0.59	< 0.005	0.15	0.15	—	555	555	0.03	0.02	0.81	563
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
User Defined Recreational	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.37	0.35	0.26	2.45	0.01	< 0.005	0.59	0.59	< 0.005	0.15	0.15	—	555	555	0.03	0.02	0.81	563

4.1.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	2.41	2.25	1.43	16.2	0.04	0.02	3.69	3.72	0.02	0.94	0.96	—	3,943	3,943	0.17	0.16	12.7	4,007
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
User Defined Recreational	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	2.41	2.25	1.43	16.2	0.04	0.02	3.69	3.72	0.02	0.94	0.96	—	3,943	3,943	0.17	0.16	12.7	4,007
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	2.31	2.15	1.68	15.5	0.04	0.02	3.69	3.72	0.02	0.94	0.96	—	3,709	3,709	0.20	0.17	0.33	3,766

Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
User Defined Recreational	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	2.31	2.15	1.68	15.5	0.04	0.02	3.69	3.72	0.02	0.94	0.96	—	3,709	3,709	0.20	0.17	0.33	3,766
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	0.37	0.35	0.26	2.45	0.01	< 0.005	0.59	0.59	< 0.005	0.15	0.15	—	555	555	0.03	0.02	0.81	563
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
User Defined Recreational	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.37	0.35	0.26	2.45	0.01	< 0.005	0.59	0.59	< 0.005	0.15	0.15	—	555	555	0.03	0.02	0.81	563

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	397	397	0.06	0.01	—	401
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

User Defined Recreational	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	397	397	0.06	0.01	—	401
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	397	397	0.06	0.01	—	401
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Recreational	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	397	397	0.06	0.01	—	401
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	65.8	65.8	0.01	< 0.005	—	66.4
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Recreational	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	65.8	65.8	0.01	< 0.005	—	66.4

4.2.2. Electricity Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	397	397	0.06	0.01	—	401
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Recreational	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	397	397	0.06	0.01	—	401
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	397	397	0.06	0.01	—	401
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Recreational	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	397	397	0.06	0.01	—	401
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	65.8	65.8	0.01	< 0.005	—	66.4
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Recreational	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	65.8	65.8	0.01	< 0.005	—	66.4

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Recreational	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Recreational	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Recreational	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.2.4. Natural Gas Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Recreational	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

User Defined Recreational	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Recreational	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	4.79	4.79	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.87	0.87	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Landscape Equipm	0.49	0.46	0.05	5.28	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	14.1	14.1	< 0.005	< 0.005	—	14.2
Total	6.15	6.12	0.05	5.28	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	14.1	14.1	< 0.005	< 0.005	—	14.2
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	4.79	4.79	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.87	0.87	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	5.66	5.66	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	0.87	0.87	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.16	0.16	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.04	0.04	< 0.005	0.48	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.15	1.15	< 0.005	< 0.005	—	1.16
Total	1.08	1.07	< 0.005	0.48	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	1.15	1.15	< 0.005	< 0.005	—	1.16

4.3.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	4.79	4.79	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.87	0.87	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.49	0.46	0.05	5.28	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	14.1	14.1	< 0.005	< 0.005	—	14.2
Total	6.15	6.12	0.05	5.28	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	14.1	14.1	< 0.005	< 0.005	—	14.2
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	4.79	4.79	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.87	0.87	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	5.66	5.66	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00

Consumer Products	0.87	0.87	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.16	0.16	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.04	0.04	< 0.005	0.48	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.15	1.15	< 0.005	< 0.005	—	1.16
Total	1.08	1.07	< 0.005	0.48	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	1.15	1.15	< 0.005	< 0.005	—	1.16

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	6.46	12.2	18.7	0.66	0.02	—	40.0
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Recreational	—	—	—	—	—	—	—	—	—	—	—	0.00	2.44	2.44	< 0.005	< 0.005	—	2.46
Total	—	—	—	—	—	—	—	—	—	—	—	6.46	14.6	21.1	0.67	0.02	—	42.5
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Condo/T	—	—	—	—	—	—	—	—	—	—	—	6.46	12.2	18.7	0.66	0.02	—	40.0
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Recreational	—	—	—	—	—	—	—	—	—	—	—	0.00	2.44	2.44	< 0.005	< 0.005	—	2.46
Total	—	—	—	—	—	—	—	—	—	—	—	6.46	14.6	21.1	0.67	0.02	—	42.5
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	1.07	2.02	3.09	0.11	< 0.005	—	6.63
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Recreational	—	—	—	—	—	—	—	—	—	—	—	0.00	0.40	0.40	< 0.005	< 0.005	—	0.41
Total	—	—	—	—	—	—	—	—	—	—	—	1.07	2.42	3.49	0.11	< 0.005	—	7.04

4.4.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	6.46	12.2	18.7	0.66	0.02	—	40.0
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

User Defined Recreational	—	—	—	—	—	—	—	—	—	—	—	0.00	2.44	2.44	< 0.005	< 0.005	—	2.46
Total	—	—	—	—	—	—	—	—	—	—	—	6.46	14.6	21.1	0.67	0.02	—	42.5
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	6.46	12.2	18.7	0.66	0.02	—	40.0
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Recreational	—	—	—	—	—	—	—	—	—	—	—	0.00	2.44	2.44	< 0.005	< 0.005	—	2.46
Total	—	—	—	—	—	—	—	—	—	—	—	6.46	14.6	21.1	0.67	0.02	—	42.5
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	1.07	2.02	3.09	0.11	< 0.005	—	6.63
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Recreational	—	—	—	—	—	—	—	—	—	—	—	0.00	0.40	0.40	< 0.005	< 0.005	—	0.41
Total	—	—	—	—	—	—	—	—	—	—	—	1.07	2.42	3.49	0.11	< 0.005	—	7.04

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	37.1	0.00	37.1	3.70	0.00	—	130
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Recreational	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	37.1	0.00	37.1	3.70	0.00	—	130
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	37.1	0.00	37.1	3.70	0.00	—	130
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Recreational	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	37.1	0.00	37.1	3.70	0.00	—	130
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	6.13	0.00	6.13	0.61	0.00	—	21.5
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Recreational	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	6.13	0.00	6.13	0.61	0.00	—	21.5

4.5.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	37.1	0.00	37.1	3.70	0.00	—	130
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Recreational	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	37.1	0.00	37.1	3.70	0.00	—	130
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	37.1	0.00	37.1	3.70	0.00	—	130
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Recreational	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	37.1	0.00	37.1	3.70	0.00	—	130
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	6.13	0.00	6.13	0.61	0.00	—	21.5

Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Recreational	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	6.13	0.00	6.13	0.61	0.00	—	21.5

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.60	1.60
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.60	1.60
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.60	1.60
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.60	1.60
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.27	0.27
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.27	0.27

4.6.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.60	1.60
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.60	1.60
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.60	1.60
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.60	1.60
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.27	0.27
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.27	0.27

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.7.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Demolition	Demolition	1/5/2026	1/30/2026	5.00	20.0	—
Site Preparation	Site Preparation	2/2/2026	2/13/2026	5.00	10.0	—
Grading	Grading	2/16/2026	3/13/2026	5.00	20.0	—
Building Construction	Building Construction	3/16/2026	1/29/2027	5.00	230	—
Paving	Paving	2/1/2027	2/26/2027	5.00	20.0	—
Architectural Coating	Architectural Coating	3/1/2027	3/26/2027	5.00	20.0	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Rubber Tired Dozers	Diesel	Average	2.00	8.00	367	0.40
Demolition	Excavators	Diesel	Average	3.00	8.00	36.0	0.38
Demolition	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Excavators	Diesel	Average	1.00	8.00	36.0	0.38
Grading	Tractors/Loaders/Backhoes	Diesel	Average	3.00	8.00	84.0	0.37
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45

Building Construction	Tractors/Loaders/Back	Diesel	Average	3.00	7.00	84.0	0.37
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Rubber Tired Dozers	Diesel	Tier 4 Interim	2.00	8.00	367	0.40
Demolition	Excavators	Diesel	Tier 4 Interim	3.00	8.00	36.0	0.38
Demolition	Concrete/Industrial Saws	Diesel	Tier 4 Interim	1.00	8.00	33.0	0.73
Site Preparation	Rubber Tired Dozers	Diesel	Tier 4 Interim	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Tier 4 Interim	4.00	8.00	84.0	0.37
Grading	Graders	Diesel	Tier 4 Interim	1.00	8.00	148	0.41
Grading	Excavators	Diesel	Tier 4 Interim	1.00	8.00	36.0	0.38
Grading	Tractors/Loaders/Backhoes	Diesel	Tier 4 Interim	3.00	8.00	84.0	0.37
Grading	Rubber Tired Dozers	Diesel	Tier 4 Interim	1.00	8.00	367	0.40
Building Construction	Forklifts	Diesel	Tier 4 Interim	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Cranes	Diesel	Tier 4 Interim	1.00	7.00	367	0.29
Building Construction	Welders	Diesel	Tier 4 Interim	1.00	8.00	46.0	0.45
Building Construction	Tractors/Loaders/Backhoes	Diesel	Tier 4 Interim	3.00	7.00	84.0	0.37
Paving	Pavers	Diesel	Tier 4 Interim	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Tier 4 Interim	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Tier 4 Interim	2.00	8.00	36.0	0.38

Architectural Coating	Air Compressors	Diesel	Tier 4 Interim	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	—	—	—	—
Demolition	Worker	15.0	11.7	LDA,LDT1,LDT2
Demolition	Vendor	—	8.40	HHDT,MHDT
Demolition	Hauling	1.40	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	11.7	LDA,LDT1,LDT2
Site Preparation	Vendor	—	8.40	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	15.0	11.7	LDA,LDT1,LDT2
Grading	Vendor	—	8.40	HHDT,MHDT
Grading	Hauling	18.8	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	67.0	11.7	LDA,LDT1,LDT2
Building Construction	Vendor	9.94	8.40	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	11.7	LDA,LDT1,LDT2

Paving	Vendor	17.0	8.40	HHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	13.4	11.7	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	8.40	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	—	—	—	—
Demolition	Worker	15.0	11.7	LDA,LDT1,LDT2
Demolition	Vendor	—	8.40	HHDT,MHDT
Demolition	Hauling	1.40	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	11.7	LDA,LDT1,LDT2
Site Preparation	Vendor	—	8.40	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	15.0	11.7	LDA,LDT1,LDT2
Grading	Vendor	—	8.40	HHDT,MHDT
Grading	Hauling	18.8	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	67.0	11.7	LDA,LDT1,LDT2

Building Construction	Vendor	9.94	8.40	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	11.7	LDA,LDT1,LDT2
Paving	Vendor	17.0	8.40	HHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	13.4	11.7	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	8.40	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Control Strategies Applied	PM10 Reduction	PM2.5 Reduction
Water unpaved roads twice daily	55%	55%
Limit vehicle speeds on unpaved roads to 25 mph	44%	44%

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	452,618	150,873	0.00	0.00	4,914

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (Ton of Debris)	Acres Paved (acres)
Demolition	0.00	0.00	0.00	111	—
Site Preparation	—	—	15.0	0.00	—
Grading	—	2,995	20.0	0.00	—
Paving	0.00	0.00	0.00	0.00	1.88

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	2	61%	61%
Water Demolished Area	2	36%	36%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Condo/Townhouse	—	0%
Other Asphalt Surfaces	1.88	100%
User Defined Recreational	0.00	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2026	0.00	204	0.03	< 0.005
2027	0.00	204	0.03	< 0.005

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Condo/Townhouse	681	757	584	247,411	4,707	5,234	4,038	1,710,601
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
User Defined Recreational	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.9.2. Mitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Condo/Townhouse	681	757	584	247,411	4,707	5,234	4,038	1,710,601
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
User Defined Recreational	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

Hearth Type	Unmitigated (number)
Condo/Townhouse	—
Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	93
Conventional Wood Stoves	0

Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0

5.10.1.2. Mitigated

Hearth Type	Unmitigated (number)
Condo/Townhouse	—
Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	93
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
452617.875	150,873	0.00	0.00	4,914

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

5.10.4. Landscape Equipment - Mitigated

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Condo/Townhouse	711,031	204	0.0330	0.0040	0.00
Other Asphalt Surfaces	0.00	204	0.0330	0.0040	0.00
User Defined Recreational	0.00	204	0.0330	0.0040	0.00

5.11.2. Mitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Condo/Townhouse	711,031	204	0.0330	0.0040	0.00
Other Asphalt Surfaces	0.00	204	0.0330	0.0040	0.00
User Defined Recreational	0.00	204	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Condo/Townhouse	3,372,775	0.00
Other Asphalt Surfaces	0.00	0.00

User Defined Recreational	0.00	885,015

5.12.2. Mitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Condo/Townhouse	3,372,775	0.00
Other Asphalt Surfaces	0.00	0.00
User Defined Recreational	0.00	885,015

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Condo/Townhouse	68.8	—
Other Asphalt Surfaces	0.00	—
User Defined Recreational	0.00	—

5.13.2. Mitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Condo/Townhouse	68.8	—
Other Asphalt Surfaces	0.00	—
User Defined Recreational	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced

Condo/Townhouse	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Condo/Townhouse	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00

5.14.2. Mitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Condo/Townhouse	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Condo/Townhouse	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.15.2. Mitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

8. User Changes to Default Data

Screen	Justification
Land Use	From applicant provided site plans
Construction: Construction Phases	Default Schedule, Monday - Friday Construction
Construction: Trips and VMT	Additional vendor trips for delivery of asphalt
Operations: Hearths	Project is all-electric
Operations: Energy Use	Additional electricity Calculational Method is from Measure E-15 of the CAPCOA Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity
Construction: Off-Road Equipment	Mitigated and unmitigated

Diana Morgan Hill Townhomes
Modeling Parameters for Construction HRA
Diesel Particulate Matter Emission Sources

Source ID	Modeled Source	Location Description	AERMOD Source Type	Size		Initial Source Release Parameters (m) Release Height	Initial Lateral Dimension	Initial Vertical Dimension	Emissions[4] (lb/hr)	AERMOD Source Emission Rate	
SITE_UM	Site - Off-Road Equipment Diesel Exhaust[1]	Project Site - Construction Area	Area	21430	m2	5	—	1.4	0.0524	3.083E-07	g/m2-sec
SITE_T4	Site - Off-Road Equipment with Tier 4 PM2.5[1]	Project Site - Construction Area (Tier 4)	Area	21430	m2	5	—	1.4	0.0141	8.308E-08	g/m2-sec
ROAD1_DPM	Roadway 1 - On-Road Diesel Exhaust[2,3]	Truck Route - Diana Ave	Line-Volume	90.4	meters	3.40	8.37	3.16	2.9E-06	3.677E-07	g/s
ROAD2_DPM	Roadway 2- On-Road Diesel Exhaust[2,4]	Truck Route - Butterfield Boulevard	Line-Volume	807.8	meters	3.40	8.37	3.16	1.3E-05	1.636E-06	g/s

1 Construction exhaust modeled as an area source. Release parameters for construction equipment DPM exhaust modeling from SCAQMD (2008) for gaseous exhaust from construction equipment.

2 Emissions for On-Road Mobile Sources (Vendor and Haul Diesel Exhaust) modeled only for roadways within 1,000 feet of the site within the modeling domain.

3 Parameters calculated as per US EPA Haul Road Workgroup Final Report released on March 2, 2012 which recommends the use of Adjacent Volume Sources to represent the haul road.

4 Emissions from CalEEModeling for Construction modeled during construction hours as included in Attachment A. See Note 2 above regarding roadway emission portion modeled.

Variable Emission Factors: ALL Sources

Monday - Friday						
1-6	0	0	0	0	0	0
7-12	0	0	1	1	1	1
13-18	0	1	1	1	1	0
19-24	0	0	0	0	0	0
Saturday						
1-6	0	0	0	0	0	0
7-12	0	0	0	0	0	0
13-18	0	0	0	0	0	0
19-24	0	0	0	0	0	0
Sunday						
1-6	0	0	0	0	0	0
7-12	0	0	0	0	0	0
13-18	0	0	0	0	0	0
19-24	0	0	0	0	0	0

Diana Morgan Hill Townhomes
Modeling Parameters for Construction HRA
Fine Particulate Matter (PM2.5) Emission Sources

Source ID	Modeled Source	Location Description	AERMOD Source Type	Size		Initial Source Release Parameters (m) Release Height	Initial Lateral Dimension	Initial Vertical Dimension	Emissions[4] (lb/hr)	AERMOD Source Emission Rate	
SITE_UM	Site - Off-Road Equipment PM2.5[1]	Project Site - Construction Area	Area	21430	m2	5	—	1.4	0.0854	5.020E-07	g/m2-sec
SITE_T4	Site - Off-Road Equipment with Tier 4 PM2.5[1]	Project Site - Construction Area (Tier 4)	Area	21430	m2	5	—	1.4	0.0462	2.718E-07	g/m2-sec
ROAD1_PM25	Roadway 1 -PM2.5 [2,3]	Truck Route - Diana Ave	Line-Volume	90.4	meters	3.40	8.37	3.16	1.5E-05	1.910E-06	g/s
ROAD2_PM25	Roadway 2 -PM2.5 [2,4]	Truck Route - Butterfield Boulevard	Line-Volume	807.8	meters	3.40	8.37	3.16	6.7E-05	8.500E-06	g/s

1 Construction exhaust modeled as an area source. Release parameters for construction equipment DPM exhaust modeling from SCAQMD (2008) for gaseous exhaust from construction equipment.

2 Emissions for On-Road Mobile Sources (Vendor and Haul Diesel Exhaust) modeled only for roadways within 1,000 feet of the site within the modeling domain.

3 Parameters calculated as per US EPA Haul Road Workgroup Final Report released on March 2, 2012 which suggests the use of Adjacent Volume Sources to represent the haul road.

4 Emissions from CalEEModeling for Construction modeled during construction hours as included in Attachment A. See Note 2 above regarding roadway emission portion modeled.

5 Construction exhaust modeled as an area source. Modeled as per BAAQMD 2022 CEQA Guidelines which permits PM2.5 Dust to be modeled along with PM2.5Exhaust.

Variable Emission Factors: ALL Sources

Monday - Friday						
1-6	0	0	0	0	0	0
7-12	0	0	1	1	1	1
13-18	0	1	1	1	1	0
19-24	0	0	0	0	0	0
Saturday						
1-6	0	0	0	0	0	0
7-12	0	0	0	0	0	0
13-18	0	0	0	0	0	0
19-24	0	0	0	0	0	0
Sunday						
1-6	0	0	0	0	0	0
7-12	0	0	0	0	0	0
13-18	0	0	0	0	0	0
19-24	0	0	0	0	0	0

Diana Morgan Hill Townhomes
Health Risk Assessment Inputs
DPM Emissions for AERMOD Inputs - Unmitigated

Net Work Days	320
Net Construction Years	1.23
Total Working Hours	2,560

Construction Year	On-site Construction Activity	On-site PM10E (lbs)	Off-Site PM10E (lbs)	Off-Site PM10E(lbs)		
				Worker	Vendor	Haul
2026	Demolition	16.86	0.02	-	-	0.02
2026	Site Preparation	12.43	0.00	-	-	-
2026	Grading	12.92	0.33	-	-	0.33
2026	Building Construction	78.71	0.77	-	0.77	-
2027	Building Construction	6.97	0.08	-	0.08	-
2027	Paving	5.96	0.13	-	0.13	-
2027	Architectural Coating	0.38	0.00	-	-	-
Total PM Exhaust (On-site)		**134.23**	**1.32**	-	0.97	0.355

CalEEMod Distance (miles)	11.7	8.4	20
Total Roadways Included within 1,000 ft	0.31	0.31	0.31
Roadway Emissions included	3%	4%	2%

	On-site Construction	Offsite Roadway	Off-Site Diesel PM10E (lbs) within 1,000 ft Roadways		
			Worker	Vendor	Haul
Modeled Emissions (lbs)	**134.23**	**0.041**	-	0.04	0.01
Hourly Emissions (lb/hr)	0.0524	0.00002	0.00E+00	1.38E-05	2.13E-06

Note: PM10E = PM10 Exhaust which is a surrogate for Diesel Exhaust, particulate matter

Source	**percentage**	**Modeling Inputs**	
Site Emissions	100%	5.24E-02	lb/hr
Roadway 1 Emissions	18%	2.92E-06	lb/hr
Roadway 2 Emissions	82%	1.30E-05	lb/hr

Diana Morgan Hill Townhomes
Health Risk Assessment Inputs
DPM Emissions for AERMOD Inputs - Tier 4 Construction Eqpt

Net Work Days	320
Net Construction Years	1.23
Total Working Hours	2,560

Construction Year	On-site Construction Activity	On-site PM10E (lbs)	Off-Site PM10E (lbs)	Off-Site PM10E(lbs)		
				Worker	Vendor	Haul
2026	Demolition	4.02	0.02	-	-	0.02
2026	Site Preparation	1.00	0.00	-	-	-
2026	Grading	1.69	0.33	-	-	0.33
2026	Building Construction	24.69	0.77	-	0.77	-
2027	Building Construction	2.45	0.08	-	0.08	-
2027	Paving	1.72	0.13	-	0.13	-
2027	Architectural Coating	0.61	0.00	-	-	-
Total PM Exhaust (On-site)		**36.18**	**1.32**	-	0.97	0.355

CalEEMod Distance (miles)	11.7	8.4	20
Total Roadways Included within 1,000 ft	0.31	0.31	0.31
Roadway Emissions included	3%	4%	2%

	On-site Construction	Offsite Roadway	Off-Site Diesel PM10E (lbs) within 1,000 ft Roadways		
			Worker	Vendor	Haul
Modeled Emissions (lbs)	**36.18**	**0.041**	-	0.04	0.01
Hourly Emissions (lb/hr)	0.0141	0.00002	-	1.38E-05	2.13E-06

Note: PM10E = PM10 Exhaust which is a surrogate for Diesel Exhaust, particulate matter

Source	**percentage**	**Modeling Inputs**	
Site Emissions	100%	1.41E-02	lb/hr
Roadway 1 Emissions	18%	2.92E-06	lb/hr
Roadway 2 Emissions	82%	1.30E-05	lb/hr

Diana Morgan Hill Townhomes

Health Risk Assessment Inputs

Fine Particulate Matter (PM2.5) Emissions for AERMOD Inputs - Unmitigated

Net Work Days	260
Net Construction Years	1.00
Total Working Hours	2,080

Construction Year	On-site Construction Activity	On-site PM2.5T (lbs)	Off-Site PM2.5T (lbs)	Off-Site PM2.5T(lbs)		
				Worker	Vendor	Haul
2026	Demolition	15.74	0.73	0.57	-	0.16
2026	Site Preparation	50.83	0.33	0.33	-	-
2026	Grading	38.61	2.77	0.57	-	2.21
2026	Building Construction	72.41	31.09	26.36	4.72	-
Total PM Exhaust (On-site)		**177.59**	**34.93**	27.83	4.72	2.371

CalEEMod Distance (miles)	11.7	8.4	20
Roadways Included within 1,000 ft	0.06	0.06	0.06
Roadway Emissions included	0%	1%	0%

	On-site Construction PM2.5T	Offsite Roadway PM2.5T	Off-Site Diesel PM2.5T (lbs) within 1,000 ft Roadways		
			Worker	Vendor	Haul
Modeled Emissions (lbs)	**177.59**	**0.172**	0.13	0.03	0.01
Hourly Emissions (lb/hr)	0.0854	0.00008	6.42E-05	1.52E-05	3.20E-06

Note: PM2.5T = Total PM2.5 which includes PM2.5 exhaust, fugitive dust, brake wear and tire wear

Source	**percentage**	**Model Inputs**	
Site Emissions	100%	8.54E-02	lb/hr
Roadway 1 Emissions	18%	1.52E-05	lb/hr
Roadway 2 Emissions	82%	6.75E-05	lb/hr

Diana Morgan Hill Townhomes

Health Risk Assessment Inputs

Fine Particulate Matter (PM2.5) Emissions for AERMOD Inputs - Tier 4 Construction Eqpt

Net Work Days	260
Net Construction Years	1.00
Total Working Hours	2,080

Construction Year	On-site Construction Activity	On-site PM2.5T (lbs)	Off-Site PM2.5T (lbs)	Off-Site PM2.5T(lbs)		
				Worker	Vendor	Haul
2026	Demolition	4.02	0.73	0.57	-	0.16
2026	Site Preparation	40.40	0.33	0.33	-	-
2026	Grading	28.36	2.77	0.57	-	2.21
2026	Building Construction	23.40	31.09	26.36	4.72	-
Total PM Exhaust (On-site)		**96.17**	**34.93**	27.83	4.72	2.371

CalEEMod Distance (miles)	11.7	8.4	20
Roadways Included within 1,000 ft	0.06	0.06	0.06
Roadway Emissions included	0%	1%	0%

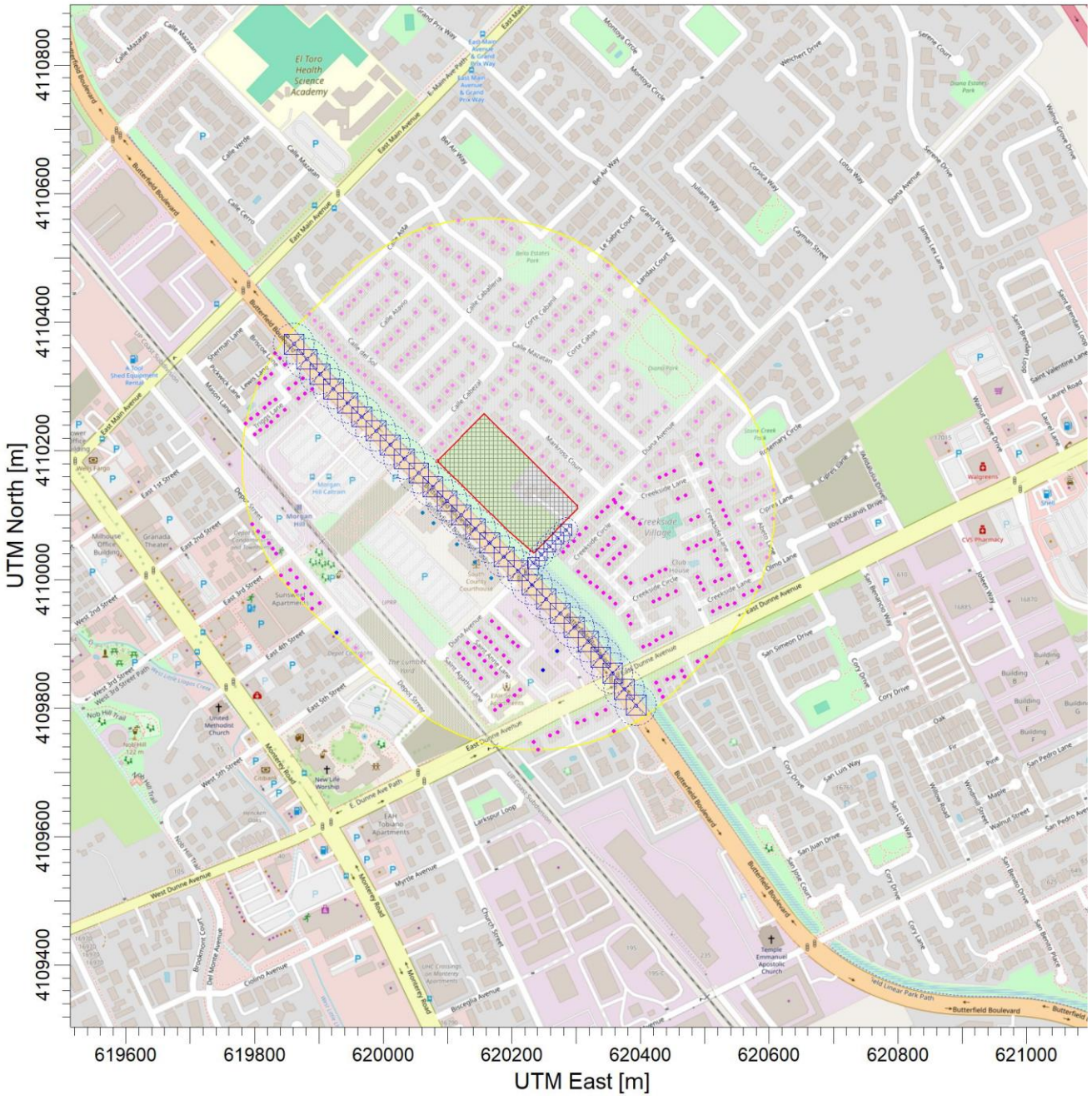
	On-site Construction	Offsite Roadway	Off-Site Diesel PM2.5T (lbs) within 1,000 ft Roadways		
			Worker	Vendor	Haul
Modeled Emissions (lbs)	**96.17**	**0.172**	0.13	0.03	0.01
Hourly Emissions (lb/hr)	0.0462	0.00008	6.42E-05	1.52E-05	3.20E-06

Note: PM2.5T = Total PM2.5 which includes PM2.5 exhaust, fugitive dust, brake wear and tire wear

Source	**percentage**	**Model Inputs**	
Site Emissions	100%	4.62E-02	lb/hr
Roadway 1 Emissions	18%	1.52E-05	lb/hr
Roadway 2 Emissions	82%	6.75E-05	lb/hr

PROJECT TITLE:

Diana MH Townhomes Project - Construction
HRA AERMOD Source Receptor Setup



Source Legend:

Site	
Area Source	-----
Line-Volume	⊠⊠⊠

Receptor Legend:

- Multi-Family Residential
- Single-Family Residential
- Business
- Public/Government

Sources / Receptors ;

8 / 368

SCALE: 1:10,000

0 0.3 km

8/15/2024

FirstCarbon Solutions

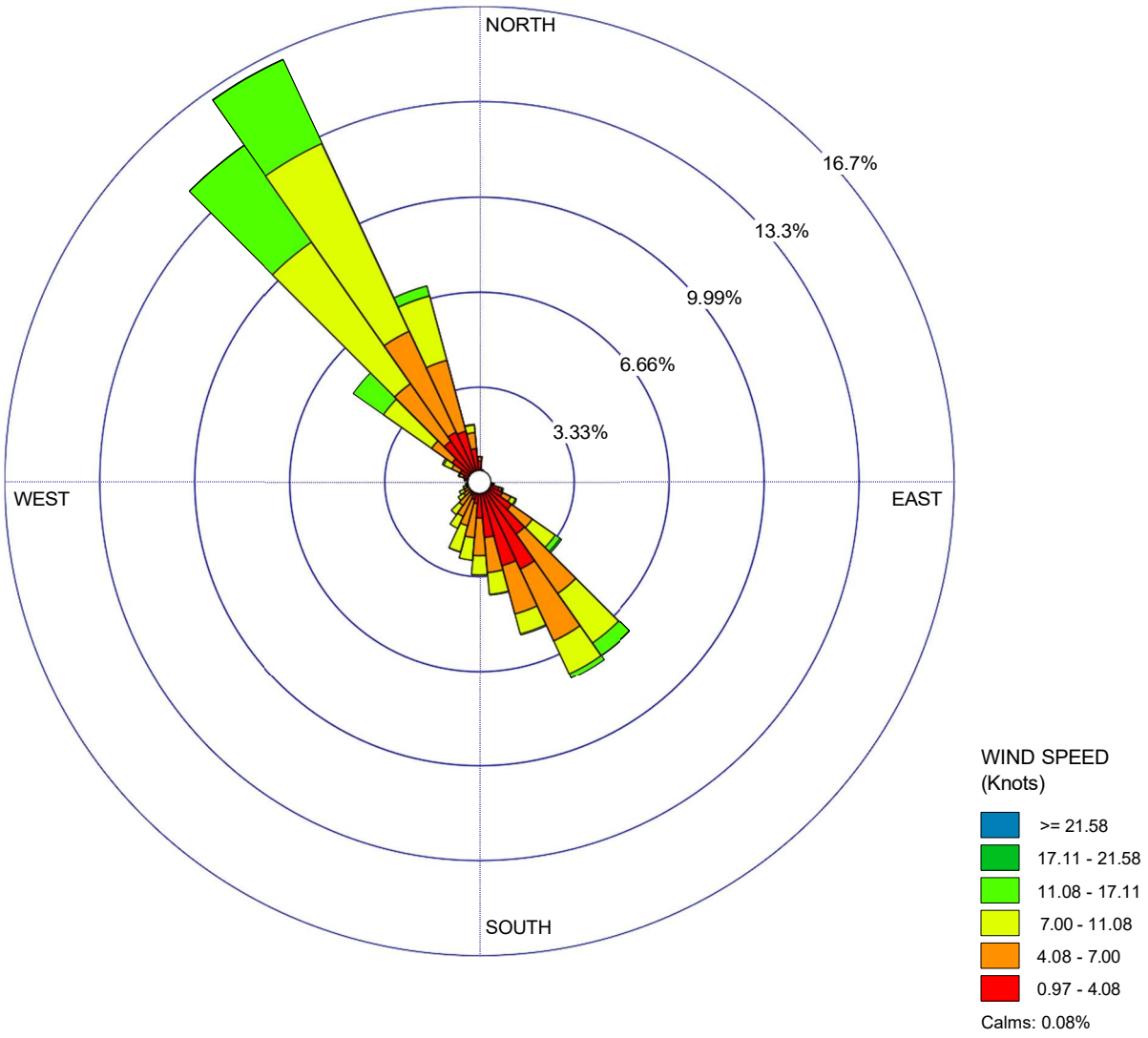
AERMOD View - Lakes Environmental Software

WIND ROSE PLOT:

San Martin Meteorological Data
Wind Direction for Daytime Construction Hours

DISPLAY:

Wind Speed
Direction (blowing from)



COMMENTS:

Wind Rose is generated just for the hours with emissions when construction would occur or from 8 AM – 5 PM. This corresponds to the modeling hours in AERMOD.

DATA PERIOD:

Start Date: 1/1/2013 - 08:00
End Date: 12/31/2017 - 17:00

CALM WINDS:

0.08%

AVG. WIND SPEED:

6.20 Knots

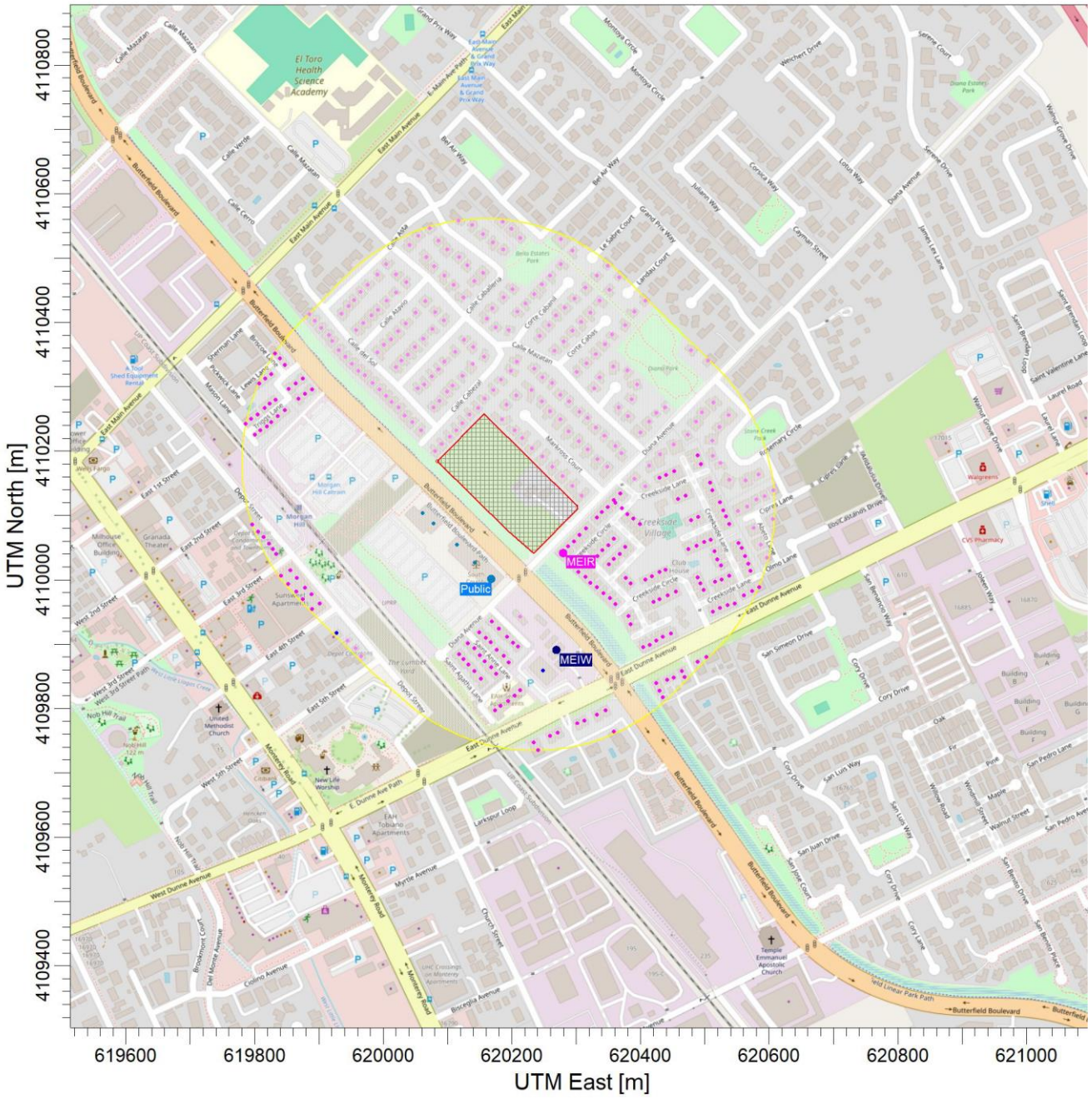
How to Read a Wind Rose Diagram

The wind rose above shows the general wind direction and speed for the meteorological data set used in the AERMOD modeling for the project.'

The circular format of the wind rose shows the direction the winds blew from and the length of each "spoke" around the circle shows how often the wind blew from that direction.

PROJECT TITLE:

Diana MH Townhomes Project Construction HRA
Sensitive Receptor Locations



PROJECT LEGEND:

- Site
- Area Source
- Line-Volume

RECEPTOR LEGEND:

- Multi-Family Residential
- Single-Family Residential
- Business
- Public/Government

SENSITIVE RECEPTOR LEGEND:

- MEIR = Maximally Exposed Individual Resident
- MEIW = Maximally Exposed Individual Worker
- MEIR = Maximally Exposed Individual Resident - Potential

SCALE: 1:10,000

0 0.3 km

8/15/2024
FirstCarbon Solutions

AERMOD View - Lakes Environmental Software

Control Pathway

Dispersion Options

Titles

F:\Jobs\60500001\ConHRA\ConHRA.isc

Dispersion Options

☑ Regulatory Default ☐ Non-Default Options

Dispersion Coefficient

Urban — Population:
Name (Optional):
Roughness Length:

Output Type

☑ Concentration
☐ Total Deposition (Dry & Wet)
☐ Dry Deposition
☐ Wet Deposition

Plume Depletion

☐ Dry Removal
☐ Wet Removal

Output Warnings

☐ No Output Warnings
☐ Non-fatal Warnings for Non-sequential Met Data

Pollutant / Averaging Time / Terrain Options

Pollutant Type

PM10

Averaging Time Options

Hours: ☑ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 6 ☐ 8 ☐ 12 ☐ 24

☐ Month ☑ Period ☐ Annual

Exponential Decay

Half-life of 4 hrs will be used

Terrain Height Options

☐ Flat ☑ Elevated

SO: Meters
RE: Meters
TG: Meters

Flagpole Receptors

☐ Yes ☑ No

Default Height = 0.00 m

Control Pathway

Optional Files

Re-Start File	Init File	Multi-Year Analyses	Event Input File	Error Listing File
☐	☐	☐	☐	■

Detailed Error Listing File

Filename: ConHRA.err

Source Pathway - Source Inputs

AERMOD

Source Pathway - Source Inputs

Polygon Area Sources

Source Type: AREA POLY

Source: SITE_UM_DPM (Unmitigated Construction)

Base Elevation (Optional)	Release Height [m]	Emission Rate [g/ (s-m^2)]	Initial Vertical Dim. [m]	Number of Vertices (or sides)	X Coordinate for Vertices [m]	Y Coordinate for Vertices [m]
106.14	5.00	3.08E-7	1.40	10	620084.13	4110184.39
		3.08E-7			620157.22	4110257.47
		3.08E-7			620302.19	4110114.90
		3.08E-7			620303.09	4110111.60
		3.08E-7			620302.49	4110110.11
		3.08E-7			620234.50	4110040.92
		3.08E-7			620233.60	4110041.22
		3.08E-7			620194.06	4110075.66
		3.08E-7			620156.32	4110112.50
		3.08E-7			620120.68	4110147.85

Source Type: AREA POLY

Source: SITE_T4_DPM (Tier 4 Construction)

Base Elevation (Optional)	Release Height [m]	Emission Rate [g/ (s-m^2)]	Initial Vertical Dim. [m]	Number of Vertices (or sides)	X Coordinate for Vertices [m]	Y Coordinate for Vertices [m]
106.14	5.00	8.31E-8	1.40	10	620084.13	4110184.39
		8.31E-8			620157.22	4110257.47
		8.31E-8			620302.19	4110114.90
		8.31E-8			620303.09	4110111.60
		8.31E-8			620302.49	4110110.11
		8.31E-8			620234.50	4110040.92
		8.31E-8			620233.60	4110041.22
		8.31E-8			620194.06	4110075.66
		8.31E-8			620156.32	4110112.50
		8.31E-8			620120.68	4110147.85

Source Pathway - Source Inputs

Source Type: AREA POLY
Source: SITE_UM_PM25 (Unmitigated Construction)

Base Elevation (Optional)	Release Height [m]	Emission Rate [g/ (s-m^2)]	Initial Vertical Dim. [m]	Number of Vertices (or sides)	X Coordinate for Vertices [m]	Y Coordinate for Vertices [m]
106.14	5.00	5.02E-7	1.40	10	620084.13	4110184.39
		5.02E-7			620157.22	4110257.47
		5.02E-7			620302.19	4110114.90
		5.02E-7			620303.09	4110111.60
		5.02E-7			620302.49	4110110.11
		5.02E-7			620234.50	4110040.92
		5.02E-7			620233.60	4110041.22
		5.02E-7			620194.06	4110075.66
		5.02E-7			620156.32	4110112.50
		5.02E-7			620120.68	4110147.85

Source Type: AREA POLY
Source: SITE_T4_PM25 (Tier 4 Construction)

Base Elevation (Optional)	Release Height [m]	Emission Rate [g/ (s-m^2)]	Initial Vertical Dim. [m]	Number of Vertices (or sides)	X Coordinate for Vertices [m]	Y Coordinate for Vertices [m]
106.14	5.00	2.72E-7	1.40	10	620084.13	4110184.39
		2.72E-7			620157.22	4110257.47
		2.72E-7			620302.19	4110114.90
		2.72E-7			620303.09	4110111.60
		2.72E-7			620302.49	4110110.11
		2.72E-7			620234.50	4110040.92
		2.72E-7			620233.60	4110041.22
		2.72E-7			620194.06	4110075.66
		2.72E-7			620156.32	4110112.50
		2.72E-7			620120.68	4110147.85

Source Pathway - Source Inputs

Line Volume Sources

Source Type: LINE VOLUME
Source: ROAD1_DPM (Diana Ave Haul Trips)

Length of Side [m]	Emission Rate [g/ s]	Building Height [m]	X Coordinate for Points [m]	Y Coordinate for points [m]	Base Elevation [m]	Release Height [m]
18.00	3.68E-7		620290.20	4110083.50	107.49	3.40
			620226.82	4110018.98	107.14	3.40

Source Type: LINE VOLUME
Source: ROAD1_PM25 (Diana Ave Haul Trips)

Length of Side [m]	Emission Rate [g/ s]	Building Height [m]	X Coordinate for Points [m]	Y Coordinate for points [m]	Base Elevation [m]	Release Height [m]
18.00	1.91E-6	Surface-Based	620290.20	4110083.50	107.49	3.40
			620226.82	4110018.98	107.14	3.40

Source Type: LINE VOLUME
Source: ROAD2_DPM (Butterfield Blvd Haul Trips)

Length of Side [m]	Emission Rate [g/ s]	Building Height [m]	X Coordinate for Points [m]	Y Coordinate for points [m]	Base Elevation [m]	Release Height [m]
31.00	1.64E-6		619851.02	4110377.79	107.18	3.40
			619914.41	4110304.22	106.89	3.40
			620212.10	4110011.05	107.20	3.40
			620324.16	4109897.86	106.63	3.40
			620362.65	4109845.80	106.78	3.40
			620403.39	4109790.33	106.29	3.40

Source Pathway - Source Inputs

Source Type: LINE VOLUME
Source: ROAD2_PM25 (Butterfield Blvd Haul Trips)

Length of Side [m]	Emission Rate [g/ s]	Building Height [m]	X Coordinate for Points [m]	Y Coordinate for points [m]	Base Elevation [m]	Release Height [m]
31.00	8.50E-6	Surface-Based	619851.02	4110377.79	107.18	3.40
			619914.41	4110304.22	106.89	3.40
			620212.10	4110011.05	107.20	3.40
			620324.16	4109897.86	106.63	3.40
			620362.65	4109845.80	106.78	3.40
			620403.39	4109790.33	106.29	3.40

Source Pathway - Source Inputs

Volume Sources Generated from Line Sources

Line Source ID	Volume Source ID	X Coordinate [m]	Y Coordinate [m]	Base Elevation [m]	Release Height [m[	Emission Rate [g/s]	Length of Side [m]	Building Height [m]	Initial Lateral Dimencion [m]	Initial Vertical Dimencion [m]
ROAD2_DPM	L0000063	619861.14	4110366.05	107.18	3.40	6.29E-8	31.00		14.42	3.16
	L0000064	619881.37	4110342.56	107.08	3.40	6.29E-8	31.00		14.42	3.16
	L0000065	619901.61	4110319.08	106.97	3.40	6.29E-8	31.00		14.42	3.16
	L0000066	619922.52	4110296.23	106.87	3.40	6.29E-8	31.00		14.42	3.16
	L0000067	619944.61	4110274.48	106.77	3.40	6.29E-8	31.00		14.42	3.16
	L0000068	619966.70	4110252.73	106.67	3.40	6.29E-8	31.00		14.42	3.16
	L0000069	619988.79	4110230.97	106.50	3.40	6.29E-8	31.00		14.42	3.16
	L0000070	620010.87	4110209.22	106.44	3.40	6.29E-8	31.00		14.42	3.16
	L0000071	620032.96	4110187.47	106.34	3.40	6.29E-8	31.00		14.42	3.16
	L0000072	620055.05	4110165.72	106.24	3.40	6.29E-8	31.00		14.42	3.16
	L0000073	620077.14	4110143.97	106.20	3.40	6.29E-8	31.00		14.42	3.16
	L0000074	620099.22	4110122.22	106.06	3.40	6.29E-8	31.00		14.42	3.16
	L0000075	620121.31	4110100.46	105.97	3.40	6.29E-8	31.00		14.42	3.16
	L0000076	620143.40	4110078.71	106.08	3.40	6.29E-8	31.00		14.42	3.16
	L0000077	620165.49	4110056.96	106.44	3.40	6.29E-8	31.00		14.42	3.16
	L0000078	620187.57	4110035.21	106.89	3.40	6.29E-8	31.00		14.42	3.16
	L0000079	620209.66	4110013.46	107.21	3.40	6.29E-8	31.00		14.42	3.16
	L0000080	620231.50	4109991.46	107.18	3.40	6.29E-8	31.00		14.42	3.16
	L0000081	620253.31	4109969.43	106.92	3.40	6.29E-8	31.00		14.42	3.16
	L0000082	620275.12	4109947.40	106.63	3.40	6.29E-8	31.00		14.42	3.16
	L0000083	620296.93	4109925.37	106.50	3.40	6.29E-8	31.00		14.42	3.16
	L0000084	620318.74	4109903.34	106.61	3.40	6.29E-8	31.00		14.42	3.16
	L0000085	620338.01	4109879.13	106.72	3.40	6.29E-8	31.00		14.42	3.16
	L0000086	620356.43	4109854.20	106.80	3.40	6.29E-8	31.00		14.42	3.16

Source Pathway - Source Inputs

AERMOD

Line Source ID	Volume Source ID	X Coordinate [m]	Y Coordinate [m]	Base Elevation [m]	Release Height [m[	Emission Rate [g/s]	Length of Side [m]	Building Height [m]	Initial Lateral Dimencion [m]	Initial Vertical Dimencion [m]
ROAD2_DPM	L0000087	620374.81	4109829.23	106.66	3.40	6.29E-8	31.00		14.42	3.16
	L0000088	620393.17	4109804.25	106.41	3.40	6.29E-8	31.00		14.42	3.16

Line Source ID	Volume Source ID	X Coordinate [m]	Y Coordinate [m]	Base Elevation [m]	Release Height [m[	Emission Rate [g/s]	Length of Side [m]	Building Height [m]	Initial Lateral Dimencion [m]	Initial Vertical Dimencion [m]
ROAD1_PM25	L0000146	620283.90	4110077.08	107.32	3.40	3.82E-7	18.00	Surface-Based	8.37	3.16
	L0000147	620271.28	4110064.24	107.21	3.40	3.82E-7	18.00	Surface-Based	8.37	3.16
	L0000148	620258.67	4110051.40	107.10	3.40	3.82E-7	18.00	Surface-Based	8.37	3.16
	L0000149	620246.05	4110038.56	107.05	3.40	3.82E-7	18.00	Surface-Based	8.37	3.16
	L0000150	620233.44	4110025.72	106.96	3.40	3.82E-7	18.00	Surface-Based	8.37	3.16

Line Source ID	Volume Source ID	X Coordinate [m]	Y Coordinate [m]	Base Elevation [m]	Release Height [m[	Emission Rate [g/s]	Length of Side [m]	Building Height [m]	Initial Lateral Dimencion [m]	Initial Vertical Dimencion [m]
ROAD2_PM25	L0000151	619861.14	4110366.05	107.18	3.40	3.27E-7	31.00	Surface-Based	14.42	3.16
	L0000152	619881.37	4110342.56	107.08	3.40	3.27E-7	31.00	Surface-Based	14.42	3.16
	L0000153	619901.61	4110319.08	106.97	3.40	3.27E-7	31.00	Surface-Based	14.42	3.16
	L0000154	619922.52	4110296.23	106.87	3.40	3.27E-7	31.00	Surface-Based	14.42	3.16
	L0000155	619944.61	4110274.48	106.77	3.40	3.27E-7	31.00	Surface-Based	14.42	3.16
	L0000156	619966.70	4110252.73	106.67	3.40	3.27E-7	31.00	Surface-Based	14.42	3.16
	L0000157	619988.79	4110230.97	106.50	3.40	3.27E-7	31.00	Surface-Based	14.42	3.16
	L0000158	620010.87	4110209.22	106.44	3.40	3.27E-7	31.00	Surface-Based	14.42	3.16
	L0000159	620032.96	4110187.47	106.34	3.40	3.27E-7	31.00	Surface-Based	14.42	3.16
	L0000160	620055.05	4110165.72	106.24	3.40	3.27E-7	31.00	Surface-Based	14.42	3.16
	L0000161	620077.14	4110143.97	106.20	3.40	3.27E-7	31.00	Surface-Based	14.42	3.16
	L0000162	620099.22	4110122.22	106.06	3.40	3.27E-7	31.00	Surface-Based	14.42	3.16
	L0000163	620121.31	4110100.46	105.97	3.40	3.27E-7	31.00	Surface-Based	14.42	3.16

Source Pathway - Source Inputs

AERMOD

Line Source ID	Volume Source ID	X Coordinate [m]	Y Coordinate [m]	Base Elevation [m]	Release Height [m[	Emission Rate [g/s]	Length of Side [m]	Building Height [m]	Initial Lateral Dimencion [m]	Initial Vertical Dimencion [m]
ROAD2_PM25	L0000164	620143.40	4110078.71	106.08	3.40	3.27E-7	31.00	Surface-Based	14.42	3.16
	L0000165	620165.49	4110056.96	106.44	3.40	3.27E-7	31.00	Surface-Based	14.42	3.16
	L0000166	620187.57	4110035.21	106.89	3.40	3.27E-7	31.00	Surface-Based	14.42	3.16
	L0000167	620209.66	4110013.46	107.21	3.40	3.27E-7	31.00	Surface-Based	14.42	3.16
	L0000168	620231.50	4109991.46	107.18	3.40	3.27E-7	31.00	Surface-Based	14.42	3.16
	L0000169	620253.31	4109969.43	106.92	3.40	3.27E-7	31.00	Surface-Based	14.42	3.16
	L0000170	620275.12	4109947.40	106.63	3.40	3.27E-7	31.00	Surface-Based	14.42	3.16
	L0000171	620296.93	4109925.37	106.50	3.40	3.27E-7	31.00	Surface-Based	14.42	3.16
	L0000172	620318.74	4109903.34	106.61	3.40	3.27E-7	31.00	Surface-Based	14.42	3.16
	L0000173	620338.01	4109879.13	106.72	3.40	3.27E-7	31.00	Surface-Based	14.42	3.16
	L0000174	620356.43	4109854.20	106.80	3.40	3.27E-7	31.00	Surface-Based	14.42	3.16
	L0000175	620374.81	4109829.23	106.66	3.40	3.27E-7	31.00	Surface-Based	14.42	3.16
	L0000176	620393.17	4109804.25	106.41	3.40	3.27E-7	31.00	Surface-Based	14.42	3.16

Line Source ID	Volume Source ID	X Coordinate [m]	Y Coordinate [m]	Base Elevation [m]	Release Height [m[	Emission Rate [g/s]	Length of Side [m]	Building Height [m]	Initial Lateral Dimencion [m]	Initial Vertical Dimencion [m]
ROAD1_DPM	L0000177	620283.90	4110077.08	107.32	3.40	7.35E-8	18.00		8.37	3.16
	L0000178	620271.28	4110064.24	107.21	3.40	7.35E-8	18.00		8.37	3.16
	L0000179	620258.67	4110051.40	107.10	3.40	7.35E-8	18.00		8.37	3.16
	L0000180	620246.05	4110038.56	107.05	3.40	7.35E-8	18.00		8.37	3.16
	L0000181	620233.44	4110025.72	106.96	3.40	7.35E-8	18.00		8.37	3.16

Source Pathway

Building Downwash Information

Option not in use

Emission Rate Units for Output

For Concentration

Unit Factor:	1E6
Emission Unit Label:	GRAMS/SEC
Concentration Unit Label:	MICROGRAMS/M**3

Source Groups

Source Group ID: PM25_UM	List of Sources in Group (Source Range or Single Sources)
	ROAD1_PM25
	ROAD2_PM25
	SITE_UM_PM25

Source Group ID: PM25_T4	List of Sources in Group (Source Range or Single Sources)
	SITE_T4_PM25
	ROAD1_PM25
	ROAD2_PM25

Source Group ID: DPM_UM	List of Sources in Group (Source Range or Single Sources)
	SITE_UM_DPM
	ROAD2_DPM
	ROAD1_DPM

Source Group ID: DPM_T4	List of Sources in Group (Source Range or Single Sources)
	SITE_T4_DPM
	ROAD2_DPM
	ROAD1_DPM

Variable Emissions

Hour-of-Day / Day-of-Week Emission Rate Variation

Scenario: Emissions Schedule

Source ID: SITE_UM_DPM

Weekdays							
Hour of Day	1 - 6	0.00	0.00	0.00	0.00	0.00	0.00
	7 - 12	0.00	1.00	1.00	1.00	1.00	1.00
	13 - 18	0.00	1.00	1.00	1.00	1.00	1.00
	19 - 24	0.00	0.00	0.00	0.00	0.00	0.00
Saturday							
Hour of Day	1 - 6	0.00	0.00	0.00	0.00	0.00	0.00
	7 - 12	0.00	0.00	0.00	0.00	0.00	0.00
	13 - 18	0.00	0.00	0.00	0.00	0.00	0.00
	19 - 24	0.00	0.00	0.00	0.00	0.00	0.00
Sunday							
Hour of Day	1 - 6	0.00	0.00	0.00	0.00	0.00	0.00
	7 - 12	0.00	0.00	0.00	0.00	0.00	0.00
	13 - 18	0.00	0.00	0.00	0.00	0.00	0.00
	19 - 24	0.00	0.00	0.00	0.00	0.00	0.00

Source ID: SITE_T4_DPM

Weekdays							
Hour of Day	1 - 6	0.00	0.00	0.00	0.00	0.00	0.00
	7 - 12	0.00	1.00	1.00	1.00	1.00	1.00
	13 - 18	0.00	1.00	1.00	1.00	1.00	1.00
	19 - 24	0.00	0.00	0.00	0.00	0.00	0.00
Saturday							
Hour of Day	1 - 6	0.00	0.00	0.00	0.00	0.00	0.00
	7 - 12	0.00	0.00	0.00	0.00	0.00	0.00
	13 - 18	0.00	0.00	0.00	0.00	0.00	0.00
	19 - 24	0.00	0.00	0.00	0.00	0.00	0.00
Sunday							
Hour of Day	1 - 6	0.00	0.00	0.00	0.00	0.00	0.00
	7 - 12	0.00	0.00	0.00	0.00	0.00	0.00
	13 - 18	0.00	0.00	0.00	0.00	0.00	0.00
	19 - 24	0.00	0.00	0.00	0.00	0.00	0.00

Source ID: ROAD2_DPM

Weekdays							
Hour of Day	1 - 6	0.00	0.00	0.00	0.00	0.00	0.00
	7 - 12	0.00	1.00	1.00	1.00	1.00	1.00
	13 - 18	0.00	1.00	1.00	1.00	1.00	1.00
	19 - 24	0.00	0.00	0.00	0.00	0.00	0.00
Saturday							
Hour of Day	1 - 6	0.00	0.00	0.00	0.00	0.00	0.00
	7 - 12	0.00	0.00	0.00	0.00	0.00	0.00
	13 - 18	0.00	0.00	0.00	0.00	0.00	0.00
	19 - 24	0.00	0.00	0.00	0.00	0.00	0.00
Sunday							
Hour of Day	1 - 6	0.00	0.00	0.00	0.00	0.00	0.00
	7 - 12	0.00	0.00	0.00	0.00	0.00	0.00
	13 - 18	0.00	0.00	0.00	0.00	0.00	0.00
	19 - 24	0.00	0.00	0.00	0.00	0.00	0.00

Source ID: ROAD1_DPM

Weekdays							
Hour of Day	1 - 6	0.00	0.00	0.00	0.00	0.00	0.00
	7 - 12	0.00	1.00	1.00	1.00	1.00	1.00
	13 - 18	0.00	1.00	1.00	1.00	1.00	1.00

Scenario: Emissions Schedule

Source ID:	**ROAD1_DPM**						
	19 - 24	0.00	0.00	0.00	0.00	0.00	0.00
Saturday							
Hour	1 - 6	0.00	0.00	0.00	0.00	0.00	0.00
of	7 - 12	0.00	0.00	0.00	0.00	0.00	0.00
Day	13 - 18	0.00	0.00	0.00	0.00	0.00	0.00
	19 - 24	0.00	0.00	0.00	0.00	0.00	0.00
Sunday							
Hour	1 - 6	0.00	0.00	0.00	0.00	0.00	0.00
of	7 - 12	0.00	0.00	0.00	0.00	0.00	0.00
Day	13 - 18	0.00	0.00	0.00	0.00	0.00	0.00
	19 - 24	0.00	0.00	0.00	0.00	0.00	0.00
Source ID:	**SITE_UM_PM25**						
Weekdays							
Hour	1 - 6	0.00	0.00	0.00	0.00	0.00	0.00
of	7 - 12	0.00	1.00	1.00	1.00	1.00	1.00
Day	13 - 18	0.00	1.00	1.00	1.00	1.00	1.00
	19 - 24	0.00	0.00	0.00	0.00	0.00	0.00
Saturday							
Hour	1 - 6	0.00	0.00	0.00	0.00	0.00	0.00
of	7 - 12	0.00	0.00	0.00	0.00	0.00	0.00
Day	13 - 18	0.00	0.00	0.00	0.00	0.00	0.00
	19 - 24	0.00	0.00	0.00	0.00	0.00	0.00
Sunday							
Hour	1 - 6	0.00	0.00	0.00	0.00	0.00	0.00
of	7 - 12	0.00	0.00	0.00	0.00	0.00	0.00
Day	13 - 18	0.00	0.00	0.00	0.00	0.00	0.00
	19 - 24	0.00	0.00	0.00	0.00	0.00	0.00
Source ID:	**SITE_T4_PM25**						
Weekdays							
Hour	1 - 6	0.00	0.00	0.00	0.00	0.00	0.00
of	7 - 12	0.00	1.00	1.00	1.00	1.00	1.00
Day	13 - 18	0.00	1.00	1.00	1.00	1.00	1.00
	19 - 24	0.00	0.00	0.00	0.00	0.00	0.00
Saturday							
Hour	1 - 6	0.00	0.00	0.00	0.00	0.00	0.00
of	7 - 12	0.00	0.00	0.00	0.00	0.00	0.00
Day	13 - 18	0.00	0.00	0.00	0.00	0.00	0.00
	19 - 24	0.00	0.00	0.00	0.00	0.00	0.00
Sunday							
Hour	1 - 6	0.00	0.00	0.00	0.00	0.00	0.00
of	7 - 12	0.00	0.00	0.00	0.00	0.00	0.00
Day	13 - 18	0.00	0.00	0.00	0.00	0.00	0.00
	19 - 24	0.00	0.00	0.00	0.00	0.00	0.00
Source ID:	**ROAD1_PM25**						
Weekdays							
Hour	1 - 6	0.00	0.00	0.00	0.00	0.00	0.00
of	7 - 12	0.00	1.00	1.00	1.00	1.00	1.00
Day	13 - 18	0.00	1.00	1.00	1.00	1.00	1.00
	19 - 24	0.00	0.00	0.00	0.00	0.00	0.00
Saturday							
Hour	1 - 6	0.00	0.00	0.00	0.00	0.00	0.00
of	7 - 12	0.00	0.00	0.00	0.00	0.00	0.00
Day	13 - 18	0.00	0.00	0.00	0.00	0.00	0.00
	19 - 24	0.00	0.00	0.00	0.00	0.00	0.00

Source Pathway

Scenario: Emissions Schedule

Source ID: ROAD1_PM25

Sunday								
Hour of Day	1 - 6	0.00	0.00	0.00	0.00	0.00	0.00
	7 - 12	0.00	0.00	0.00	0.00	0.00	0.00
	13 - 18	0.00	0.00	0.00	0.00	0.00	0.00
	19 - 24	0.00	0.00	0.00	0.00	0.00	0.00

Source ID: ROAD2_PM25

Weekdays								
Hour of Day	1 - 6	0.00	0.00	0.00	0.00	0.00	0.00
	7 - 12	0.00	1.00	1.00	1.00	1.00	1.00
	13 - 18	0.00	1.00	1.00	1.00	1.00	1.00
	19 - 24	0.00	0.00	0.00	0.00	0.00	0.00
Saturday								
Hour of Day	1 - 6	0.00	0.00	0.00	0.00	0.00	0.00
	7 - 12	0.00	0.00	0.00	0.00	0.00	0.00
	13 - 18	0.00	0.00	0.00	0.00	0.00	0.00
	19 - 24	0.00	0.00	0.00	0.00	0.00	0.00
Sunday								
Hour of Day	1 - 6	0.00	0.00	0.00	0.00	0.00	0.00
	7 - 12	0.00	0.00	0.00	0.00	0.00	0.00
	13 - 18	0.00	0.00	0.00	0.00	0.00	0.00
	19 - 24	0.00	0.00	0.00	0.00	0.00	0.00

Receptor Networks

Note: Terrain Elavations and Flagpole Heights for Network Grids are in Page RE2 - 1 (If applicable)
Generated Discrete Receptors for Multi-Tier (Risk) Grid and Receptor Locations for Fenceline Grid are in Page RE3 - 1 (If applicable)

Discrete Receptors

Discrete Cartesian Receptors

Record Number	X-Coordinate [m]	Y-Coordinate [m]	Group Name (Optional)	Terrain Elevations	Flagpole Heights [m] (Optional)
1	620308.67	4110130.55	SF	107.85	
2	620293.86	4110145.87	SF	107.90	
3	620279.05	4110161.19	SF	107.71	
4	620262.20	4110175.49	SF	107.77	
5	620247.39	4110191.84	SF	107.71	
6	620231.56	4110204.60	SF	107.73	
7	620216.24	4110220.94	SF	107.88	
8	620204.49	4110232.69	SF	107.96	
9	620184.57	4110249.03	SF	108.03	
10	620191.21	4110272.52	SF	108.13	
11	620206.53	4110286.82	SF	108.10	
12	620230.03	4110294.99	SF	108.02	
13	620246.88	4110277.63	SF	107.98	
14	620259.64	4110261.80	SF	107.86	
15	620274.97	4110249.03	SF	107.75	
16	620287.73	4110230.65	SF	107.77	
17	620304.07	4110215.84	SF	107.65	
18	620317.35	4110202.56	SF	107.62	
19	620333.18	4110187.24	SF	107.74	
20	620348.50	4110176.00	SF	107.89	
21	620369.95	4110196.94	SF	108.29	
22	620360.76	4110207.67	SF	108.32	
23	620343.91	4110224.01	SF	108.27	
24	620330.12	4110236.78	SF	108.27	
25	620317.86	4110251.59	SF	108.21	
26	620304.58	4110261.29	SF	108.35	
27	620288.75	4110277.12	SF	108.35	
28	620274.97	4110287.84	SF	108.28	
29	620262.20	4110306.23	SF	108.24	
30	620247.39	4110314.91	SF	108.25	

31	620080.40	4110200.01	SF	106.89
32	620090.61	4110211.24	SF	106.94
33	620103.38	4110221.97	SF	106.96
34	620113.59	4110232.18	SF	107.15
35	620123.29	4110243.41	SF	107.25
36	620134.02	4110256.69	SF	107.49
37	620147.30	4110267.42	SF	107.81
38	620157.51	4110281.72	SF	108.00
39	620170.79	4110295.50	SF	108.02
40	620183.04	4110311.33	SF	108.07
41	620198.36	4110324.61	SF	108.20
42	620207.56	4110338.91	SF	108.35
43	620234.62	4110328.19	SF	108.36
44	620279.56	4110042.71	MF	108.07
45	620296.41	4110059.57	MF	108.15
46	620287.22	4110051.91	MF	108.10
47	620305.09	4110069.78	MF	108.15
48	620315.30	4110079.99	MF	108.15
49	620332.37	4110096.64	MF	108.11
50	620349.22	4110113.50	MF	108.10
51	620340.03	4110105.84	MF	108.10
52	620357.90	4110123.71	MF	108.10
53	620368.11	4110133.92	MF	108.07
54	620332.93	4110037.09	MF	107.71
55	620349.78	4110053.95	MF	107.75
56	620340.59	4110046.29	MF	107.75
57	620358.46	4110064.16	MF	107.75
58	620350.80	4110023.82	MF	107.44
59	620367.65	4110040.68	MF	107.22
60	620358.46	4110033.02	MF	107.26
61	620376.33	4110050.89	MF	107.24
62	620331.68	4109988.41	MF	107.68
63	620314.10	4110004.51	MF	107.89
64	620322.15	4109995.66	MF	107.83
65	620303.52	4110012.74	MF	107.88
66	620352.41	4109971.43	MF	107.41
67	620360.46	4109962.58	MF	107.30
68	620341.83	4109979.66	MF	107.37

69	620376.65	4110003.22	MF	107.30
70	620384.70	4109994.37	MF	107.27
71	620388.67	4110095.19	MF	107.32
72	620371.10	4110111.29	MF	107.51
73	620379.15	4110102.44	MF	107.31
74	620360.52	4110119.52	MF	108.06
75	620398.83	4110086.44	MF	107.29
76	620407.23	4110000.84	MF	107.05
77	620417.96	4110005.95	MF	107.06
78	620429.19	4110012.08	MF	107.06
79	620438.38	4110015.65	MF	107.06
80	620420.51	4109966.11	MF	107.12
81	620429.70	4109970.20	MF	107.10
82	620441.96	4109976.33	MF	107.08
83	620454.73	4109981.95	MF	107.08
84	620381.19	4109943.64	MF	107.36
85	620384.25	4109930.88	MF	107.25
86	620403.66	4109895.13	MF	107.13
87	620414.38	4109899.22	MF	107.20
88	620424.08	4109905.85	MF	107.23
89	620434.81	4109911.47	MF	107.24
90	620447.58	4109916.58	MF	107.22
91	620474.13	4110047.82	MF	107.32
92	620486.90	4110052.93	MF	107.44
93	620498.64	4110058.55	MF	107.74
94	620509.37	4110062.12	MF	107.82
95	620488.94	4110003.90	MF	107.20
96	620493.03	4109994.20	MF	107.24
97	620497.62	4109983.99	MF	107.40
98	620512.43	4109950.28	MF	107.76
99	620523.67	4109956.41	MF	107.85
100	620535.41	4109960.50	MF	107.84
101	620546.14	4109963.56	MF	107.77
102	620516.01	4109996.76	MF	107.82
103	620526.22	4110000.84	MF	107.90
104	620537.97	4110006.46	MF	108.05
105	620560.95	4109976.33	MF	108.31
106	620573.71	4109982.46	MF	108.30

107	620584.44	4109988.58	MF	108.32
108	620570.65	4110014.12	MF	108.16
109	620567.08	4110024.84	MF	107.98
110	620561.97	4110037.10	MF	107.93
111	620557.37	4110049.36	MF	107.98
112	620552.27	4110057.53	MF	107.91
113	620524.69	4110022.29	MF	107.53
114	620519.58	4110031.99	MF	107.66
115	620514.99	4110044.25	MF	107.75
116	620478.22	4110092.76	MF	107.88
117	620489.45	4110097.87	MF	107.95
118	620537.97	4110087.15	MF	107.91
119	620532.86	4110098.38	MF	108.05
120	620528.77	4110108.08	MF	108.06
121	620523.16	4110120.85	MF	108.03
122	620511.41	4110139.75	MF	108.17
123	620507.84	4110151.49	MF	108.27
124	620457.79	4110125.45	MF	108.05
125	620470.05	4110130.55	MF	108.17
126	620429.19	4110159.15	MF	108.19
127	620439.92	4110163.24	MF	108.19
128	620452.68	4110168.85	MF	108.18
129	620494.05	4110180.09	MF	108.29
130	620488.43	4110193.88	MF	108.41
131	620114.10	4110054.46	PL	106.57
132	620142.19	4110026.37	PL	106.51
133	620167.72	4110001.86	PL	106.55
134	620077.84	4110087.66	PL	106.20
135	620061.50	4110103.49	PL	106.28
136	620168.23	4109934.96	MF	106.11
137	620179.47	4109924.24	MF	106.20
138	620192.75	4109911.98	MF	106.25
139	620201.43	4109902.28	MF	106.32
140	620148.83	4109918.11	MF	106.15
141	620159.04	4109909.94	MF	106.22
142	620166.70	4109902.79	MF	106.23
143	620176.40	4109891.55	MF	106.23
144	620187.64	4109881.85	MF	106.24

145	620195.30	4109872.15	MF	106.14
146	620131.46	4109901.26	MF	106.11
147	620141.68	4109893.60	MF	106.21
148	620150.36	4109882.87	MF	106.23
149	620158.02	4109873.17	MF	106.24
150	620167.72	4109863.98	MF	106.23
151	620175.38	4109854.28	MF	106.13
152	620117.68	4109884.41	MF	106.15
153	620124.83	4109876.75	MF	106.22
154	620132.49	4109868.06	MF	106.22
155	620141.17	4109858.36	MF	106.23
156	620151.89	4109846.10	MF	106.21
157	620209.60	4109896.66	MF	106.29
158	620247.90	4109858.87	BU	106.44
159	620269.86	4109888.49	BU	106.44
160	620173.85	4109797.59	MF	106.49
161	620182.02	4109803.72	MF	106.57
162	620193.77	4109811.89	MF	106.52
163	620203.98	4109820.06	MF	106.51
164	620212.66	4109828.74	MF	106.51
165	620058.44	4110232.69	SF	106.92
166	620044.65	4110245.46	SF	107.15
167	620033.41	4110255.67	SF	107.19
168	620024.22	4110267.93	SF	107.30
169	620012.99	4110276.61	SF	107.41
170	620077.84	4110267.93	SF	107.09
171	620087.03	4110278.14	SF	107.26
172	620099.29	4110292.44	SF	107.42
173	620107.97	4110302.14	SF	107.57
174	620122.78	4110316.95	SF	107.85
175	620138.61	4110335.34	SF	108.11
176	620157.00	4110347.08	SF	108.18
177	620139.63	4110361.89	SF	108.56
178	620125.34	4110373.13	SF	108.29
179	620111.55	4110354.23	SF	108.02
180	620094.69	4110339.42	SF	107.85
181	620086.01	4110327.17	SF	107.67
182	620075.80	4110315.93	SF	107.60

183	620063.54	4110303.67	SF	107.52
184	620053.84	4110297.55	SF	107.29
185	620004.45	4110286.00	SF	107.40
186	619993.85	4110295.90	SF	107.42
187	619983.24	4110306.50	SF	107.51
188	619971.23	4110317.81	SF	107.54
189	619961.33	4110324.88	SF	107.59
190	619950.73	4110335.48	SF	107.63
191	619940.83	4110346.79	SF	107.68
192	619930.94	4110356.69	SF	107.81
193	619920.33	4110371.53	SF	107.90
194	619915.39	4110380.72	SF	107.89
195	619903.37	4110391.32	SF	107.89
196	619893.47	4110402.63	SF	107.96
197	619884.99	4110412.53	SF	108.03
198	620020.00	4110330.53	SF	107.27
199	619991.02	4110353.86	SF	107.41
200	620028.48	4110341.13	SF	107.53
201	620038.38	4110350.32	SF	107.65
202	620048.98	4110362.34	SF	107.72
203	620061.70	4110374.36	SF	107.80
204	620076.55	4110389.91	SF	107.95
205	620094.22	4110403.34	SF	108.16
206	620080.79	4110416.06	SF	108.28
207	620065.24	4110433.02	SF	108.37
208	620050.39	4110415.35	SF	108.26
209	620034.84	4110398.39	SF	108.14
210	620022.83	4110386.37	SF	107.95
211	620012.22	4110373.65	SF	107.89
212	620000.91	4110365.17	SF	107.74
213	619957.80	4110388.49	SF	107.62
214	619969.11	4110399.10	SF	107.78
215	619981.12	4110411.11	SF	107.92
216	619991.73	4110419.59	SF	107.94
217	620005.16	4110433.73	SF	108.11
218	620020.00	4110446.45	SF	108.23
219	620035.55	4110462.71	SF	108.44
220	620019.29	4110474.73	SF	108.53

221	620004.45	4110490.99	SF	108.56
222	619991.02	4110474.73	SF	108.35
223	619975.47	4110458.47	SF	108.15
224	619964.87	4110447.87	SF	108.07
225	619954.26	4110435.14	SF	108.04
226	619945.78	4110425.25	SF	107.95
227	619935.18	4110413.94	SF	107.68
228	620124.61	4110438.68	SF	108.19
229	620109.77	4110458.47	SF	108.38
230	620094.92	4110472.61	SF	108.43
231	620078.67	4110487.45	SF	108.42
232	620066.65	4110501.59	SF	108.55
233	620040.50	4110520.67	SF	108.89
234	620054.63	4110534.81	SF	109.10
235	620072.31	4110546.83	SF	109.17
236	620085.74	4110527.03	SF	109.30
237	620099.17	4110513.60	SF	109.37
238	620117.54	4110501.59	SF	109.25
239	620130.27	4110488.86	SF	109.12
240	620155.01	4110476.85	SF	108.94
241	620141.58	4110464.83	SF	108.91
242	620186.11	4110513.60	SF	109.10
243	620170.56	4110524.21	SF	109.20
244	620155.01	4110536.93	SF	109.24
245	620138.04	4110551.77	SF	109.23
246	620116.84	4110558.14	SF	108.99
247	620212.26	4110531.28	SF	109.34
248	620198.83	4110546.12	SF	109.46
249	620185.40	4110556.72	SF	109.60
250	620275.88	4110529.86	SF	109.76
251	620293.55	4110511.48	SF	109.51
252	620275.88	4110490.28	SF	109.41
253	620259.62	4110473.31	SF	109.12
254	620246.19	4110459.18	SF	109.04
255	620234.88	4110444.33	SF	108.87
256	620221.45	4110429.49	SF	108.69
257	620208.73	4110416.77	SF	108.64
258	620195.30	4110388.49	SF	108.28

259	620174.80	4110392.73	SF	108.59
260	620160.66	4110406.16	SF	108.50
261	620169.85	4110422.42	SF	108.84
262	620187.52	4110439.39	SF	108.99
263	620200.95	4110452.11	SF	108.98
264	620243.36	4110379.30	SF	108.63
265	620257.50	4110395.56	SF	108.84
266	620268.81	4110411.11	SF	108.89
267	620282.24	4110423.13	SF	109.05
268	620297.08	4110437.27	SF	109.23
269	620314.05	4110454.23	SF	109.34
270	620332.42	4110472.61	SF	109.48
271	620351.51	4110450.70	SF	109.19
272	620366.35	4110470.49	SF	109.28
273	620348.68	4110488.16	SF	109.68
274	620336.66	4110433.73	SF	109.16
275	620321.82	4110415.35	SF	109.03
276	620307.68	4110401.22	SF	108.99
277	620294.25	4110387.08	SF	108.87
278	620280.12	4110370.82	SF	108.72
279	620265.98	4110355.98	SF	108.28
280	620300.62	4110323.46	SF	108.46
281	620316.17	4110336.19	SF	108.70
282	620330.30	4110351.03	SF	108.72
283	620344.44	4110365.87	SF	108.87
284	620355.75	4110381.42	SF	108.92
285	620376.25	4110396.27	SF	109.11
286	620390.39	4110416.77	SF	109.23
287	620407.35	4110433.73	SF	109.33
288	620328.18	4110298.02	SF	108.26
289	620336.66	4110314.98	SF	108.74
290	620357.16	4110331.24	SF	108.81
291	620379.78	4110325.58	SF	108.81
292	620394.63	4110303.67	SF	109.03
293	620386.14	4110281.05	SF	108.83
294	620365.65	4110267.62	SF	108.47
295	620380.49	4110254.90	SF	108.48
296	620399.57	4110229.45	SF	108.65

297	620413.00	4110246.42	SF	108.91
298	620424.31	4110259.14	SF	108.99
299	620437.74	4110267.62	SF	108.88
300	620478.74	4110356.69	SF	109.27
301	620504.89	4110340.43	SF	109.17
302	620407.35	4110145.34	SF	108.02
303	620390.39	4110157.36	SF	108.17
304	620413.71	4110177.15	SF	108.18
305	620430.68	4110195.52	SF	108.21
306	620451.17	4110210.37	SF	108.58
307	620473.09	4110225.92	SF	108.40
308	620486.52	4110246.42	SF	108.54
309	620495.70	4110260.55	SF	108.77
310	620513.38	4110275.40	SF	108.96
311	620536.70	4110256.31	SF	109.02
312	620522.56	4110237.23	SF	108.76
313	620511.26	4110216.73	SF	108.61
314	620512.67	4110192.70	SF	108.59
315	620523.98	4110181.39	SF	108.61
316	620538.12	4110155.23	SF	108.49
317	620562.85	4110154.53	SF	108.48
318	620583.35	4110163.72	SF	108.58
319	620551.55	4110107.17	SF	108.16
320	620565.68	4110113.53	SF	108.12
321	620579.82	4110124.84	SF	108.15
322	620592.54	4110129.79	SF	108.20
323	620605.97	4110138.98	SF	108.14
324	620576.28	4110081.02	SF	107.95
325	620586.89	4110054.86	SF	108.04
326	620596.08	4110034.36	SF	107.90
327	620605.27	4110094.45	SF	108.32
328	620212.74	4109942.67	SF	106.62
329	619786.15	4110243.05	MF	107.59
330	619794.76	4110249.85	MF	107.68
331	619804.28	4110256.87	MF	107.64
332	619815.16	4110267.30	MF	107.69
333	619823.09	4110273.64	MF	107.70
334	619832.16	4110279.99	MF	107.66

335	619853.24	4110296.53	MF	107.45
336	619864.11	4110305.37	MF	107.44
337	619875.22	4110312.62	MF	107.44
338	619889.27	4110295.85	MF	107.43
339	619878.17	4110288.83	MF	107.47
340	619868.19	4110281.57	MF	107.51
341	619825.81	4110245.54	MF	107.65
342	619836.01	4110254.60	MF	107.63
343	619847.12	4110264.12	MF	107.65
344	619800.20	4110225.37	MF	107.53
345	619809.04	4110232.17	MF	107.64
346	619818.56	4110238.06	MF	107.63
347	619807.00	4110305.60	MF	107.64
348	619816.07	4110313.08	MF	107.63
349	619825.59	4110319.42	MF	107.64
350	619847.12	4110334.15	MF	107.50
351	619838.96	4110343.90	MF	107.59
352	619831.93	4110352.06	MF	107.58
353	619833.19	4110040.16	MF	106.21
354	619828.08	4110047.83	MF	106.20
355	619822.46	4110056.00	MF	106.19
356	619813.78	4110066.21	MF	106.29
357	619805.60	4110074.90	MF	106.34
358	619796.41	4110085.62	MF	106.39
359	619855.66	4110015.13	MF	106.12
360	619865.37	4110003.39	MF	106.38
361	619878.65	4109988.06	MF	106.34
362	619888.35	4109977.34	MF	106.25
363	619901.12	4109963.54	MF	106.31
364	619888.86	4109954.86	MF	107.08
365	619875.07	4109970.18	MF	107.10
366	619864.86	4109981.93	MF	107.12
367	619851.58	4109993.68	MF	106.72
368	619840.85	4110006.45	MF	106.11
369	619927.68	4109917.57	BU	105.61
370	619944.03	4109905.82	SF	105.49
371	619956.80	4109893.56	SF	105.43
372	619965.48	4109881.31	SF	105.22

373	620240.56	4109735.78	MF	105.86
374	620234.04	4109747.19	MF	105.91
375	620259.57	4109757.51	MF	105.93
376	620270.98	4109762.40	MF	105.94
377	620301.95	4109777.06	MF	106.07
378	620312.81	4109781.41	MF	106.22
379	620332.37	4109790.10	MF	106.41
380	620345.40	4109797.16	MF	106.46
381	620358.44	4109764.03	MF	105.99
382	620424.71	4109839.53	MF	106.84
383	620429.60	4109827.58	MF	106.73
384	620441.55	4109844.97	MF	106.71
385	620451.33	4109847.68	MF	106.65
386	620464.37	4109858.00	MF	106.90
387	620468.71	4109849.31	MF	106.84
388	620488.81	4109872.67	MF	106.84
389	620502.39	4109880.28	MF	107.00
390	620434.49	4109817.26	MF	106.37
391	620119.15	4110177.42	SITE	0.00
392	620168.58	4110219.25	SITE	0.00
393	620194.66	4110147.00	SITE	0.00
394	620277.23	4110121.47	SITE	0.00
395	620226.17	4110069.32	SITE	0.00

Plant Boundary Receptors

Receptor Groups

Record Number	Group ID	Group Description
1	SF	Single Family
2	MF	Multi Family
3	PL	Public
4	BU	Business
5	SITE	Project Site

Meteorology Pathway

Met Input Data

Surface Met Data

Filename: ..\MET\SAN_MARTIN_2013_2017.SFC
Format Type: Default AERMET format

Profile Met Data

Filename: ..\MET\SAN_MARTIN_2013_2017.PFL
Format Type: Default AERMET format

Wind Speed

☐ Wind Speeds are Vector Mean (Not Scalar Means)

Wind Direction

Rotation Adjustment [deg]:

Potential Temperature Profile

Base Elevation above MSL (for Primary Met Tower): 85.30 [m]

Meteorological Station Data

Stations	Station No.	Year	X Coordinate [m]	Y Coordinate [m]	Station Name
Surface		2013	37.09	-121.60	San Martin
Upper Air		2013			OAKLAND/WSO AP
On-Site		2013			

Data Period

Data Period to Process

Start Date: 1/1/2013 Start Hour: 1 End Date: 12/31/2017 End Hour: 24

Wind Speed Categories

Stability Category	Wind Speed [m/s]	Stability Category	Wind Speed [m/s]
A	1.54	D	8.23
B	3.09	E	10.8
C	5.14	F	No Upper Bound

Output Pathway

Tabular Printed Outputs

Short Term Averaging Period	RECTABLE Highest Values Table										MAXTABLE Maximum Values Table	DAYTABLE Daily Values Table
	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th		
1	☑	☐	☐	☐	☐	☐	☐	☐	☐	☐		No

Contour Plot Files (PLOTFILE)

Path for PLOTFILES: ConHRA.AD

Averaging Period	Source Group ID	High Value	File Name
Period	DPM_UM		CONpe_DPM_UM.PLT
Period	DPM_T4		CONpe_DPM_T4.PLT
Period	PM25_UM		CONpe_PM25_UM.PLT
Period	PM25_T4		CONpe_PM25_T4.PLT

Results Summary

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PM10 - Concentration - Source Group: DPM_T4

Averaging Period	Rank	Peak	Units	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
PERIOD		0.04169	ug/m^3	620279.56	4110042.71	108.07	0.00	108.07	

PM10 - Concentration - Source Group: DPM_UM

Averaging Period	Rank	Peak	Units	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
PERIOD		0.15458	ug/m^3	620279.56	4110042.71	108.07	0.00	108.07	

PM10 - Concentration - Source Group: PM25_T4

Averaging Period	Rank	Peak	Units	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
PERIOD		0.13650	ug/m^3	620279.56	4110042.71	108.07	0.00	108.07	

PM10 - Concentration - Source Group: PM25_UM

Averaging Period	Rank	Peak	Units	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
PERIOD		0.25188	ug/m^3	620279.56	4110042.71	108.07	0.00	108.07	

Sensitive Receptor Summary

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PM10 - Concentration - Source Group: DPM_T4

Averaging Period	Rank	Peak	Units	Receptor ID	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
PERIOD		0.04070	ug/m^3	1	620113.59	4110232.18	107.15	0.00	107.15	
PERIOD		0.04141	ug/m^3	1	620123.29	4110243.41	107.25	0.00	107.25	
PERIOD		0.04169	ug/m^3	1	620279.56	4110042.71	108.07	0.00	108.07	
PERIOD		0.04089	ug/m^3	1	620287.22	4110051.91	108.10	0.00	108.10	
PERIOD		0.00730	ug/m^3	1	620167.72	4110001.86	106.55	0.00	106.55	
PERIOD		0.00762	ug/m^3	1	620269.86	4109888.49	106.44	0.00	106.44	

PM10 - Concentration - Source Group: DPM_UM

Averaging Period	Rank	Peak	Units	Receptor ID	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
PERIOD		0.15102	ug/m^3	1	620113.59	4110232.18	107.15	0.00	107.15	
PERIOD		0.15365	ug/m^3	1	620123.29	4110243.41	107.25	0.00	107.25	
PERIOD		0.15458	ug/m^3	1	620279.56	4110042.71	108.07	0.00	108.07	
PERIOD		0.15161	ug/m^3	1	620287.22	4110051.91	108.10	0.00	108.10	
PERIOD		0.02702	ug/m^3	1	620167.72	4110001.86	106.55	0.00	106.55	
PERIOD		0.02822	ug/m^3	1	620269.86	4109888.49	106.44	0.00	106.44	

Sensitive Receptor Summary

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PM10 - Concentration - Source Group: PM25_T4

Averaging Period	Rank	Peak	Units	Receptor ID	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
PERIOD		0.13317	ug/m^3	1	620113.59	4110232.18	107.15	0.00	107.15	
PERIOD		0.13549	ug/m^3	1	620123.29	4110243.41	107.25	0.00	107.25	
PERIOD		0.13650	ug/m^3	1	620279.56	4110042.71	108.07	0.00	108.07	
PERIOD		0.13387	ug/m^3	1	620287.22	4110051.91	108.10	0.00	108.10	
PERIOD		0.02392	ug/m^3	1	620167.72	4110001.86	106.55	0.00	106.55	
PERIOD		0.02496	ug/m^3	1	620269.86	4109888.49	106.44	0.00	106.44	

PM10 - Concentration - Source Group: PM25_UM

Averaging Period	Rank	Peak	Units	Receptor ID	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
PERIOD		0.24593	ug/m^3	1	620113.59	4110232.18	107.15	0.00	107.15	
PERIOD		0.25021	ug/m^3	1	620123.29	4110243.41	107.25	0.00	107.25	
PERIOD		0.25188	ug/m^3	1	620279.56	4110042.71	108.07	0.00	108.07	
PERIOD		0.24704	ug/m^3	1	620287.22	4110051.91	108.10	0.00	108.10	
PERIOD		0.04408	ug/m^3	1	620167.72	4110001.86	106.55	0.00	106.55	
PERIOD		0.04601	ug/m^3	1	620269.86	4109888.49	106.44	0.00	106.44	

HEALTH RISK ASSESSMENT CALCULATIONS

The HRA was conducted utilizing the CARB's Hot Spots Analysis and Reporting Program Version 2 (HARP2) to automatically calculate risks for the projects using OEHHA promulgated cancer potency and reference exposure levels. (HARP2) is the recommended model for calculating and presenting HRA results because it follows the district's risk assessment guidance methodology and is consistent with the Air District's Regulation 2-5. Since AERMOD was run with project emission rates to directly calculate potential DPM and PM2.5 concentrations, the Health Risk Assessment Standalone Tool (RAST) version of HARP2 was used.

The HRA follows BAAQMD CEQA Guidelines based on OEHHA Guidance. This risk assessment intake methodology addresses children's greater sensitivity and health impacts from early exposure to carcinogenic compounds. The chemical intake or dose describing the frequency and duration of the exposure is estimated using receptor's breathing rates, exposure duration, and exposure frequency. The calculations include the use of age-specific weighting factors, breathing rates, fraction of time at home, and reduced exposure durations.

These factors are described below, followed by a summary of the HARP2 HRA inputs and cancer and noncancer risk results for selected for each receptor group (i.e., resident, off-site worker, and student).

Age Sensitivity Factors – Studies have shown that young animals are more sensitive than adult animals to exposure to many carcinogens (OEHHA, 2009). Therefore, OEHHA developed age sensitivity factors (ASFs) to account for the increased sensitivity to carcinogens during early-in-life exposures. Accordingly, the cancer risk methodology applies different ASFs by age groups. The ASFs utilized a 10-fold multiplier in sensitivity for the third trimester and infants less than age 2, a 3-fold increase in sensitivity for children ages 2 to 16 years old, and a sensitivity factor of 1 for ages 16 and older.

Daily breathing rates (age-specific daily air intake) – For residential receptors, the HRA utilizes the 95th percentile breathing rates for the most sensitive age groups (less than 2 years of age) and 80th percentile for all other age groups. This approach jointly developed by ARB and CAPCOA[1] and adopted by BAAQMD[2] is referred to as the "Risk Management Policy" and was developed to consider the new science in risk assessment while providing a reasonable estimate of potential cancer risk for risk management decisions. and used in this HRA. The HRA uses 95th percentile 8-hour breathing rates for moderate intensity activities for worker and student exposure.[3]

Time at home – The time at home applies only applies to residential receptors. Residents are assumed to be at home 350 days per year, which assumes individuals are away for approximately 2 weeks of

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1 California Air Resources Board (ARB) and California Air Pollution Control Officers Association (CAPCOA). 2015. Risk Management Guidance for Stationary Sources of Air Toxics. July 23. Website: https://ww2.arb.ca.gov/sites/default/files/classic/toxics/rma/rmgssat.pdf. Accessed April 8, 2024.

2 Bay Area Air Quality Management District (BAAQMD). 2022. California Environmental Quality Act – Air Quality Guidelines Appendix E: Recommended Methods for Screening and Modeling Local Risks and Hazards. Website: https://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa-guidelines-2022/appendix-e-recommended-methods-for-screening-and-modeling-local-risks-and-hazards_final-pdf.pdf?rev=b8917a27345a4a629fc18fc8650951e4&sc_lang=en. Accessed March 7, 2024.

3 Office of Environmental Health Hazard Assessment (OEHHA). 2015. The Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments. Website: https://oehha.ca.gov/media/downloads/crnr/2015guidancemanual.pdf. Accessed March 29, 2024.

vacation. The fraction of time at home refers to the estimated amount of time residents stay at home during these 350 days. The HRA uses the OEHHA and BAAQMD recommended values of 73% time at home for 16-year-olds and above based on based on population and activity statistics. The HRA also assumes 100 percent time at home for receptors under age 16 to address exposures at local schools close to emitting sources. Even though infants and children may not be at their residence all the time, they are likely to remain in the neighborhood (at schools or neighbors) and would be exposed to similar levels of the pollutants.

Exposure Duration - OEHHA 2015 guidelines specify a 30-year residential exposure duration for estimating cancer risk at the maximum exposed individual resident (MEIR). This is based on studies showing that 30 years is a reasonable estimate of the 90th to 95th percentile of residency duration in the population. A 25-year standard exposure duration is the default to estimate cancer risk for off-site workers. However, risk assessors can use other exposure durations with proper justification and documentation. For example, short-term projects (e.g., construction projects) can now be evaluated for as short a duration as 6 months.

For a project with construction followed by operations, the HRA may be divided into 2 segments for the entire 30-year residential exposure duration.

Residential Cancer Risk

Cancer risk for individual resident receptors exposed to "Diesel Particulate Exhaust" (DPM) were calculated utilizing the "Risk Management Policy" option for inhalation, specifying that residents spend 100% time at home for ages less than 16 years old. Consistent with OEHHA guidance, the start of residential exposure was assumed to occur in the third trimester (-0.25 years) to accommodate the increased susceptibility of exposures in early life. Since the construction is anticipated to occur for 1.23 years, the residential exposure starts with the unborn child at the third trimester (when construction begins) and continues until the child is 0.98 years of age. Because there are no significant sources of TAC emissions during operations, the exposure assessment is limited to the 1.23-year duration of the proposed project construction.

Worker Cancer Risk

Cancer risk and the chronic hazard index was calculated for the maximum impacted off-site worker based on the maximum DPM concentration at identified off-site receptors. 8-hour breathing rates for moderate intensity activities of 230 L/kg-8 hrs (applicable to 16–70-year adults) were used to calculate the daily dose via the inhalation route to the worker. The analysis assumes a start age of 16 years and an exposure duration equivalent to the construction duration of 1.23 years.

Since the construction emissions were modeled as a non-continuous source, the worker adjustment factor was used to adjust for the proper exposure concentration. When modeling a non-continuously emitting source (e.g., operating for eight hours per day and five days per week), the modeled long-term average concentrations are based on 24 hours a day and seven days per week for the period of the meteorological data set. Even though the emitting source is modeled using a non-continuous emissions schedule, the long-term concentration is still based on 24 hours a day and seven days per week. Thus, this concentration includes the zero hours when the source was not operating.

The worker adjustment factor (WAF) is used to determine the long-term concentration the worker is breathing during their work shift. Therefore, the long-term concentration is adjusted so it is based only on the hours when the worker is present. For this project, assuming the emitting source and worker's schedules are the same, the adjustment factor is 4.2 = (24 hours per day/8 hours per shift) x(7 days in a week/5 days in a work week).

HARP2 provides for the specification of the WAF for worker cancer risk assessments, and this was entered as 4.2 to make this adjustment.

Noncancer Chronic Health Risks

Chronic RELs are used to assess not only residential health impacts, but also worker and student health impacts.

Potential chronic noncancer health impacts use the long-term annual average concentration regardless of the emitting facility's schedule. As per OEHHA guidance, no adjustment factors were used to adjust this concentration for workers or students.

HARP2 Inputs and Results

HARP2 Output files are included to document the HRA exposure parameters and risk results.

HARP2 - HRACalc (dated 22118) 8/19/2024 9:36:47 AM - Output Log

GLCs loaded successfully
Pollutants loaded successfully
****
RISK SCENARIO SETTINGS

Receptor Type: Worker
Scenario: Cancer
Calculation Method: HighEnd

****
EXPOSURE DURATION PARAMETERS FOR CANCER

Start Age: -0.25
Total Exposure Duration: 0.98

Exposure Duration Bin Distribution
3rd Trimester Bin: 0.25
0<2 Years Bin: 0.98
2<9 Years Bin: 0
2<16 Years Bin: 0
16<30 Years Bin: 0
16 to 70 Years Bin: 0

****
PATHWAYS ENABLED

NOTE: Inhalation is always enabled and used for all assessments. The remaining pathways are only used for cancer and noncancer chronic assessments.

Inhalation: True
Soil: False
Dermal: False
Mother's milk: False
Water: False
Fish: False
Homegrown crops: False
Beef: False
Dairy: False
Pig: False
Chicken: False
Egg: False

****
INHALATION

Daily breathing rate: RMP

Worker Adjustment Factors
Worker adjustment factors enabled: NO

Fraction at time at home
3rd Trimester to 16 years: OFF
16 years to 70 years: ON

****
TIER 2 SETTINGS

Tier2 adjustments were used in this assessment. Please see the input file for details.
Tier2 - What was changed: ED or start age changed|
Calculating cancer risk
Cancer risk saved to: F:\Jobs\60500001\ConHRA\HARP2\CanRES_DPM_UM_CancerRisk.csv
HRA ran successfully

*HARP - HRACalc v22118 8/19/2024 9:36:47 AM -
Cancer Risk - Input File: F:\Jobs\60500001\ConHRA\HARP2\CanRES_DPM_UM_HRAInput.hra

GRP1	GRP2	Pollutant	Conc (ug/m3)	Risk	Scenario	Inhaation Risk
DPM_UM	MEIR	DieselExhPM	0.15458	1.9274e-05	0.98YrCancerRMP_Inh_FAH16to70	1.9274e-05
DPM_UM	Sens_Res	DieselExhPM	0.15365	1.9158e-05	0.98YrCancerRMP_Inh_FAH16to70	1.9158e-05
DPM_UM	Sens_Res	DieselExhPM	0.15161	1.8904e-05	0.98YrCancerRMP_Inh_FAH16to70	1.8904e-05
DPM_UM	Sens_Res	DieselExhPM	0.15102	1.883e-05	0.98YrCancerRMP_Inh_FAH16to70	1.883e-05

GLCs loaded successfully
Pollutants loaded successfully
****
RISK SCENARIO SETTINGS

Receptor Type: Worker
Scenario: Cancer
Calculation Method: HighEnd

****
EXPOSURE DURATION PARAMETERS FOR CANCER

Start Age: 18
Total Exposure Duration: 1.23

Exposure Duration Bin Distribution
3rd Trimester Bin: 0
0<2 Years Bin: 0
2<9 Years Bin: 0
2<16 Years Bin: 0
16<30 Years Bin: 1.23
16 to 70 Years Bin: 0

****
PATHWAYS ENABLED

NOTE: Inhalation is always enabled and used for all assessments. The remaining pathways are only used for cancer and noncancer chronic assessments.

Inhalation: True
Soil: False
Dermal: False
Mother's milk: False
Water: False
Fish: False
Homegrown crops: False
Beef: False
Dairy: False
Pig: False
Chicken: False
Egg: False

****
INHALATION

Daily breathing rate: RMP

Worker Adjustment Factors
NOTE: The worker adjustment factors below are only used for cancer assessments. However, the GLC adjustment factor is also applied to 8-hr noncancer chronic assessments.
Worker adjustments factors enabled: YES
GLC adjustment factor: 4.2
Exposure frequency: 250

Fraction at time at home
3rd Trimester to 16 years: OFF
16 years to 70 years: OFF

****
TIER 2 SETTINGS

Tier2 adjustments were used in this assessment. Please see the input file for details.
Tier2 - What was changed: ED or start age changed|
Calculating cancer risk
Cancer risk saved to: F:\Jobs\60500001\ConHRA\HARP2\CanMEIW_DPM_UM_CancerRisk.csv
HRA ran successfully

*HARP - HRACalc v22118 8/19/2024 10:05:59 AM -
Cancer Risk - Input File: F:\Jobs\60500001\ConHRA\HARP2\CanMEIW_DPM_UM_HRAInput.hra

GRP1	GRP2	Pollutant	Conc (ug/m3)	Risk	Scenario	Inhaation Risk
DPM_UM	MEIW	DieselExhPM	0.02822	4.0954e-07	1.23YrCancerRMP_Inh	4.0954e-07
DPM_UM	Public	DieselExhPM	0.02232	3.2391e-07	1.23YrCancerRMP_Inh	3.2391e-07

HARP2 - HRACalc (dated 22118) 8/19/2024 9:43:00 AM - Output Log

GLCs loaded successfully
Pollutants loaded successfully
****
RISK SCENARIO SETTINGS

Receptor Type: Resident
Scenario: Cancer
Calculation Method: HighEnd

****
EXPOSURE DURATION PARAMETERS FOR CANCER

Start Age: -0.25
Total Exposure Duration: 0.98

Exposure Duration Bin Distribution
3rd Trimester Bin: 0.25
0<2 Years Bin: 0.98
2<9 Years Bin: 0
2<16 Years Bin: 0
16<30 Years Bin: 0
16 to 70 Years Bin: 0

****
PATHWAYS ENABLED

NOTE: Inhalation is always enabled and used for all assessments. The remaining pathways are only used for cancer and noncancer chronic assessments.

Inhalation: True
Soil: False
Dermal: False
Mother's milk: False
Water: False
Fish: False
Homegrown crops: False
Beef: False
Dairy: False
Pig: False
Chicken: False
Egg: False

****
INHALATION

Daily breathing rate: RMP

Worker Adjustment Factors
Worker adjustment factors enabled: NO

Fraction at time at home
3rd Trimester to 16 years: OFF
16 years to 70 years: OFF

****
TIER 2 SETTINGS

Tier2 adjustments were used in this assessment. Please see the input file for details.
Tier2 - What was changed: ED or start age changed|
Calculating cancer risk
Cancer risk saved to: F:\Jobs\60500001\ConHRA\HARP2\CanRES_DPM_T4_CancerRisk.csv
HRA ran successfully

*HARP - HRACalc v22118 8/19/2024 9:43:00 AM -
Cancer Risk - Input File: F:\Jobs\60500001\ConHRA\HARP2\CanRES_DPM_T4_HRAInput.hra

GRP1	GRP2	Pollutant	Conc (ug/m3)	Risk	Scenario	Inhaation Risk
DPM_T4	MEIR	DieselExhPM	0.04169	7.2774e-06	0.98YrCancerRMP_Inh	7.2774e-06
DPM_T4	Sens_Res	DieselExhPM	0.04141	7.2286e-06	0.98YrCancerRMP_Inh	7.2286e-06
DPM_T4	Sens_Res	DieselExhPM	0.04089	7.1378e-06	0.98YrCancerRMP_Inh	7.1378e-06
DPM_T4	Sens_Res	DieselExhPM	0.0407	7.1046e-06	0.98YrCancerRMP_Inh	7.1046e-06

GLCs loaded successfully
Pollutants loaded successfully
****
RISK SCENARIO SETTINGS

Receptor Type: Worker
Scenario: Cancer
Calculation Method: HighEnd

****
EXPOSURE DURATION PARAMETERS FOR CANCER

Start Age: 18
Total Exposure Duration: 1.23

Exposure Duration Bin Distribution
3rd Trimester Bin: 0
0<2 Years Bin: 0
2<9 Years Bin: 0
2<16 Years Bin: 0
16<30 Years Bin: 1.23
16 to 70 Years Bin: 0

****
PATHWAYS ENABLED

NOTE: Inhalation is always enabled and used for all assessments. The remaining pathways are only used for cancer and noncancer chronic assessments.

Inhalation: True
Soil: False
Dermal: False
Mother's milk: False
Water: False
Fish: False
Homegrown crops: False
Beef: False
Dairy: False
Pig: False
Chicken: False
Egg: False

****
INHALATION

Daily breathing rate: RMP

Worker Adjustment Factors
NOTE: The worker adjustment factors below are only used for cancer assessments. However, the GLC adjustment factor is also applied to 8-hr noncancer chronic assessments.
Worker adjustments factors enabled: YES
GLC adjustment factor: 4.2
Exposure frequency: 250

Fraction at time at home
3rd Trimester to 16 years: OFF
16 years to 70 years: OFF

****
TIER 2 SETTINGS

Tier2 adjustments were used in this assessment. Please see the input file for details.
Tier2 - What was changed: ED or start age changed|
Calculating cancer risk
Cancer risk saved to: F:\Jobs\60500001\ConHRA\HARP2\CanMEIW_DPM_T4_CancerRisk.csv
HRA ran successfully

*HARP - HRACalc v22118 8/19/2024 9:45:14 AM -
Cancer Risk - Input File: F:\Jobs\60500001\ConHRA\HARP2\CanMEIW_DPM_T4_HRAInput.hra

GRP1	GRP2	Pollutant	Conc (ug/m3)	Risk	Scenario	Inhaation Risk
DPM_T4	MEIW	DieselExhPM	0.00762	1.1058e-07	1.23YrCancerRMP_Inh	1.1058e-07
DPM_T4	Public	DieselExhPM	0.0073	1.0594e-07	1.23YrCancerRMP_Inh	1.0594e-07

HARP2 - HRACalc (dated 22118) 8/19/2024 9:24:37 AM - Output Log

GLCs loaded successfully
Pollutants loaded successfully
****
RISK SCENARIO SETTINGS

Receptor Type: Resident
Scenario: NCChronic
Calculation Method: HighEnd

****
EXPOSURE DURATION PARAMETERS FOR CANCER
Exposure duration are only adjusted for cancer assessments

****
PATHWAYS ENABLED

NOTE: Inhalation is always enabled and used for all assessments. The remaining pathways are only used for cancer and noncancer chronic assessments.

Inhalation: True
Soil: False
Dermal: False
Mother's milk: False
Water: False
Fish: False
Homegrown crops: False
Beef: False
Dairy: False
Pig: False
Chicken: False
Egg: False

****
INHALATION

Daily breathing rate: RMP

Worker Adjustment Factors
Worker adjustment factors enabled: NO

Fraction at time at home
NOTE: Exposure duration (i.e., start age, end age, ED, & FAH) are only adjusted for cancer assessments.

****
TIER 2 SETTINGS

Tier2 adjustments were used in this assessment. Please see the input file for details.
Tier2 - What was changed: ED or start age changed|
Calculating chronic risk
Chronic risk saved to: F:\Jobs\60500001\ConHRA\HARP2\ChronRES_DPM_UM_NCChronicRisk.csv
HRA ran successfully

UTME	UTMN	Pollutant	Conc (ug/m3)	CV	CNS	IMMUN	KIDNEY	GILV	REPRO	RESP	SKIN	EYE	B/T	ENDO	BLOOD	ODOR	GEN
DPM_UM	MEIR	DieselExhPM	0.15458	0.0	0.0	0.0	0.0	0.0	0.0	0.030916	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DPM_UM	Sens_Res	DieselExhPM	0.15365	0.0	0.0	0.0	0.0	0.0	0.0	0.03073	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DPM_UM	Sens_Res	DieselExhPM	0.15161	0.0	0.0	0.0	0.0	0.0	0.0	0.030322	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DPM_UM	Sens_Res	DieselExhPM	0.15102	0.0	0.0	0.0	0.0	0.0	0.0	0.030204	0.0	0.0	0.0	0.0	0.0	0.0	0.0

GLCs loaded successfully
Pollutants loaded successfully
****
RISK SCENARIO SETTINGS

Receptor Type: Worker
Scenario: NCChronic
Calculation Method: HighEnd

****
EXPOSURE DURATION PARAMETERS FOR CANCER
Exposure duration are only adjusted for cancer assessments

****
PATHWAYS ENABLED

NOTE: Inhalation is always enabled and used for all assessments. The remaining pathways are only used for cancer and noncancer chronic assessments.

Inhalation: True
Soil: False
Dermal: False
Mother's milk: False
Water: False
Fish: False
Homegrown crops: False
Beef: False
Dairy: False
Pig: False
Chicken: False
Egg: False

****
INHALATION

Daily breathing rate: RMP

Worker Adjustment Factors
NOTE: The worker adjustment factors below are only used for cancer assessments. However, the GLC adjustment factor is also applied to 8-hr noncancer chronic assessments.
Worker adjustments factors enabled: YES
GLC adjustment factor: 4.2
Exposure frequency: 250

Fraction at time at home
NOTE: Exposure duration (i.e., start age, end age, ED, & FAH) are only adjusted for cancer assessments.

****
TIER 2 SETTINGS

Tier2 adjustments were used in this assessment. Please see the input file for details.
Tier2 - What was changed: ED or start age changed|
Calculating chronic risk
Chronic risk saved to: F:\Jobs\60500001\ConHRA\HARP2\ChronMEIW_DPM_UM_NCChronicRisk.csv
HRA ran successfully

UTME	UTMN	Pollutant	Conc (ug/m3)	CV	CNS	IMMUN	KIDNEY	GILV	REPRO	RESP	SKIN	EYE	B/T	ENDO	BLOOD	ODOR	GEN
DPM_UM	MEIW	DieselExhPM	0.02822	0.0	0.0	0.0	0.0	0.0	0.0	0.005644	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DPM_UM	Public	DieselExhPM	0.02232	0.0	0.0	0.0	0.0	0.0	0.0	0.004464	0.0	0.0	0.0	0.0	0.0	0.0	0.0

HARP2 - HRACalc (dated 22118) 8/19/2024 9:29:17 AM - Output Log

GLCs loaded successfully
Pollutants loaded successfully
****
RISK SCENARIO SETTINGS

Receptor Type: Worker
Scenario: NCChronic
Calculation Method: HighEnd

****
EXPOSURE DURATION PARAMETERS FOR CANCER
Exposure duration are only adjusted for cancer assessments

****
PATHWAYS ENABLED

NOTE: Inhalation is always enabled and used for all assessments. The remaining pathways are only used for cancer and noncancer chronic assessments.

Inhalation: True
Soil: False
Dermal: False
Mother's milk: False
Water: False
Fish: False
Homegrown crops: False
Beef: False
Dairy: False
Pig: False
Chicken: False
Egg: False

****
INHALATION

Daily breathing rate: RMP

Worker Adjustment Factors
Worker adjustment factors enabled: NO

Fraction at time at home
NOTE: Exposure duration (i.e., start age, end age, ED, & FAH) are only adjusted for cancer assessments.

****
TIER 2 SETTINGS

Tier2 adjustments were used in this assessment. Please see the input file for details.
Tier2 - What was changed: ED or start age changed|
Calculating chronic risk
Chronic risk saved to: F:\Jobs\60500001\ConHRA\HARP2\ChronRES_DPM_T4_NCChronicRisk.csv
HRA ran successfully

UTME	UTMN	Pollutant	Conc (ug/m3)	CV	CNS	IMMUN	KIDNEY	GILV	REPRO	RESP	SKIN	EYE	B/T	ENDO	BLOOD	ODOR	GEN
DPM_T4	MEIR	DieselExhPM	0.04169	0.0	0.0	0.0	0.0	0.0	0.0	0.008338	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DPM_T4	Sens_Res	DieselExhPM	0.04141	0.0	0.0	0.0	0.0	0.0	0.0	0.008282	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DPM_T4	Sens_Res	DieselExhPM	0.04089	0.0	0.0	0.0	0.0	0.0	0.0	0.008178	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DPM_T4	Sens_Res	DieselExhPM	0.0407	0.0	0.0	0.0	0.0	0.0	0.0	0.00814	0.0	0.0	0.0	0.0	0.0	0.0	0.0

GLCs loaded successfully
Pollutants loaded successfully
****
RISK SCENARIO SETTINGS

Receptor Type: Worker
Scenario: NCChronic
Calculation Method: HighEnd

****
EXPOSURE DURATION PARAMETERS FOR CANCER
Exposure duration are only adjusted for cancer assessments

****
PATHWAYS ENABLED

NOTE: Inhalation is always enabled and used for all assessments. The remaining pathways are only used for cancer and noncancer chronic assessments.

Inhalation: True
Soil: False
Dermal: False
Mother's milk: False
Water: False
Fish: False
Homegrown crops: False
Beef: False
Dairy: False
Pig: False
Chicken: False
Egg: False

****
INHALATION

Daily breathing rate: RMP

Worker Adjustment Factors
NOTE: The worker adjustment factors below are only used for cancer assessments. However, the GLC adjustment factor is also applied to 8-hr noncancer chronic assessments.
Worker adjustments factors enabled: YES
GLC adjustment factor: 4.2
Exposure frequency: 250

Fraction at time at home
NOTE: Exposure duration (i.e., start age, end age, ED, & FAH) are only adjusted for cancer assessments.

****
TIER 2 SETTINGS

Tier2 adjustments were used in this assessment. Please see the input file for details.
Tier2 - What was changed: ED or start age changed|
Calculating chronic risk
Chronic risk saved to: F:\Jobs\60500001\ConHRA\HARP2\ChronMEIW_DPM_T4_NCChronicRisk.csv
HRA ran successfully

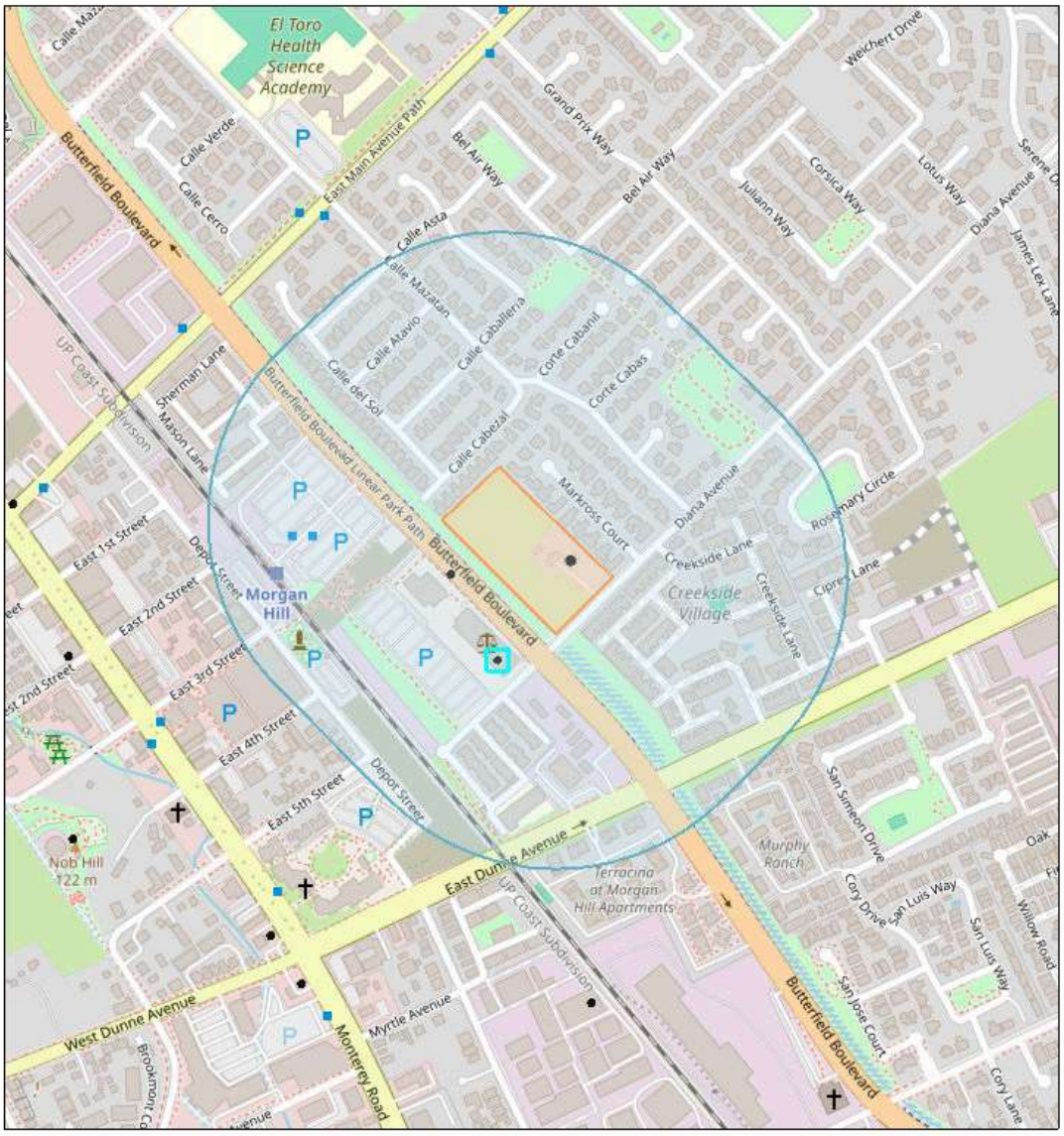
UTME	UTMN	Pollutant	Conc (ug/m3)	CV	CNS	IMMUN	KIDNEY	GILV	REPRO	RESP	SKIN	EYE	B/T	ENDO	BLOOD	ODOR	GEN
DPM_UM	MEIW	DieselExhPM	0.00762	0.0	0.0	0.0	0.0	0.0	0.0	0.001524	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DPM_UM	Public	DieselExhPM	0.00603	0.0	0.0	0.0	0.0	0.0	0.0	0.001206	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Screening Report - Diana MH Townhomes Project

Area of Interest (AOI) Information

Area : 5,408,255.86 ft²

Aug 16 2024 7:32:36 Pacific Daylight Time



Summary

Name	Count	Area(ft²)	Length(ft)
Permitted Stationary Sources	2	N/A	N/A

Permitted Stationary Sources

#	Address	Cancer_Ris	Chronic_Ha	City	County
1	301 Diana Avenue	2.78	0.00	Morgan Hill	Santa Clara
2	17275 Butterfield Blvd	1.47	0.00	Morgan Hill	Santa Clara

#	Details	Facility_I	Facility_N	Latitude	Longitude
1	Generator	20861	Judicial Council of California JCC 43-N1	37.13	-121.65
2	Generator	17708	Santa Clara County-FAF	37.13	-121.65

#	NAICS	NAICS_Indu	NAICS_Sect	NAICS_Subs	PM25
1	922110	Courts	Public Administration	Justice, Public Order, and Safety Activities	0.00
2	922190	Other Justice, Public Order, and Safety Activities	Public Administration	Justice, Public Order, and Safety Activities	0.00

#	State	Zip	Count
1	CA	95037	1
2	CA	95037	1

NOTE: A larger buffer than 1,000 may be warranted depending on proximity to significant sources.

BAAQMD Cumulative HRA for Sensitive Receptors - Diana MH Townhomes Project

Receptors	UTMX	UTMY	Road Canc	Road Chro	Road PM2.	Rail Cance	Rail Chron	Rail PM2.5
MEIR	620279.6	4110043	7.802723	0.028273	0.195551	1.466045	0.000394	0.001851
Sensitive Residential Receptor	620123.3	4110243	5.0994	0.020045	0.155799	1.365092	0.000367	0.001723
Sensitive Residential Receptor	620287.7	4110231	4.832932	0.019472	0.1563	0.763068	0.000205	0.000963
Sensitive Residential Receptor	620113.6	4110232	5.0994	0.020045	0.155799	1.602761	0.00043	0.002023
MEIW	620269.9	4109888	13.98981	0.043462	0.241565	2.036104	0.000547	0.00257
Public/Government	620142.2	4110026	9.342396	0.031331	0.188908	2.012816	0.000541	0.002541

Data Provided By: BAAQMD as raster file (.tif) datasets
Roadway Screening Tool - Cancer Risk Last Updated December 8 2022
Roadway Screening Tool - Chronic Hazard Last Updated December 8 2022
Roadway Screening Tool - PM2.5 Last Updated December 8 2022
Rail Screening Tool - Cancer Risk Last Updated January 30 2023
Rail Screening Tool - Chronic Hazard Last Updated January 30 2023
Rail Screening Tool - PM2.5 Last Updated January 30 2023

BAAQMD Cumulative HRA for Project Site - Diana MH Townhomes Project

UTMX	UTMY	Road Canc	Road Chro	Road PM2.	Rail Cance	Rail Chroni	Rail PM2.5	
620233.5	4110056	8.606765	0.028663	0.180679	1.490704	0.0004	0.001882	(Corner of Butterfield Blvd and Diana Ave)
620163.1	4110117	5.573712	0.019253	0.130732	2.032233	0.000546	0.002565	
620113.4	4110173	5.580945	0.020069	0.14184	2.128617	0.000572	0.002687	
620155.8	4110232	4.716482	0.017058	0.124392	1.592296	0.000428	0.00201	
620213.7	4110175	5.046741	0.017728	0.124742	1.537912	0.000413	0.001941	
620254.6	4110141	6.025418	0.021648	0.153001	1.304733	0.00035	0.001647	

Data Provided By: BAAQMD as raster file (.tif) datasets
Roadway Screening Tool - Cancer Risk Last Updated December 8 2022
Roadway Screening Tool - Chronic Hazard Last Updated December 8 2022
Roadway Screening Tool - PM2.5 Last Updated December 8 2022
Rail Screening Tool - Cancer Risk Last Updated May 9 2024
Rail Screening Tool - Chronic Hazard Last Updated May 9 2024
Rail Screening Tool - PM2.5 Last Updated May 9 2024

Diana Morgan Hill Townhomes

Summary of Fossil Fuel Energy Use During Construction

Construction equipment fuel	35,082	gallons (diesel)
Construction vehicle fuel	11,716	gallons (gasoline, diesel)
Total construction fuel	**46,799**	**gallons (gasoline, diesel)**

Diana Morgan Hill Townhomes

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor	PhaseDays	FuelConsumption
Demolition	Rubber Tired Dozers	Diesel	Average	2	8	367	0.4	20	2536.7
Demolition	Excavators	Diesel	Average	3	8	36	0.38	20	354.6
Demolition	Concrete/Industrial Saws	Diesel	Average	1	8	33	0.73	20	208.1
Site Preparation	Rubber Tired Dozers	Diesel	Average	3	8	367	0.4	10	1902.5
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	4	8	84	0.37	10	537.1
Grading	Graders	Diesel	Average	1	8	148	0.41	20	524.3
Grading	Excavators	Diesel	Average	1	8	36	0.38	20	118.2
Grading	Tractors/Loaders/Backhoes	Diesel	Average	3	8	84	0.37	20	805.6
Grading	Rubber Tired Dozers	Diesel	Average	1	8	367	0.4	20	1268.4
Building Construction	Forklifts	Diesel	Average	3	8	82	0.2	230	4888.5
Building Construction	Generator Sets	Diesel	Average	1	8	14	0.74	230	1029.4
Building Construction	Cranes	Diesel	Average	1	7	367	0.29	230	9253.0
Building Construction	Welders	Diesel	Average	1	8	46	0.45	230	2056.8
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	3	7	84	0.37	230	8106.3
Paving	Pavers	Diesel	Average	2	8	81	0.42	20	587.9
Paving	Paving Equipment	Diesel	Average	2	8	89	0.36	20	553.7
Paving	Rollers	Diesel	Average	2	8	36	0.38	20	236.4
Architectural Coating	Air Compressors	Diesel	Average	1	6	37	0.48	20	115.1
									35082.4

ARB 2021, Low Emission Diesel (LED) Study: Biodiesel and Renewable Diesel Emissions in Legacy and New Technology Diesel Engines, November 2021
Average Value for CARB Reference Fuel - Nonroad Transient Cycle - BSFC = 0.054 gal/bhp-hr

Off-Road Construction Equipment
Fuel Consumption

Diana Morgan Hill Townhomes
Energy Calculations - Construction Vehicle Fuel
Source: AQ/GHG Appendix, CalEEMod Output, EMFAC2021 v1.0.2

Vehicle Type	Total VMT (mi)	mi/gal	gal	Vehicle Cat
Worker	195,901	27.44	7,139	LDA,LDT1,LDT2
Vendor	22,063	6.83	3,229	HHDT,MHDT
Hauling	8,060	5.98	1,348	HHDT
Onsite truck	0	5.98	0	HHDT
	226,024		**11,716**	**gallons**
	Combined VMT			

Note: Fuel Economy Factors are from EMFAC2021 for: Santa Clara

Diana Morgan Hill Townhomes
Energy Calculations - Building Electricity Consumption

Operational Year	**2027**
County	**Santa Clara**

Building Energy Fuel	**Electricity (kWh/yr)**	**Natural Gas (MMBTU/yr)**
Condo/Townhouse	711031	-
Other Asphalt Surfaces	0	-
User Defined Recreational	0	-
Total Building Energy	711,031	-

Diana Morgan Hill Townhomes
Energy Calculations
Onroad Mobile Sources

Operational Year	**2027**	
County	**Santa Clara**	
Gasoline	**56,857**	**gallons**
Diesel	**5,547**	**gallons**
Natural Gas	**265**	**gallons**
Electricity	**44,549**	**kw-hr**

Diana Morgan Hill Townhomes
Energy Calculations - Operations Fuel Use from Mobile Sources

Santa Clara	Annual VMT	HHDT	LDA	LDT1	LDT2	LHDT1	LHDT2	MCY	MDV	MH	MHDT	OBUS	SBUS	UBUS	
2027	1,710,601	0.76%	52.26%	3.82%	23.43%	2.36%	0.59%	2.20%	13.16%	0.24%	0.95%	0.11%	0.07%	0.04%	100%

Total Operational FUEL Consumption for ALL LAND USES (gallons for fuels, Kw-hr for electricity)

Fuel	All Vehicles	HHDT	LDA	LDT1	LDT2	LHD1	LHD2	MCY	MDV	MH	MHDT	OBUS	SBUS	UBUS
Gasoline	56,857	1	24593	2420	14976	2498	360	886	9973	644	368	106	24	6
Diesel	5,547	1905	39	0	41	867	488		120	142	1626	156	106	56
Natural Gas	265	223									21	2	6	14
Electricity	44,549	425	38216	188	2374	551	138		2164		401	10	17	66

Fuel Consumption by Vehicle Category

Fuel Consumption for CVMT	Units	HHDT	LDA	LDT1	LDT2	LHD1	LHD2	MCY	MDV	MH	MHDT	OBUS	SBUS	UBUS
Gasoline	gal	1	24151	2417	14909	2498	360	886	9931	644	368	106	24	6
Diesel	gal	1905	39	0	41	867	488		120	142	1626	156	106	56
Natural Gas	gal	223									21	2	6	14
Plug-in Hybrid (Gasoline)	gal		443	3	67				42					
Fuel Consumption for EVMT	**Units**	**HHDT**	**LDA**	**LDT1**	**LDT2**	**LHD1**	**LHD2**	**MCY**	**MDV**	**MH**	**MHDT**	**OBUS**	**SBUS**	**UBUS**
Electricity	kwhr	425	32610	142	1502	551	138		1619		401	10	17	66
Plug-in Hybrid (Electricity)	kwhr		5606	46	872				544					

Fuel Consumption Factors	Units	HHDT	LDA	LDT1	LDT2	LHDT1	LHDT2	MCY	MDV	MH	MHDT	OBUS	SBUS	UBUS
Gasoline	mi/gal	4.3	32.2	26.8	26.2	10.2	9.0	42.6	21.6	4.4	5.0	5.0	10.1	9.3
Diesel	mi/gal	6.1	45.3	25.8	35.1	16.2	13.6		26.2	9.4	8.6	8.1	8.3	9.1
Natural Gas	mi/gal	5.2									7.2	8.0	5.6	5.9
Plug-in Hybrid	mi/gal		29.4	29.3	29.1				28.7					

Fuel Consumption Factors	Units	HHDT	LDA	LDT1	LDT2	LHDT1	LHDT2	MCY	MDV	MH	MHDT	OBUS	SBUS	UBUS
Electricity	kwhr/mi	1.84	0.37	0.36	0.35	0.65	0.65		0.36		1.09	1.11	1.05	1.74
Plug-in Hybrid	kwhr/mi	1.84	0.37	0.36	0.35	0.65	0.65		0.36		1.09	1.11	1.05	1.74

Total VMT Fraction by Fuel and Vehicle Category

Fuel	HHDT	LDA	LDT1	LDT2	LHDT1	LHDT2	MCY	MDV	MH	MHDT	OBUS	SBUS	UBUS
Gasoline	0.0%	86.9%	99.1%	97.5%	63.1%	32.1%	100.0%	95.4%	68.2%	11.2%	29.1%	20.9%	8.7%
Diesel	89.4%	0.2%	0.0%	0.4%	34.8%	65.8%		1.4%	31.8%	85.6%	69.7%	74.8%	74.1%
Natural Gas	8.8%									0.9%	0.7%	3.0%	11.8%
Electricity	1.8%	9.8%	0.6%	1.1%	2.1%	2.1%		2.0%		2.2%	0.5%	1.4%	5.5%
Plug-in Hybrid		3.1%	0.3%	1.1%				1.2%					
totals	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

CVMT by EMFAC Vehicle Type

Fuel	HHDT	LDA	LDT1	LDT2	LHDT1	LHDT2	MCY	MDV	MH	MHDT	OBUS	SBUS	UBUS
Plug-in Hybrid		46%	42%	44%				45%					

EVMT by EMFAC Vehicle Type

Fuel	HHDT	LDA	LDT1	LDT2	LHDT1	LHDT2	MCY	MDV	MH	MHDT	OBUS	SBUS	UBUS
Electricity	100%	100%	100%	100%	100%	100%		100%		100%	100%	100%	100%
Plug-in Hybrid		54%	58%	56%				55%					

CNG

CNG stands for Compressed Natural Gas, and is a growing alternative fuel source for cars, trucks and buses. Consisting of mostly methane (CH_4), it is produced and recovered alongside oil production, from coal beds, and frequently from landfills. To make use of it in vehicles, the natural gas is compressed and stored in a tank. A clean burning fuel, CNG delivers approximately the same energy as gasoline, but often with 20 to 25% fewer greenhouse gas emissions, making it attractive to users who want to lower their carbon footprint. CNG does require a conversion to run in a conventional gasoline or diesel engine, but popular vehicle manufacturers are adding dedicated CNG vehicles to their products, and currently, around 10 millions vehicles worldwide run on compressed natural gas.

CNG is sold in gasoline gallon equivalents (it normally is a gas) and has a CO_2 emission factor of 13.2 lbs per gallon equivalent, or 53.06 kgCO_2 per MMBtu.

Appendix B

Biological Resources Assessment

Biological Resources Assessment
Diana MH Townhomes Project
Morgan Hill, California

Prepared for:
Diana MH Homes, LLC
734 The Alameda
San José, CA 95126

Contact: Jeff Aguilar

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Contact: Mary Bean, Project Director
Robert Carroll, Senior Biologist

Date: July 29, 2024
Revised: December 12, 2024

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SECTION 1: INTRODUCTION

This Biological Resources Assessment (BRA) has been prepared by FirstCarbon Solutions (FCS) for the proposed Diana Morgan Hill Townhomes Project (proposed project). The purpose of the BRA is to (1) document existing and potentially occurring biological resources on the project site and adjacent areas; (2) analyze potential project-related impacts on regulated biological resources; (3) summarize relevant local, State, and federal regulations; and (4) recommend appropriate measures to mitigate potential impacts on biological resources.

1.1 - Project Location

The Study Area is located in the City of Morgan Hill, in Santa Clara County, California (Exhibit 1). Specifically, the Study Area is located at the northeastern corner of Diana Avenue and Butterfield Boulevard, at 375 Diana Avenue (Exhibit 2). The Study Area's Assessor's Parcel Numbers (APNs) include APN 726-12-001 and APN 726-12-004. The Study Area is 5.30 acres in size and is located within the United States Geological Survey (USGS) *Morgan Hill, California* 7.5-minute Topographic Quadrangle Map. The Study Area is surrounded to the north, east, and south by residential uses and is surrounded by public and commercial uses to the south and west. Additionally, an unnamed off-site flood control channel is located between Butterfield Boulevard and the Study Area.

1.2 - Project Description

The proposed project would demolish all existing on-site structures, remove four trees, and construct 93 townhome residential units in 16 separate buildings, at a density of 17.5 dwelling units per acre (du/acre). Townhomes would be grouped into buildings of six or seven units, with a total building construction area of approximately 223,515 square feet. In addition, the proposed project would construct approximately 34,970 square feet of common open space, 13,950 square feet of private open space, and two bioretention basins, one being 5,167 square feet and the other being 1,150 square feet. The proposed common open space would include various amenities such as barbecue areas, benches, exercise structures, etc. (Exhibit 3).

The proposed project would be accessed via a driveway connecting to Diana Avenue in the northeast corner of the project site, and internal circulation would be provided by an internal road. Additionally, the proposed project would provide 218 residential parking spaces and 31 visitor parking spaces.

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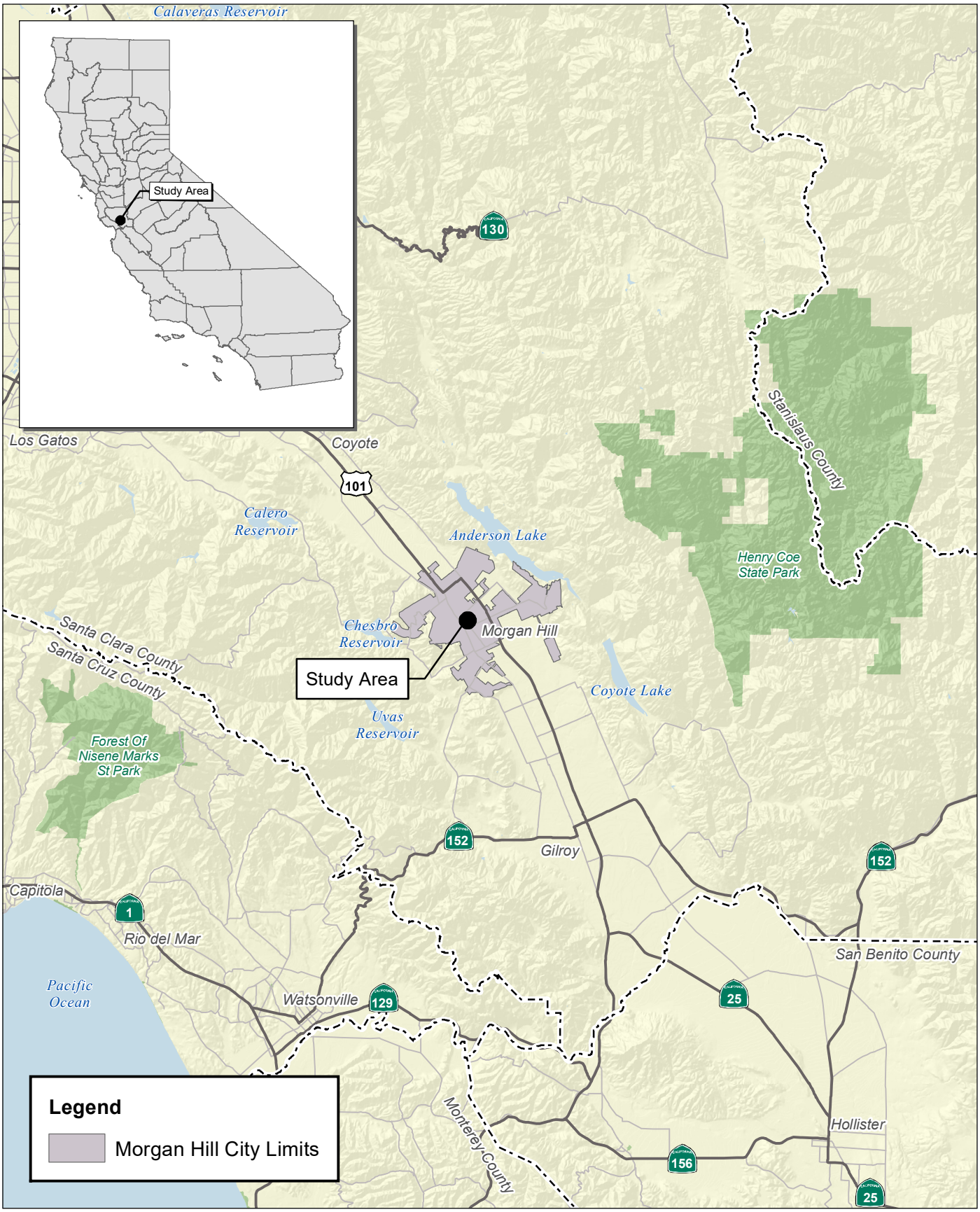

Source: Census 2000 Data, The California Spatial Information Library (CaSIL).

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5 2.5 0 5
Miles

Exhibit 1
Regional Location Map

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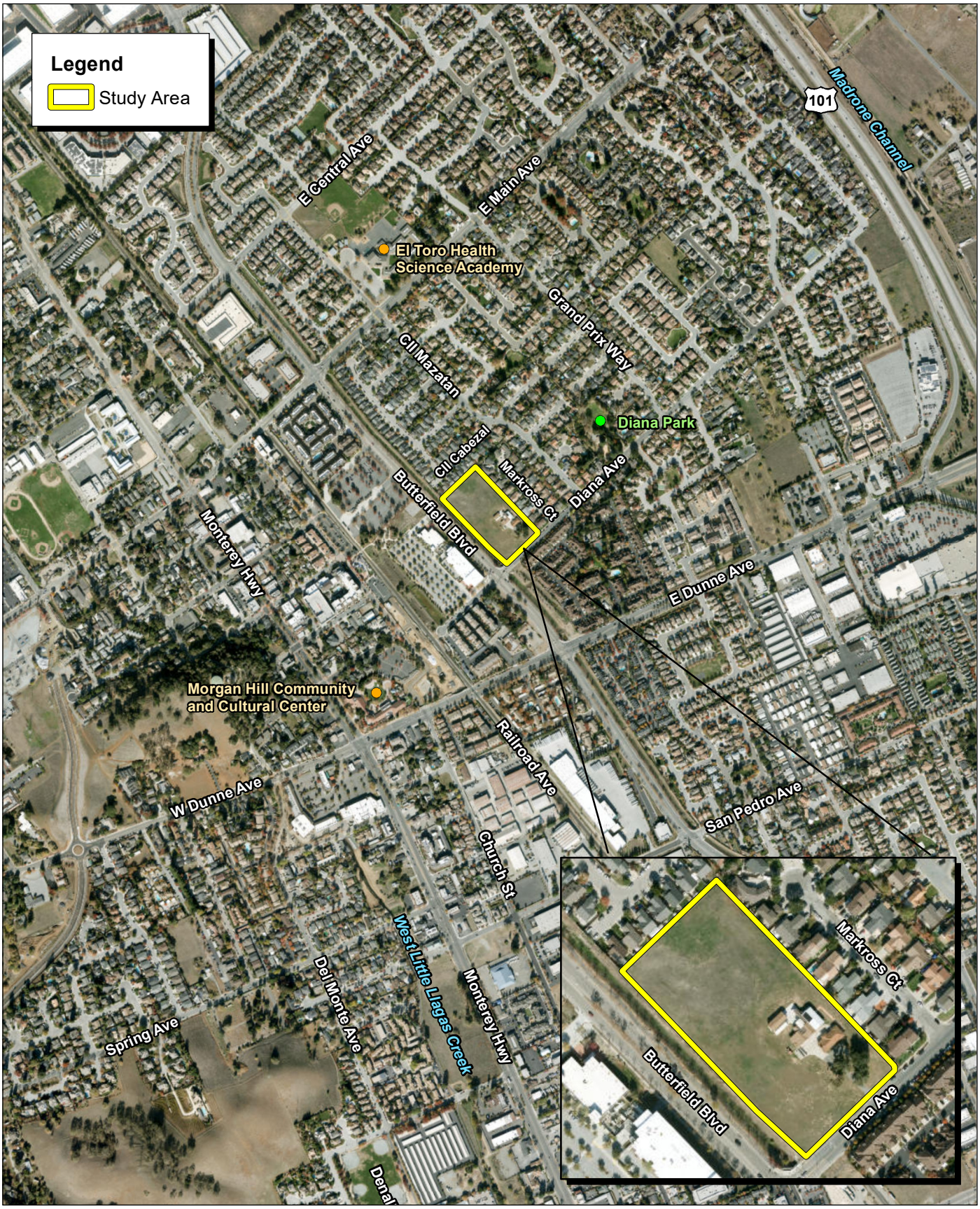

Source:ESRI Aerial Imagery.

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1,000 500 0 1,000 Feet

Exhibit 2
Local Vicinity Map

60500001 • 07/2024 | 2_local_vicinity.mxd

DIANA MH HOMES, LLC
DIANA MH TOWNHOMES RESIDENTIAL PROJECT
BIOLOGICAL RESOURCES ASSESSMENT

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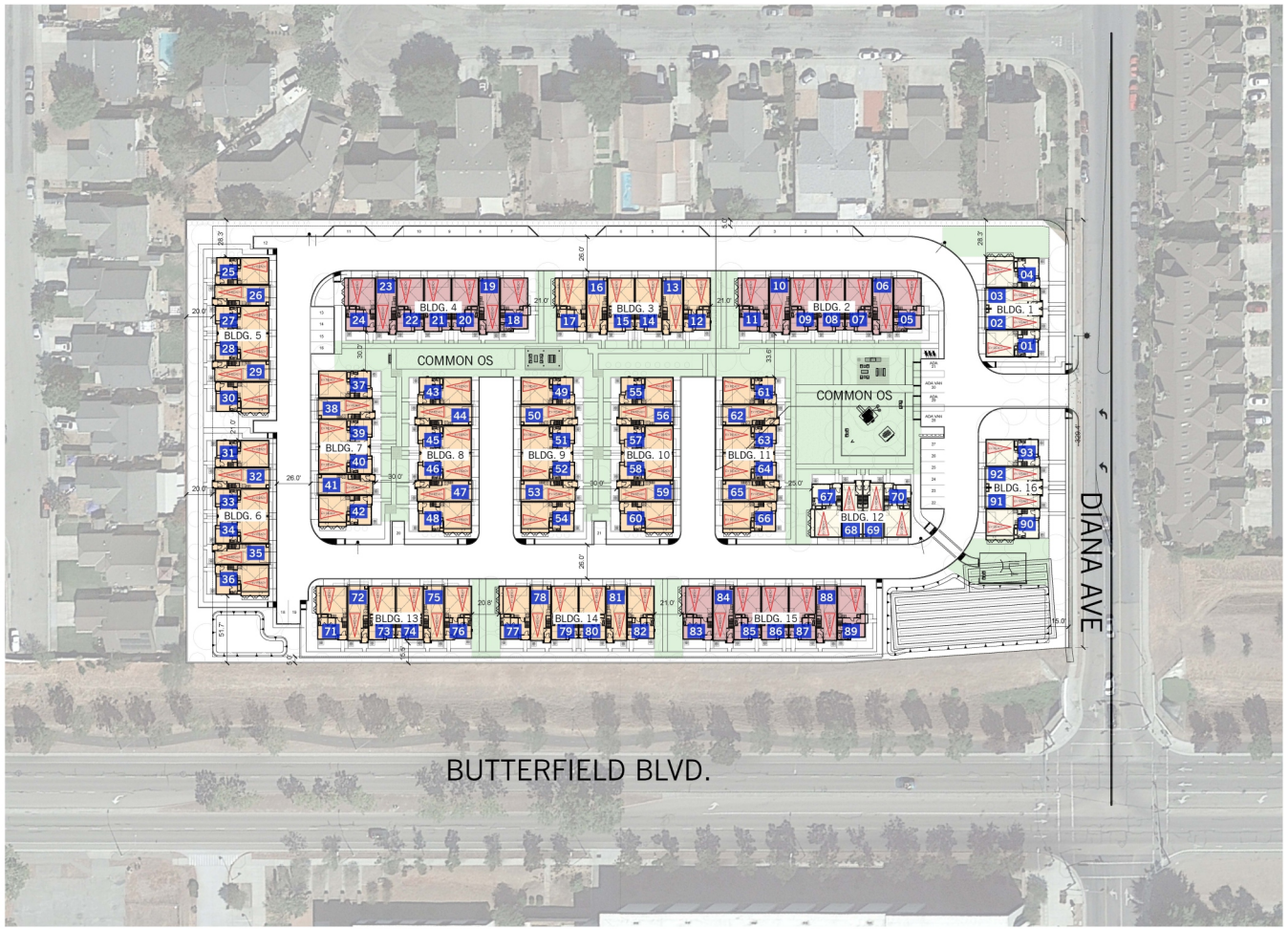

EV READY PARKING SPACE | 00 LOT NUMBER | 4-PLEX | 6-PLEX | 7-PLEX

PROJECT SUMMARY					
Site Location:	375 Diana Ave, Morgan Hill CA				
Accessor Parcel Number	726-12-001, 726-12-004				
Gross Parcel Area	237,402	sf	5.45	acres	
Net Parcel Area	231,049	sf	5.30	acres	
DEVELOPMENT REGULATIONS	**REQUIRED**				**PROVIDED**
GP Designation	RAM (Resi Attached Medium)				
GP Density	16 - 24 du/ net acre				17.5
Zoning Designation	RAM (Resi Attached Medium)				
Min. Lot Size					
Lot area	6,000	SF min			231,049
Lot width	60'	min			329.4'
Lot depth	85'	min			680.1'
Lot Coverage	60%	max			35.0%
Site area per dwelling unit	2,000 sf min				2,484
Setbacks	BASE ZONING				
Front	15'	min			15' min
Rear	20'	min			20' min
Interior Side	5'	min			29' min
Street Side	15'	min			15.5' min
Building height (overall)	3-stories /40'				3-stories /40'
OPEN SPACE	**REQUIRED**				**PROVIDED**
Common Open Space	150 sf per unit	min			376 sf per unit
Private Open Space	150 sf per unit	min			150 sf per unit
On-Site Recreational Amenities	(2) x Tier 1, (2) x Tier 2, (1) Tier (3)				(2) x Tier 1, (2) x Tier 2, (1) Tier (3)
Tier 1					Benches, Passive rec. area
Tier 2					Shade trellis area, 2 Picnic / BBQ Areas
Tier 3					Exercise structure
PARKING STANDARDS	**REQUIRED**				**PROVIDED**
	covered		uncovered		
2 bed - TH	1	/ unit	1	/ unit	2 covered / unit (64 Total)
4 bed - TH	1	/ unit	1.5	/ unit	2 covered/unit (122 Total) .5 uncovered/unit (31 Total)
Short term bike spaces	10% of req'd auto spaces				10% of req'd auto spaces (22 Total)
Long term bike spaces	1/ 5 units				1 / unit

ARCHITECTURAL SUMMARY

unit name	unit count	bedroom count	bathroom count	gross living area / unit	total gross living area	garage area	porch area	deck area	total deck area
th 1	32	2	2.5	1,415	45,280	598	20	100	3,200
th 2	29	4	3.5	1,975	57,275	498	15	110	3,190
th 2x	16	4	3.5	2,050	32,800	561	25	106	1,696
th 2C	13	4	3.5	1,963	25,519	498	26	81	1,053
th 3	3	4	3.5	2,093	6,279	514	51	105	315
Total	93				167,153				9,454

BUILDING CALCULATIONS

bldg name	bldg count	unit count / bldg	building area - level 1	building area - level 2	building area - level 3	building area / bldg	total building area	coverage area / bldg	total coverage area
4 unit TH	3	4	3,148	2,923	3,260	9,331	27,993	3,378	10,134
6 unit TH	10	6	4,852	4,524	5,039	14,415	144,150	5,181	51,810
7 unit TH	3	7	5,723	5,384	6,017	17,124	51,372	6,197	18,591
Total	16						223,515		80,535

N

0 20 40 80 120 FEET

Source: Dahlin Group, July 18, 2024.

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Exhibit 3
Site Plan

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SECTION 2: REGULATORY SETTING

2.1 - Federal

2.1.1 - Endangered Species Act

The United States Congress passed the Endangered Species Act in 1973 to protect those species that are endangered or threatened with extinction. The Endangered Species Act is intended to operate in conjunction with the National Environmental Policy Act (NEPA) to help protect the ecosystems upon which endangered and threatened species depend.

The Endangered Species Act prohibits the "take" of endangered or threatened wildlife species. "Take" is defined to include harassing, harming, pursuing, hunting, shooting, wounding, killing, trapping, capturing, or collecting wildlife species or any attempt to engage in such conduct (16 United States Code [USC] § 1531 *et seq*.). "Harm" is further defined to include significant habitat modification or degradation that results in death or injury to listed species by significantly impairing behavioral patterns (50 Code of Federal Regulations [CFR] § 17.3). "Harass" is defined as actions that create the likelihood of injury to listed species to such an extent as to significantly disrupt normal behavior patterns (50 CFR § 17.3). Actions that result in take can result in civil or criminal penalties.

The Endangered Species Act and the Clean Water Act (CWA) Section 404 guidelines prohibit the issuance of wetland permits for projects that jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of habitat of such species. The United States Army Corps of Engineers (USACE) must consult with the United States Fish and Wildlife Service (USFWS) and/or the National Marine Fisheries Service (NOAA Fisheries) when threatened or endangered species under their jurisdiction may be affected by a proposed project. In the context of the proposed project, Endangered Species Act consultation would be initiated if development resulted in take of a threatened or endangered species or if issuance of a Section 404 permit or other federal agency action could result in take of an endangered species or adversely modify critical habitat of such a species.

2.1.2 - Migratory Bird Treaty Act

Raptors (birds of prey), migratory birds, and other avian species are protected by several State and federal laws. The Migratory Bird Treaty Act (MBTA) implements international treaties between the United States and other nations devised to protect migratory birds, their parts, eggs, and nests from activities such as hunting, pursuing, capturing, killing, selling, and shipping, unless expressly authorized in the regulations or by permit. The MBTA prohibits the killing, possessing, or trading of migratory birds except in accordance with regulations prescribed by the Secretary of the Interior. All migratory birds and their nests are protected from take and other impacts under the MBTA (16 USC § 703, *et seq*.).

2.1.3 - Bald and Golden Eagle Protection Act

The golden eagle (*Aquila chrysaetos*) and bald eagle (*Haliaeetus leucocephalus*) are afforded additional protection under the Eagle Protection Act, amended in 1973 (16 USC § 669, *et seq*.) and the Bald and Golden Eagle Protection Act (16 USC §§ 668–668d).

2.1.4 - Clean Water Act

Section 404

The USACE administers Section 404 of the CWA, which regulates the discharge of dredge and fill material into waters of the United States.

As of the preparation of the original version of this report on June 26, 2024, the final "Revised Definition of Waters of the United States" rule was published in the Federal Register on January 18, 2023, and took effect on March 20, 2023. However, the final rule is not currently operative in certain states and for certain parties due to litigation. Moreover, the United States Environmental Protection Agency (EPA) and USACE (hereafter known as the agencies) are in receipt of the U.S. Supreme Court's May 25, 2023 decision in the case of *Sackett v. Environmental Protection Agency* [*Sackett*]. In light of this decision, the agencies will interpret the phrase "waters of the United States" consistent with the Supreme Court's decision in *Sackett*.

On August 29, 2023, the agencies issued a final ruling that amends the "Revised Definition of 'waters of the United States'" to conform key portions of the regulatory text to the U.S. Supreme Court's May 25, 2023 decision, defining "waters of the United States" as follows:

1. All waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide.
2. The interstate waters including interstate wetlands.
3. All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation, or destruction of which could affect interstate or foreign commerce including any such waters:
    i. Which are or could be used by interstate or foreign travelers for recreational or other purposes; or
    ii. From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or
    iii. Which are used or could be used for industrial purposes by industries in interstate commerce.
4. All impoundments of waters otherwise defined as waters of the United States under this definition.
5. Tributaries of waters identified in paragraphs (a)(1) through (4) of this section.
6. The territorial seas; and

7. Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (a)(1) through (6) of this section.
8. Waters of the United States do not include prior converted cropland. Notwithstanding the determination of an area's status as prior converted cropland by any other Federal agency, for the purposes of the Clean Water Act, the final authority regarding Clean Water Act jurisdiction remains with EPA.

   Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of the Clean Water Act (other than cooling ponds as defined in 40 Code of Federal Regulations 423.11(m) which also meet the criteria of this definition) are not waters of the United States.

Waters of the United States do not include prior converted cropland. Notwithstanding the determination of an area's status as prior converted cropland by any other federal agency, for the purposes of the CWA, the final authority regarding CWA jurisdiction remains with the EPA and/or USACE.

"Wetland" refers to areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and seasonal wetlands. Wetlands are considered jurisdictional if they fall under one of the categories of waters of the United States defined above. The USACE jurisdiction typically extends up to the ordinary high water mark (OHWM).

In general, a USACE permit must be obtained before placing fill in wetlands or other waters of the United States. The type of permit depends on the impacted acreage, the purpose of the proposed fill, and other factors.

Section 401

As stated in Section 401 of the CWA, "any applicant for a federal permit for activities that involve a discharge to waters of the State, shall provide the federal permitting agency a certification from the State in which the discharge is proposed that states that the discharge will comply with the applicable provisions under the federal Clean Water Act." Therefore, before the USACE will issue a Section 404 permit, applicants must apply for and receive a Section 401 Water Quality Certification from the Regional Water Quality Control Board (RWQCB).

2.2 - State

2.2.1 - CEQA Guidelines

The California Environmental Quality Act (CEQA) requires public agencies to evaluate potential impacts to special-status species and their habitat. The following CEQA Guidelines Appendix G checklist questions serve as thresholds of significance when evaluating the potential impacts of a proposed project on biological resources. Impacts are considered significant if a project would:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as being a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife (CDFW) or USFWS.
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the CDFW or USFWS.
- Have a substantial adverse effect on federally and State-protected wetlands as defined by Section 404 of the CWA (including but not limited to marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.
- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.
- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State Habitat Conservation Plan.

2.2.2 - California Endangered Species Act

The State of California enacted the California Endangered Species Act (CESA) in 1984. CESA pertains to State-listed endangered and threatened species. CESA requires State agencies to consult with the CDFW when preparing CEQA documents to ensure that the State lead agency actions do not jeopardize the continued existence of a listed species or result in the destruction or adverse modification of habitat essential to the continued existence of those species, if there are reasonable and prudent alternatives available (California Fish and Game Code [FGC] § 2080). CESA directs agencies to consult with the CDFW on projects or actions that could affect listed species, directs the CDFW to determine whether jeopardy would occur, and allows the CDFW to identify “reasonable and prudent alternatives” to the project consistent with conserving the species. CESA allows the CDFW to authorize exceptions to the State’s prohibition against take of a listed species if the “take” of a listed species is incidental to carrying out an otherwise lawful project that has been approved under CEQA (FGC § 2081).

2.2.3 - California Fish and Game Code

Under CESA, the CDFW has the responsibility for maintaining a list of endangered and threatened species (FGC § 2070). Fish and Game Code Sections 2050 through 2098 outline the protection provided to California’s rare, endangered, and threatened species. Fish and Game Code Section 2080 prohibits the taking of plants and animals listed under the CESA. Fish and Game Code Section 2081 established an incidental take permit program for State-listed species. The CDFW maintains a list of “candidate species,” which it formally notices as being under review for addition to the list of endangered or threatened species.

In addition, the Native Plant Protection Act of 1977 (NPPA) (FGC § 1900, *et seq*.) prohibits the taking, possessing, or sale within the State of any plants with a State designation of rare, threatened, or endangered (as defined by the CDFW). An exception to this prohibition in the NPPA allows landowners, to take listed plant species under specified circumstances, provided that the owners first notify the CDFW and give the agency at least 10 days to come and retrieve (and presumably replant) the plants before they are plowed under or otherwise destroyed. Fish and Game Code Section 1913 exempts from "take" prohibition "the removal of endangered or rare native plants from a canal, lateral ditch, building site, or road, or other right-of-way." Project impacts to these species are not considered significant unless the species are known to have a high potential to occur within the area of disturbance associated with construction of the proposed project.

In addition to formal listing under the Endangered Species Act and CESA, some species receive additional consideration by the CDFW and local lead agencies during the CEQA process. Species that may be considered for review are those listed as a "Species of Special Concern." The CDFW maintains lists of "Species of Special Concern" that serve as species "watch lists." Species with this status may have limited distributions or limited populations, and/or the extent of their habitats has been reduced substantially, such that their populations may be threatened. Thus, their populations are monitored, and they may receive special attention during environmental review. While they do not have statutory protection, they may be considered rare under CEQA and specific protection measures may be warranted. In addition to Species of Special Concern (SSC), the CDFW Special Animals List identifies animals that are tracked by the California Natural Diversity Database (CNDDB) and may be potentially vulnerable but warrant no federal interest and no legal protection.

Sensitive species that would qualify for listing but are not currently listed are afforded protection under CEQA. CEQA Guidelines Section 15065 (Mandatory Findings of Significance) requires that a substantial reduction in numbers of a rare or endangered species be considered a significant effect. CEQA Guidelines Section 15380 (Rare or Endangered Species) provides for the assessment of unlisted species as rare or endangered under CEQA if the species can be shown to meet the criteria for listing. Unlisted plant species on the California Native Plant Society (CNPS) List ranked 1A, 1B, and 2 would typically require evaluation under CEQA.

Fish and Game Code Sections 3500 to 5500 outline protection for fully protected species of mammals, birds, reptiles, amphibians, and fish. Species that are fully protected by these sections may not be taken or possessed at any time. The CDFW cannot issue permits or licenses that authorize the take of any fully protected species, except under certain circumstances such as scientific research and live capture and relocation of such species pursuant to a permit for the protection of livestock.

Under Fish and Game Code Section 3503.5, it is unlawful to take, possess, or destroy any birds in the orders of Falconiformes or Strigiformes (birds of prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto. To comply with the requirements of CESA, an agency reviewing a proposed project within its jurisdiction must determine whether any State-listed endangered or threatened species may be present in the project Study Area and determine whether the proposed project will have a

potentially significant impact on such species. In addition, the CDFW encourages informal consultation on any proposed project that may impact a candidate species.

Project-related impacts to species on the CESA endangered or threatened list would be considered significant. State-listed species are fully protected under the mandates of CESA. "Take" of protected species incidental to otherwise lawful management activities may be authorized under Fish and Game Code Section 206.591. Authorization from the CDFW would be in the form of an Incidental Take Permit.

Fish and Game Code Section 1602 requires any entity to notify the CDFW before beginning any activity that "may substantially divert or obstruct the natural flow of, or substantially change or use any material from the bed, channel, or bank of any river, stream, or lake" or "deposit debris, waste, or other materials that could pass into any river, stream, or lake." "River, stream, or lake" includes waters that are episodic and perennial and ephemeral streams, desert washes, and watercourses with a subsurface flow. A Lake or Streambed Alteration Agreement will be required if the CDFW determines that project activities may substantially adversely affect fish or wildlife resources through alterations to a covered body of water. CDFW jurisdiction typically extends to the edge or "drip line" of the riparian habitat or top of bank.

2.2.4 - California Department of Fish and Wildlife Species of Concern

In addition to formal listing under the Endangered Species Act and CESA, species receive additional consideration by the CDFW and local lead agencies during the CEQA process. Species that may be considered for review are included on a list of "Species of Special Concern," developed by the CDFW. It tracks species in California whose numbers, reproductive success, or habitat may be threatened. In addition to SSC, the CDFW identifies animals that are tracked by the CNDDB but warrant no federal interest and no legal protection. These species are identified as California Special Animals.

2.2.5 - California Porter-Cologne Water Quality Control Act

The CDFW is a trustee agency that has jurisdiction under Fish and Game Code Section 1600, *et seq.* Under Fish and Game Code Sections 1602 and 1603, a private party must notify the CDFW if a proposed project would "substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake designated by the department, or use any material from the streambeds . . . except when the department has been notified pursuant to Section 1601." Additionally, the CDFW may assert jurisdiction over native riparian habitat adjacent to aquatic features, including native trees over 4 inches in diameter at breast height (DBH). If an existing fish or wildlife resource may be substantially adversely affected by the activity, the CDFW may propose reasonable measures that will allow protection of those resources. If these measures are agreeable to the parties involved, they may enter into an agreement with the CDFW identifying the approved activities and associated mitigation measures.

Section 13260(a) of the Porter-Cologne Water Quality Control Act (contained in the California Water Code) requires any person discharging waste or proposing to discharge waste, other than to a community sewer system, within any region that could affect the quality of the waters of the State

(all surface and subsurface waters) to file a report of waste discharge. The discharge of dredged or fill material may constitute a discharge of waste that could affect the quality of waters of the State.

Historically, California relied on its authority under Section 401 of the CWA to regulate discharges of dredged or fill material to California waters. That section requires an applicant to obtain "water quality certification" from the California State Water Resources Control Board (State Water Board) through its RWQCBs to ensure compliance with State water quality standards before certain federal licenses or permits may be issued. The permits subject to Section 401 include permits for the discharge of dredged or fill material (CWA Section 404 permits) issued by the USACE. Waste discharge requirements under the Porter-Cologne Water Quality Control Act were typically waived for projects that required certification. With recent changes that limited jurisdiction of wetlands under the CWA, the State Water Board has had to rely on the report of waste discharge process.

2.2.6 - California State Water Resources Control Board/RWQCB Stormwater Management Permitting

While federal CWA National Pollutant Discharge Elimination System (NPDES) regulations allow two permitting options for construction-related stormwater discharges (individual permits and General Permits), the State Water Board has elected to adopt only one Statewide Construction General Permit at this time that will apply to all stormwater discharges associated with construction activity, except those located on Tribal lands in the Lake Tahoe Hydrologic Unit and those performed by the California Department of Transportation (Caltrans).

The Construction General Permit requires all dischargers where construction activity disturbs greater than 1 acre of land or those sites less than 1 acre that are part of a common plan of development or sale that disturbs more than one acre of land surface to:

1. Develop and implement a Storm Water Pollution Prevention Plan (SWPPP) which specifies Best Management Practices (BMPs) that will prevent all construction pollutants from contacting stormwater with the intent of keeping all products of erosion from moving off-site into receiving waters.
2. Eliminate or reduce non-stormwater discharges to storm sewer systems and other waters of the nation. Achieve quantitatively defined (i.e., numeric) pollutant-specific discharge standards, and conduct much more rigorous monitoring based on the project's projected risk level.
3. Perform inspections of all BMPs.

2.2.7 - California Native Plant Society

CDFW, in collaboration with CNPS and other technical experts, maintains a rank of plant species that are native to California and that have low population numbers, limited distribution, or are otherwise threatened with extinction. This information is published in the Inventory of Rare and Endangered Vascular Plants of California. The California Rare Plant Rank (CRPR) system includes six rarity and endangerment ranks that are defined as follows:

- **Rank 1A:** Plants presumed extirpated in California and either rare or extinct elsewhere
- **Rank 1B:** Plants rare, threatened, or endangered in California and elsewhere
- **Rank 2A:** Plants presumed extirpated in California but common elsewhere
- **Rank 2B:** Plants rare, threatened, or endangered in California but more common elsewhere
- **Rank 3:** Plants about which more information is needed
- **Rank 4:** Watch List: Plants of limited distribution

Potential impacts to populations of CRPR ranked plants receive consideration under CEQA review. All plants appearing on the CNPS List ranked 1 or 2 are considered to meet the CEQA Guidelines Section 15380 criteria. Rank 3 and 4 plants do not automatically meet this definition. Rank 4 plants do not clearly meet CEQA standards and thresholds for impact considerations. Nevertheless, some level of CEQA review is justified for CRPR 4 taxa, and under some circumstances, a full impact analysis is warranted. Taxa that can be shown to meet the criteria for endangered, rare, or threatened status under CEQA Section 15380(d) or that can be shown to be regionally rare or unique as defined in CEQA Section 15125(c) must be fully analyzed in a CEQA document. Some circumstances, such as local rarity, having occurrences peripheral to the taxon's distribution, or having occurrences on unusual substrates or rare and declining habitats, provide justification for treating some CRPR 4 taxa occurrences as regionally rare or unique. One limitation to fully analyzing impacts on CRPR 4 taxa is the difficulty in obtaining current data on the number and condition of the occurrences.[1]

2.3 - Regional and Local

2.3.1 - Habitat Conservation Plan

The proposed project is located within the Santa Clara Valley Habitat Plan (SCVHP). The SCVHP provides a framework for promoting the protection and recovery of natural resources, including a specific subset of special-status species, while streamlining the permitting process for planned development, infrastructure, and maintenance activities. The purpose of the SCVHP is to protect, enhance, and restore natural resources in specific areas of Santa Clara County and contribute to the recovery of specific special-status species. The SCVHP comprehensively evaluates natural-resource impacts and mitigation requirements in a way that is more efficient and effective for at-risk species and their essential habitats. The SCVHP was adopted on January 29, 2013, by Santa Clara County, the Santa Clara Valley Water District, and Santa Clara Valley Transportation Authority, as well as the cities of San José, Gilroy, and Morgan Hill.

SCVHP Chapter 6 - Conditions on Covered Activities and Application Process

Criteria to Verify or Identify a Watercourse as a Stream

While all Category 1 streams are mapped by the Plan, not all Category 2 streams are mapped. If a watercourse is not mapped by the Plan, but does meet the following criteria, it will be classified as a Category 2 stream. The following is based on the *Santa Clara Valley Water Resources Protection Collaborative (*2006).

[1] California Native Plant Society (CNPS). 2024. Considerations for Including CRPR 4 Plant Taxa in CEQA Biological Resource Impact Analysis. Sacramento, CA. Website: https://www.cnps.org/wp-content/uploads/2020/02/crpr4_technical_memo.pdf. Accessed June 13, 2024.

A watercourse which does not appear to fit into one of the two described stream categories may be considered a stream if the director of the planning department of the local jurisdiction determines that the watercourse complies with all of the following three criteria:

1. The watercourse is hydrologically connected to a waterway above and below the site or is connected to a spring, headwaters, lake, and/or bay based on satisfying at least one of the conditions identified in paragraph (A) below; and
2. The watercourse is within a defined channel which includes a bed, bank, and exhibits features that indicate actual or potential sediment movement based on satisfying at least one of the conditions identified in paragraph (B) below; and
3. The watercourse occupies a specific topographic position based on satisfying at least one of the conditions:
   a) The watercourse is either a 'U' or 'V' shaped channel typically located at the low point of a macro-topographic feature.
   b) The watercourse consists of bowl, 'U', or 'V' shaped topography with high points draining to valley or ravine as part of a large drainage network leading to large streams, lakes and/or a bay.
   c) The watercourse located on flatland consists of shallow bowl or 'U' shaped topography. Generally these streams flow from the hills toward a bay following the slope of the land.

Exceptions

For all proposed exceptions to the stream setbacks (inside or outside the urban service area), exceptions will be considered based on the following factors:

1. The existence of legal uses within the setback.
2. The extent to which meeting the required setback would result in a demonstrable hardship (i.e., denies an owner any economically viable use of his land or adversely affects recognized real property interests) for the applicant.
3. The extent to which meeting the required setback would require deviation from, exceptions to, or variances from other established policies, ordinances or standards regarding grading, access, water supply, wastewater treatment, disposal systems, geologic hazards, zoning, or other established code standards.
4. The stream setback exception does not preclude achieving the biological goals and objectives of the Habitat Plan or conflict with other applicable requirements of the Habitat Plan and local policies.

Exceptions may be requested through the standard application process described in Section 6.8, or through a separate request process. Applicants must apply for a stream-setback exception through their local jurisdiction. All private applications for stream-setback exceptions must be reviewed and approved by the local jurisdiction. For projects implemented by a local jurisdiction, exception requests must be made to the Implementing Entity. The findings required to approve the stream setback exception must be supported by factual information and judgments in the record.

2.3.2 - City of Morgan Hill Municipal Code

Chapter 12.32, Restrictions on Removal of Significant Trees

The City of Morgan Hill Municipal Code (Municipal Code) (Chapter 12.32, Restrictions on Removal of Significant Trees) defines an Ordinance Sized Tree as having a single stem or trunk of a circumference of 40 inches or more for a non-indigenous species and 18-inch or more for an indigenous species. Municipal Code Chapter 12.32.030 defines Street Trees as within the street right-of-way or within 5 feet of a sidewalk.

> It is unlawful for any person to cut down, remove, poison, or otherwise kill or destroy, or cause to be removed, any ordinance sized tree, street tree, or a community of trees on any city or private property without first securing a permit as provided in this chapter; provided, however, that a permit shall not be required for the following:
>
> A. Developments which have been reviewed and approved by the planning commission or community development director and the tree removal conforms with the landscape plans of those developments.
>
> B. Commercial tree farms.
>
> C. Non-indigenous trees within a single-family residential zoning district that do not qualify as street trees.
>
> A permit shall otherwise be required for removal of or pruning of which would reduce the canopy area by more than twenty-five percent of any trees defined in subsection G. of Section 12.32.020 of this chapter.

2.3.3 - City of Morgan Hill General Plan

Goal NRE-6 Protection of native plants, animals, and sensitive habitats.

Policies

NRE-6.1 **Natural State of Habitat.** Preserve all fish and wildlife habitats in their natural state whenever possible. Consider development impacts upon wildlife and utilize actions to mitigate those environmental impacts.

NRE-6.2 **Habitat Conservation Plan.** Support the implementation of the Santa Clara Valley Habitat Plan to protect wildlife, rare and endangered plants and animals, and sensitive habitats from loss and destruction.

NRE-6.3 **Urban Expansion Impacts.** Minimize impacts upon wildlife when considering annexations, urban service area extensions, and other governmental actions that permit urban development of previously undeveloped property.

NRE-6.4 **Tree Preservation and Protection**. Preserve and protect mature, healthy trees whenever feasible, particularly native trees, historically significant trees, and other

trees which are of significant size or of significant aesthetic value to the immediate vicinity or to the community as a whole.

NRE-6.5 **Soil and Erosion**. Require development to be designed to conserve soil and avoid erosion.

NRE-6.6 **Use of Native Plants.** Encourage use of native plants, especially drought-resistant species, in landscaping.

NRE-6.7 **Habitat Protection and Enhancement**. Encourage the protection, restoration, and enhancement of remaining native grasslands, oak woodlands, marshlands, and riparian habitat.

Action

NRE-6.A **Standard Measures for Construction Activities**. Develop a set of standard measures requiring construction activities to avoid disturbance to natural features to the extent feasible.

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SECTION 3: METHODS

3.1 - Literature Review

Literature review was conducted to analyze existing documentation regarding biological resources and habitat conditions within the Study Area and is summarized below.

3.1.1 - Existing Documentation

As part of the literature review, an FCS Biologist compiled and analyzed existing environmental documentation for the Study Area. This included a nine-quadrangle search, as further described in Section 3.1.4 below (Appendix A). This documentation included literature pertaining to the habitat requirements of special-status species with the potential to occur in the Study Area and project vicinity; and federal register listings, protocols, and species data provided by the USFWS, CDFW, and CNPS.

3.1.2 - Topographic Maps and Aerial Photographs

An FCS Biologist reviewed current USGS 7.5-minute topographic quadrangle map(s) and aerial photographs as a preliminary analysis of the existing conditions within the Study Area and immediate vicinity.[2] Information obtained from the topographic maps included elevation, general watershed information, and potential drainage feature locations using Google Earth in conjunction with the EPA Watershed Assessment, Tracking, and Environmental Results System (WATERS).[3] Aerial photographs provided a perspective of the current site conditions relative to on-site and off-site land use, plant community locations, and potential locations of wildlife movement corridors.

3.1.3 - Soils

The United States Department of Agriculture (USDA) has published soil surveys that describe the soil series (i.e., group of soils with similar profiles) occurring within a particular area.[4] These profiles include major horizons with similar thickness, arrangement, and other important characteristics. These series are further subdivided into soil mapping units that provide specific information regarding soil characteristics. Many special-status plant species have a limited distribution based exclusively on soil type. Therefore, pertinent USDA soil survey maps were reviewed to determine the existing soil mapping units within the Study Area and to inform whether the soil conditions on-site are potentially suitable for any special-status plant species. However, Natural Resources Conservation Service (NRCS) soil maps utilize an approximately 1.4-acre minimum mapping unit, and line placement may not be accurate on a large (i.e., parcel-level) scale.

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2 United States Geological Survey (USGS). 2024. National Geospatial Program. Website: https://apps.nationalmap.gov/viewer/. Accessed July 2, 2024.

3 United States Environmental Protection Agency (EPA). 2024. Watershed Assessment, Tracking and Environmental Results System (WATERS). Website: https://www.epa.gov/waterdata/waters-watershed-assessment-tracking-environmental-results-system. Accessed July 2, 2024.

4 United States Department of Agriculture (USDA). Natural Resources Conservation Service (NRCS). 2024. Web Soil Survey (WSS). Website: https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx. Accessed July 2, 2024.

3.1.4 - Special-status Species Database Search

An FCS Biologist compiled a list of threatened, endangered, and otherwise special-status species which was based on a nine-quad database review for previously recorded occurrences within the project site vicinity.[5] The list was based on FCS's special-status species assessment and subsequent supplemental documentation, search of the CDFW CNDDB, and the CNPS Electronic Inventory (CNPSEI) of Rare and Endangered Vascular Plants of California for the USGS *Morgan Hill, California* 7.5-minute Topographic Quadrangle Map, and the eight surrounding quadrangles (Appendix B).[6,7] The CNDDB Biogeographic Information and Observation System (BIOS) database was used to determine the distance between known recorded occurrences of special-status species and the Study Area.[8]

3.1.5 - Sensitive Natural Communities Identification and Mapping

Sensitive natural communities are vegetation communities or special wildlife habitats that are rare or occur in limited distributions or provide specific habitat requirements for special-status plant or wildlife species. The CDFW maintains a list of natural communities which attempts to classify vegetation types found within the State of California and rank them based on rarity. Communities ranked S1–S3 are considered sensitive natural communities.[9] Riparian vegetation and wetland communities are generally considered sensitive, regardless of species composition.

3.1.6 - Trees

FCS Biologists reviewed applicable City ordinances pertaining to tree preservation and protective measures and their tree replacement conditions or permits required.

3.1.7 - Jurisdictional Waters and Wetlands

FCS Biologists reviewed USGS topographic maps and aerial photography to identify any potential natural drainage features and water bodies. In general, all surface drainage features identified as blue-line streams on USGS maps and associated riparian habitat are considered potentially subject to State and federal regulatory authority as "waters of the United States and/or State."

3.1.8 - Wildlife Movement Corridors and Nursery Sites

Wildlife movement corridors link areas of suitable wildlife habitat that are otherwise separated by natural and anthropogenic dispersal barriers, including rugged terrain, changes in vegetation, development, or human disturbance. Urbanization and the resulting fragmentation of open space

[5] United States Fish and Wildlife Service (USFWS). 2024. Information for Planning and Consultation (IPaC). Website: https://ecos.fws.gov/ipac/. Accessed July 2, 2024.
[6] California Department of Fish and Wildlife (CDFW). 2024. California Natural Diversity Database (CNDDB) RareFind 5 California Natural Diversity Database Query for Special-Status Species. Website: https://wildlife.ca.gov/Data/CNDDB/Maps-and-Data. Accessed July 2, 2024.
[7] California Native Plant Society (CNPS). 2024. California Native Plant Society Rare and Endangered Plant Inventory. Website: https://www.rareplants.cnps.org/. Accessed July 2, 2024.
[8] California Department of Fish and Wildlife (CDFW). 2024. Biogeographic Information and Observation System (BIOS 6). Website: https://wildlife.ca.gov/Data/BIOS. Accessed July 2, 2024.
[9] California Department of Fish and Wildlife (CDFW). 2024. Natural Communities List, Sacramento: California Department of Fish and Wildlife. Website: https://wildlife.ca.gov/Data/VegCAMP/Natural-Communities. Accessed July 2, 2024.

areas create isolated "islands" of wildlife habitat, forming separated populations. Corridors act as an effective link between populations.

The Study Area was evaluated for evidence of a wildlife movement corridors and nursery sites during the reconnaissance-level survey and review of aerial photographs. The focus of this study was to determine whether a change in land use at the Study Area could have significant impacts on the regional movement of wildlife. Conclusions are based on the information compiled during the literature review, including the aerial photographs, USGS topographic maps, and resource maps for the vicinity; the field survey; and professional experience with the desired topography, habitat, and resource requirements of the special-status species potentially utilizing the Study Area and vicinity.

3.2 - Field Survey

An FCS Biologist familiar with the biological resources of the region conducted general wildlife, habitat, vegetation community and aquatic resource survey on July 12, 2024. The objective of the field survey was to ascertain general site conditions and wildlife use and to identify whether existing vegetation communities provide suitable habitat for special-status plant or wildlife species. Potentially sensitive areas identified during the literature review were ground-truthed during the field surveys for mapping accuracy. Special attention was paid to sensitive habitats and areas potentially supporting special-status floral and faunal species. Site photographs are provided in Appendix C.

Wildlife species detected during the reconnaissance-level surveys by sight, calls, tracks, scat, or other signs were recorded. Notations were made regarding suitable habitat for those special-status species determined to have the potential to occur within the Study Area.[10]

3.2.1 - Preliminary Arborist Report

A Preliminary Arborist Report was developed for the proposed project in January 2024 by HortScience | Bartlett Consulting (Appendix D). The report assessed the health, structural condition, and suitability for preservation of the trees located within and adjacent to the proposed project. It also assessed the trees that would be preserved and removed based on the preliminary development plans, and provided tree preservation guidelines for the design, construction, and maintenance phases of development. Trees were assessed on December 21, 2023, and included all trees measuring 6 inches or larger in diameter. Species were recorded, tagged, trunk diameter was measured, and health assessed.

3.2.2 - Vegetation

Common plant species observed during the reconnaissance-level surveys were identified by visual characteristics and morphology in the field and recorded. Uncommon plants were identified with the use of taxonomical guides, including Jepson eFlora and Calflora.[11,12] Taxonomic nomenclature used in

[10] California Department of Fish and Wildlife (CDFW). 2024. CNDDB RareFind 5 California Natural Diversity Database Query for Special-Status Species. Website: https://wildlife.ca.gov/Data/BIOS. Accessed July 2, 2024.
[11] Jepson Flora Project (eds.) 2020. Jepson eFlora, https://ucjeps.berkeley.edu/eflora/. Accessed July 2, 2024.
[12] Calflora. 2020. Calflora: Information on California plants for education, research, and conservation. Website: http://www.calflora.org/. Accessed July 2, 2024.

this study follows The Jepson Manual: Vascular Plants of California.[13] Vegetation types and boundaries were noted on aerial photos, verified through field observation, and digitized using ESRI ArcGIS software® ArcMap 10.0. By incorporating collected field data and interpreting aerial photography, a map of habitat types, land cover types, and other biological resources within the Study Area was prepared.

As noted above, sensitive natural communities are vegetation communities or special wildlife habitats that are rare or occur in limited distributions or provide specific habitat requirements for special-status plant or wildlife species. The CDFW maintains a list of natural communities which attempts to classify vegetation types found within the State of California and rank them based on rarity. Communities ranked S1-S3 are considered sensitive natural communities.[14] Riparian vegetation communities are generally considered sensitive regardless of species composition.

3.2.3 - Wildlife

Wildlife species detected during the reconnaissance-level surveys by sight, calls, tracks, scat, or other signs were recorded. Notations were made regarding suitable habitat for those special-status species determined to have the potential to occur within the Study Area.[15] Appropriate field guides were used to assist in species identification during surveys, such as Peterson, Reid, and Stebbins.[16,17,18] Online resources such as eBird and California Herps were also consulted as necessary. [19,20]

[13] Baldwin, B. et al. 2012. The Jepson Manual: Vascular Plants of California. Berkeley: University of California Press. County of San Bernardino (Bernardino). 2007 (amended 2015).
[14] California Department of Fish and Wildlife (CDFW). 2024. Sensitive Natural Communities List, Sacramento: California Department of Fish and Wildlife. https://wildlife.ca.gov/Data/VegCAMP/Natural-Communities. Accessed July 2, 2024.
[15] California Department of Fish and Wildlife (CDFW). 2024. CNDDB RareFind 5 California Natural Diversity Database Query for Special-Status Species. Website: https://wildlife.ca.gov/Data/BIOS. Accessed July 2, 2024.
[16] Peterson, T.R. 2010. A Field Guide to Birds of Western North America, 4th Edition. Boston: Houghton Mifflin Harcourt.
[17] Reid, F. 2006. A Field Guide to Mammals of North America, 4th Edition. Boston: Houghton Mifflin Harcourt.
[18] Stebbins, R.C. 2003. A Field Guide to Western Reptiles and Amphibians. Third Edition. Boston: Houghton Mifflin Harcourt.
[19] eBird. 2020. Online bird occurrence database. Website: http://ebird.org/content/ebird/. Accessed June 27, 2024.
[20] California Herps. 2020. A Guide to the Amphibians and Reptiles of California. Website: http://www.californiaherps.com/ Accessed June 27, 2024.

SECTION 4: RESULTS

This section summarizes the results of the literature search, database review, and field surveys. Sensitive biological resources including special-status species and the impact analysis are addressed separately in Section 5 and 6 of this BRA.

4.1 - Environmental Setting

The 5.45-acre Study Area is located in an urbanized portion of the City of Morgan Hill. Land uses surrounding the Study Area include residential uses to the north, east, and south and public and commercial uses to the south and west. The Study Area contains two occupied residential buildings and associated structures, is generally flat, and contains maintained (e.g., mowed) non-native annual grasslands.

4.1.1 - Topography and Hydrology

The Study Area is located between 345 and 350 feet above sea level in elevation. The Study Area is generally flat. An unnamed drainage feature, which lies approximately 21 feet to the west of the Study Area (adjacent to, but outside) is the closest drainage feature within the project vicinity. This unnamed feature appears to be straightened and modified to function as a managed flood control channel. At the time of the survey the drainage feature was dry; sparse desiccated vegetation was observed.

4.1.2 - Soils

The USDA NRCS indicates that the soils on the Study Area consist of Arbuckle gravely loam, Pleasanton loam, and San Ysidro loam. These soil types and its primary characteristics are summarized in Table 1 and depicted on Exhibit 4.

Table 1: Soil Types Present within Study Area

Soil Name	Symbol	Slope	Description	Study Area Acreage (approx.)
Arbuckle gravely loam	ArA	0-2%	The Arbuckle series consists of very deep, well drained soils that formed in alluvium from sedimentary and metamorphic rocks	1.41
Pleasanton loam	PoA	0-2%	The Pleasanton series is a member of the fine-loamy, mixed, thermic family of Mollic Haploxeralfs.	0.09
San Ysidro loam	SdA	0-2%	The San Ysidro series consists of very deep, moderately well drained soils that formed in alluvium from sedimentary rocks.	3.80
Source: United States Department of Agriculture (USDA) Natural Resources Conservation Service. 2024. Official Soil Series Descriptions. Website: https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx. Accessed July 2, 2024.				

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Source: ESRI Aerial Imagery. USDA Soils Data, Santa Clara County Eastern Area.

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Exhibit 4
Soils Map

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4.2 - Vegetation Communities and Land Cover Types

The following section describes the vegetation communities and land cover types present on the Study Area, as shown on Exhibit 5.

4.2.1 - Non-Native Annual Grassland

The Study Area includes 4.26- acres of non-native annual grassland. Non-native annual grassland typically occurs in the open areas of valleys and foothills throughout California. This vegetation type is the dominate vegetation community across the Study Area. Vegetation observed at this this location included shortpod mustard (*Hirschfeldia incana*), ribwort plantain (*Plantago lanceolata*), slender wild oat (*Avena barbata*), chicory (*Cichorium intybus*), prickly lettuce (*Lactuca serriola*), field bindweed (*Convolvulus arvensis*), curly dock (*Rumex crispus*), cheeseweed mallow (*Malva parviflora*), yellow star-thistle (*Centaurea solstitalis*), red sandspurry (*Spergularia rubra*), and others. The annual grasslands in the Study Area are routinely mowed for fire suppression.

4.2.2 - Urban/Developed

Developed land includes areas that have been constructed upon or physically altered to an extent that native vegetation is no longer supported and retains no soil substrate. Developed land is characterized by permanent or semi-permanent structures, pavement or hardscape, and landscaped areas that often require irrigation. Areas where no natural land is evident because a large quantity of debris or other materials has been placed upon it may also be considered urban/developed. Developed areas are typically unvegetated or landscaped with a variety of ornamental (usually non-native) plants. 1.04-acres of urban/developed land cover is present within the southeastern portion of the Study Area and is associated with the two residential dwelling units.

4.2.3 - Engineered Drainage Channel

The Study Area is adjacent to an unnamed engineered drainage channel. The top of bank of the channel is approximately 21 feet west of the Study Area. The channel was dry at the time of the survey; however, it exhibits evidence of concentrated seasonal flow in form of sediment deposits and undercut banks. This drainage appears to contain an intermittent hydrological regime and is approximately 40 feet wide between top of banks. It is straightened and manages to function as a flood control channel, including apparent regular vegetation management and dredging.

4.3 - Trees

The Preliminary Arborist Report prepared by HortScience | Bartlett Consulting in January 2024 identified fifteen trees representing seven species on or adjacent to the Study Area. Eleven trees were identified offsite with four trees identified onsite. Native species documented include coast live oak (*Quercus agrifolia)*, California black walnut (*Juglans californica*), and coast redwood (*Sequoia sempervirens*) with Raywood ash (*Fraxinus angustifolia* 'Raywood'), honey locust (*Gleditsia triacanthos*), glossy privet (*Ligustrum lucidum*), and Idaho locust (*Robinia x ambigua* 'Idahoensis') also identified. Trees within the project site consist of four semi-mature to mature coast live oak within the southern portion of the site. All four trees within the site exceeded the 18-inch

indigenous circumference requirement to qualify as a City designated Ordinance Sized tree. Six of the off-site trees were identified as Ordinance Sized trees with three indigenous and three non-indigenous.

4.4 - Common Wildlife

The Study Area may provide habitat for generalist and opportunistic wildlife species that are able to thrive in semi-natural and human-altered environments. The trees present on-site could provide suitable nesting habitat for various migratory or resident nesting birds. Several dormant California ground squirrel (*Otospermophilus beecheyi)* burrows were also observed on-site.

Source: ESRI Aerial Imagery.

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Exhibit 5
Vegetation Communities and Land Cover Types

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Wildlife species not observed but expected to occur include skunk (*Mephitis mephitis*), raccoon (*Procyon lotor*), various tree squirrels, Botta's pocket gopher (*Thomomys bottae*), mourning dove (*Zenaida macroura*), American crow (*Corvus brachyrhynchos*), northern mockingbird (*Mimus polyglottos*), house finch (*Haemorhous mexicanus*), house sparrow, *(Passer domesticus*), Anna's hummingbird (*Calypte anna*), and California scrub jay (*Aphelocoma californica*), among others.

4.5 - Wildlife Movement Corridors and Nursery Sites

While the majority of the land that composes the Study Area is undeveloped, it is directly bounded on all sides by residential and commercial development and active roadways. Based on the CNDDB Terrestrial Connectivity, Areas of Conservation Emphasis (ACE) Map, the Study Area is considered to have limited connectivity opportunity.[21] The high level of development around the Study Area combined with various barriers, including roads surrounding the site, impedes the movement of terrestrial species through the area.

Wildlife nursery sites include nesting birds and maternity bat roosts, aquatic breeding habitats, and special-status and non-special-status wildlife breeding or nesting colonies. No significant breeding, roosts, or nesting colonies were observed during the 2024 FCS field survey. However, individual nesting birds and roosting bats have the potential of being present on-site and within disturbance distance seasonally.

4.6 - Habitat Conservation Plans

The proposed project lies within the boundaries of the SCVHP Permit Area. The Study Area is located within a designated "Fee Zone C" (Small Vacant Sites Under 10 Acres). This zone is subject to specific fees and conditions to mitigate the impact of development on biological resources. The fee for projects in Fee Zone C is calculated per acre. The proposed project also lies within the "Urban Areas" (No Land Cover Fee) within the SCVHP and is not subject to any other Land Cover or sensitive habitat (such as Wetland or Serpentine area) development fees, nor does the Study Area lie within a SCVHP-defined plant or wildlife survey area. Additionally, the proposed project does not lie within a Streams and Setback or an Urban Reserve System Interface buffer zone. Prior to obtaining building permits, the applicant would be required to complete a coverage screening form to determine if the project is covered under the SCVHP.

The SCVHP also contains conditions and general avoidance and minimization measures that are described in Chapter 6 of the SCVHP and pertain to private projects. Examples include the avoidance of direct impacts on legally protected plants and wildlife species, the establishment of setbacks to protect streams and riparian habitats, the avoidance and minimization of impacts to serpentine and associated covered species, the avoidance and minimization of wetland and pond areas along with covered plants, and the maintenance of hydrologic conditions and the protection of water quality. Private projects must adhere to applicable conditions defined in the SCVHP Application.

[21] California Department of Fish and Wildlife (CDFW). 2024. Biogeographic Information and Observation System (BIOS 6). Website: https://wildlife.ca.gov/Data/BIOS. Accessed July 2, 2024.

4.6.1 - SCVHP Chapter 6 (Engineered Drainage Channel)

The engineered drainage channel may be subject to Chapter 6 of the SCVHP. The location of the ephemeral drainage channel is shown in Exhibit 5. Photographs of the property line and edge of engineered drainage channel line is shown in Appendix C. The SCVHP requires a 35-foot setback from the top of bank of a Category 2 stream. The Study Area is located 21 feet from the top of bank of the engineered drainage channel but is not identified as a Category 2 stream in the SCVHP Geobrowser.

However, additional criteria to verify or identify a watercourse as a Category 2 stream is listed in Chapter 6 of the SCVHP (Section 2.3.1). The southern terminus of the drainage appears to terminate at 15000 Seymour Avenue and the northern terminus of the drainage ends at the intersection of Butterfield and East Central Avenue (Appendix C). However, based on personal communications with MH Engineering, prior to the termination of the drainage at 15000 Seymour Avenue, water from the drainage flows through a retention basin that contains an engineered weir structure.[22] When water reaches sufficient levels within the retention basin, flows are directed through the weir into Little Llagas Creek. This artificial hydrological connection to a downstream source likely meets the Criteria 1 requirement of a Category 2 stream as outlined in Section 2.3.1 above. The drainage also contains a defined bed and bank and has a specific topographic position that meets Criteria 2 and 3 requirements of a Category 2 stream. Therefore, it is presumed that the drainage meets all Criteria requirements of a Category 2 stream, though the Valley Water District makes a final designation on the drainage's standing. However, under Chapter 6 of the SCVHP, the drainage may meet exceptions from setback requirements, described in greater detail in Section 6.4 below.

[22] Singla, Harry. Personal Communication. December 4, 2024.

SECTION 5: SENSITIVE BIOLOGICAL RESOURCES

The following section discusses the existing site conditions and presence or potential presence for sensitive biological resources to occur within the Study Area.

5.1 - Sensitive Natural Communities

Sensitive natural communities are vegetation communities or special wildlife habitats that are rare or occur in limited distributions or provide specific habitat requirements for special-status plant or wildlife species. The CDFW maintains a list of natural communities that classifies vegetation types found within the State of California and rank them based on rarity. Communities identified on CDFW's list as "sensitive" and/or communities ranked S1-S3 are considered sensitive natural communities under CEQA.[23] Wetlands and riparian habitats are also typically considered sensitive natural communities and are addressed in the environmental review process. No sensitive natural communities were observed within the Study Area. As such, this resource category is not further addressed in the impact analysis and recommendations section of this document.

5.2 - Special-status Plant Species

The CNDDB and CNPS list 41 special-status or sensitive plant species that have been recorded within the *Morgan Hill, California* USGS Topographic Quadrangle Map and the eight surrounding quadrangles.[24,25,26] The CNDDB occurrences near the Study Area are shown on Exhibit 6.

The Special-status Plant Species Evaluation Table (Appendix B, Table 1) includes the species' status, required habitat, and potential to occur within the Study Area. Special-status plant species that were determined to have no potential to occur on-site are also included in the table, along with the justification for their exclusion from further discussion. None of the special-status plant species were determined to have potential to occur on-site primarily due to the absence of suitable habitat, past and current land use, and the extent and frequency of ground disturbance. As such, this resource category is not further addressed in the impact analysis and recommendations section of this document.

[23] California Department of Fish and Wildlife (CDFW). 2024. Natural Communities List, Sacramento: California Department of Fish and Wildlife. https://wildlife.ca.gov/Data/VegCAMP/Natural-Communities. Accessed July 2, 2024.

[24] United States Geological Survey (USGS). 2024. National Geospatial Program. Website: https://apps.nationalmap.gov/viewer/. Accessed April 22, 2024.

[25] California Department of Fish and Wildlife (CDFW). 2024. CNDDB RareFind 5 California Natural Diversity Database Query for Special-status Species. Website: https://wildlife.ca.gov/Data/BIOS. Accessed April 22, 2024.

[26] California Native Plant Society (CNPS). 2024. California Native Plant Society Rare and Endangered Plant Inventory. Website: http://www.rareplants.cnps.org/. Accessed April 22, 2024.

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CNDDB version 07/2024. Please Note:
The occurrences shown on this map represent the known locations of the species listed here as of the date of this version. There may be additional occurrences or additional species within this area which have not yet been surveyed and/or mapped. Lack of information in the CNDDB about a species or an area can never be used as proof that no special status species occur in an area.

Legend

- Study Area

CNDDB

Symbology

- Plant (80m)
- Plant (specific)
- Plant (non-specific)
- Plant (circular)
- Animal (80m)
- Animal (specific)
- Animal (non-specific)
- Animal (circular)
- Terrestrial Comm. (80m)
- Terrestrial Comm. (specific)
- Terrestrial Comm. (non-specific)
- Terrestrial Comm. (circular)
- Aquatic Comm. (80m)
- Aquatic Comm. (specific)
- Aquatic Comm. (non-specific)
- Aquatic Comm. (circular)
- Multiple (80m)
- Multiple (specific)
- Multiple (non-specific)
- Multiple (circular)
- Sensitive EO's (Commercial only)

Source: Bing Street Imagery. California Natural Diversity Database (CNDDB), July 2024.

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9.5 4.75 0 9.5 Miles

Exhibit 6
CNDDB Special-Status Species Occurrences

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5.3 - Special-status Wildlife Species

CNDDB identifies 34 federal and State-listed threatened and/or endangered wildlife species and State SSC that have been recorded within the *Morgan Hill, California* USGS Topographic Quadrangle Map and eight surrounding quadrangles. The CNDDB occurrences near the Study Area are shown on Exhibit 6.

The Special-status Wildlife Species Evaluation Table (Appendix B, Table 2) includes the species' status, required habitat types and features, and potential to occur within the Study Area. The table also includes special-status wildlife species that have been determined to have no potential to occur on-site, primarily based on the absence of suitable habitat and the lack of recorded occurrence in the project vicinity, along with other justification(s) for their exclusion from further discussion. Three special-status wildlife species–burrowing owl (*Athene cunicularia*), golden eagle, and white-tailed kite (*Elanus leucurus*)–have at least a low potential to occur within the Study Area and are therefore discussed in further detail below.

5.3.1 - Burrowing Owl

The burrowing owl is designated a California SSC. This species receives additional protection under the MBTA and California Fish and Game Code Section 3503. Additionally, on October 10, 2024, this species became a "candidate" species for listing as threatened or endangered under CESA. Candidate status provides legal protection as though it were a listed species, including CESA's protections against unauthorized take. This species inhabits open, dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. It is a subterranean nester and is dependent upon burrowing mammals, most notably, the California ground squirrel. CNDDB records show five occurrences of burrowing owl known to occur within 5 miles of the Study Area. The nearest occurrence is located 0.4 mile to the north. The presence of California ground squirrel burrows and suitable grassland habitat on-site leaves open the possibility that burrowing owl may inhabit the Study Area under certain conditions (e.g., while vegetation is low growing). Burrowing owl are known to overwinter in disturbed sites and sites near frequent human use. No burrowing owl or signs of burrowing owl were observed during the field survey; however, they could colonize the site in the future, such as before start of project construction. Therefore, burrowing owl has potential to occur on-site, albeit low potential.

5.3.2 - Protected Nesting Birds (Including All Special-status Bird Species)

The Study Area contains several mature oak trees and adjacent trees within disturbance distance which could provide suitable nesting habitat for native resident and migratory bird species, including birds of prey (raptors) protected under federal and State regulations while nesting. Special-status raptors such as golden eagle and white-tailed kite are unlikely to nest on-site, as more suitable nesting sites and foraging habitat that is not subject to man-made disturbances are present within several miles of the Study Area. It is possible that these species may fly over the Study Area while foraging; however, potential for these species to occur on-site remains low.

5.4 - State and Federally Protected Waters and Wetlands

The Study Area does not contain any potentially jurisdictional waters or wetlands. The closest potential State- or federally protected water is an unnamed drainage which lies approximately 21 feet west of the Study Area. The channel was dry at the time of the survey; however, it exhibits evidence of concentrated seasonal flow in form of sediment deposits and undercut banks. This drainage appears to contain an intermittent hydrological regime and is approximately 40 feet wide between top of banks. It is straightened and managed to function as a flood control channel, including apparent regular vegetation management and dredging. Therefore, it generally lacks the typical habitat heterogeneity that naturally developed creeks provide, such as riffles, pools, and microhabitat features. Therefore, project construction would not have substantial adverse effects on any State or federally protected aquatic features. As such, this resource category is not further addressed in the impact analysis and recommendations section of this document.

5.5 - Protected Trees

As described in Section 4.3 above, the Study Area contains several trees of various species and sizes. The Preliminary Arborist Report concluded that there are four coast live oak trees within the Study Area that qualify as City designated Ordinance Sized trees and therefore are afforded protection through the Municipal Code (Chapter 12.32, Restrictions on Removal of Significant Trees).

SECTION 6: IMPACT ANALYSIS AND RECOMMENDATIONS

The following discussion addresses potential project impacts on sensitive biological resources, including special-status species, and recommends measures to avoid and/or mitigate impacts to a less than significant level under CEQA (Exhibit 7).

6.1 - Impact Analysis for Special-status Wildlife Species

6.1.1 - Burrowing Owl

Burrowing owl, a California Species of Special Concern and a "candidate" listed species under CESA, was assessed as having a low potential to occur within the Study Area. Burrowing owl is a covered species under the SCVHP, and mitigation of potential impacts to this species should follow the conditions determined during the SCVHP permit application process, which at a minimum include pre-construction surveys and, if found, notification to the CDFW and avoidance of occupied burrows. Additional conditions and general avoidance and minimization measure identified in the SCVHP to protect burrowing owls include avoidance buffers and passive relocation if individuals are identified, along with habitat preservation, limited activities that could disturb owls during breeding seasons, and monitoring programs to track the effectiveness of avoidance and minimization measures.

Additionally, the project must adhere to General Plan Goal NRE-6 and Policies NRE-6.1 and NRE-6.2 which specify the protection of animals, the preservation of wildlife habitats whenever possible, and supports the implementation of the SCVHP to protect wildlife. Standard measures for construction activities such as measures requiring construction to avoid disturbance to natural features are also recommended to avoid impacts to species. Compliance with General Plan Goal NRE-6, Policies NRE-6.1 and NRE-6.2, and adherence to the SCVHP would reduce potential impacts to burrowing owls if they occupy the site during project construction to a less than significant level.

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Source: ESRI Aerial Imagery.

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Feet

Exhibit 7
Impacts Map

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6.1.2 - Protected Nesting Birds (Including Golden Eagle and White-tailed Kite)

Mature trees within the Study Area and within disturbance distance could provide suitable nesting habitat for a variety of native, migratory, or other bird species, including special-status species such as golden eagle and white-tailed kite. Construction activities that occur during the avian nesting season (generally February 1 to August 31) could significantly disturb or destroy nesting sites for bird species protected under the Fish and Game Code or MBTA. The removal of trees during the nesting season could result in direct harm to nesting birds, while noise, light, and other man-made disturbances may cause nesting birds to prematurely abandon their nests.

The project is required to comply with SCVHP. Specifically, SCVHP Habitat Plan Condition A states that the applicant must avoid direct impacts to protected plant and wildlife species, including several protected bird species. Additionally, the project must adhere to General Plan Goal NRE-6 and Policies NRE-6.1 and NRE-6.2 which specify the protection of animals, the preservation of wildlife habitats whenever possible, and supports the implementation of the SCVHP to protect wildlife. Standard measures for construction activities such as measures requiring construction to avoid disturbance to natural features are also recommended to avoid impacts to species such as nesting migratory birds. Therefore, the project applicant would conduct nesting bird surveys and implement bird nesting buffers for active nests prior to and during construction if construction commences during the bird nesting season pursuant to the SCVHP, General Plan Policies, the federal Migratory Bird Treaty Act (MBTA), and CDFW Code Sections 3503, 3503.5, and 2800. Compliance with the policies identified above would reduce potential impacts to nesting birds if they were to occupy the site during project construction to a less than significant level.

6.2 - Impact Analysis for Wildlife Movement Corridors and Nursery Sites

The Study Area is not within a designated wildlife corridor based on the Essential Connectivity Areas geospatial data set, which uses habitat modeling to identify areas of land with value as wildlife corridors. [27] Moreover, and as noted in Section 4.5 of this BRA, based on the CNDDB Terrestrial Connectivity, ACE Map, the Study Area is considered to have limited connectivity opportunity. The Study Area is directly bounded on all sides by residential and commercial development and active roadways which serves as significant barriers to movement of terrestrial species. The Study Area does not provide corridor functions beyond connecting similar developed land parcels in the local surrounding areas. Therefore, the Study Area is not likely to function as a wildlife movement corridor.

The Study Area does not contain native wildlife nursery sites. No significant breeding/nesting colonies were observed during the field survey. However, individual nesting birds have the potential of being present on-site seasonally. Potential impacts to individual nesting birds are addressed through the adherence to General Plan Goal NRE-6 and Policies NRE-6.1 and NRE-6.2, and the

[27] California Department of Fish and Wildlife (CDFW) and California Department of Transportation (Caltrans). 2024. California Essential Habitat Connectivity Project: A Strategy for Conserving a Connected California. California Department of Fish and Wildlife, Sacramento, CA. Website: https://www.wildlife.ca.gov/Conservation/Planning/Connectivity/CEHC. Accessed July 2, 2024.

SCVHP. Compliance with these goals and policies would reduce potential impacts to wildlife nursery sites to a less than significant level.

6.3 - Protected Trees

The proposed project would require the removal of four City-defined Ordinance Sized Trees. Therefore, the project applicant would be required to apply to the City for a tree removal permit prior to the removal of any City protected trees. Chapter 12.32 of the City of Morgan Hill Municipal Code states that is it unlawful for any person to remove an ordinance sized tree without first securing a tree removal permit. Therefore, by obtaining a tree removal permit, the proposed project would adhere to the City of Morgan Hill Municipal Code. The community development director may attach conditions of approval for granting a tree removal permit (Chapter 12.32.080) which include replacement of trees removed with plantings of trees acceptable to the community development director and the potential posting of a bond to insure maintenance of substitute landscaping. A 1:1 replacement ratio for native trees would provide compensation for the loss of the four native trees.

Additionally, the City of Morgan Hill General Plan Policy NRE-6.4 states that the protection and preservation of protected trees must be done whenever feasible. Project implementation does not allow for the feasible preservation of four protected trees within the site. However, by obtaining a tree removal permit, the proposed project would not conflict with the City of Morgan Hill General Plan policies. As such, by obtaining tree removal permits for the four ordinance sized trees, the proposed project would not conflict with any applicable policies or ordinances pertaining to trees.

6.4 - Conflict with Habitat Conservation Plans

The project applicant would be required to obtain a SCVHP permit and pay all applicable fees. This includes the completion of a coverage screening form to determine if the project is covered under the SCVHP. The project applicant would be required to coordinate with the City of Morgan Hill to submit all applicable forms, fees, and/or technical reports. Conditions that may apply to the proposed project (based on the Geobrowser Parcel Query Report) include the following, after verification with the Supervising Environmental Planner:

- Land Cover Fee Zone C (small vacant sites under 10 acres)
- Compliance with applicable conditions defined in the SCVHP Application for Private Projects.

As stated in Section 4.6 above, the SCVHP contains conditions and general avoidance and minimization measures that are described in Chapter 6 of the SCVHP and pertain to private projects. Examples include the avoidance of direct impacts on legally protected plants and wildlife species, the establishment of setbacks to protect streams and riparian habitats, the avoidance and minimization of impacts to serpentine and associated covered species, the avoidance and minimization of wetland and pond areas along with covered plants, and the maintenance of hydrologic conditions and the protection of water quality. Private projects must adhere to applicable conditions defined in the SCVHP Application.

Note that the SCVHP requires habitat assessments to be conducted by qualified Biologists on specific project sites. These results may either confirm or override the preliminary landscape scale mapping and determinations presented in the SCVHP Geobrowser. This BRA satisfies the SCVHP requirements of a site-specific and ground-truthed habitat assessment and can be used as the basis of the SCVHP permit application.

6.4.1 - Conflict with SCVHP Chapter 6 (Ephemeral Drainage Channel)

As described above, the parcel falls within the 35-foot setback specified by the SCVHP as a Category 2 stream. Although the standard setback for Category 2 streams under the SCVHP is 35 feet, exceptions exist for the reduction of setbacks in limited cases. It should be noted that applicants must apply for a stream setback exception through their local jurisdiction. Based on the results of this BRA, a reduced setback (to 21 feet from the required 35 feet) is warranted for the following reasons:

- Exception No. #2: Chapter 6 of the SCVHP contains Exceptions that are listed in Section 2.3.1. The drainage's top of bank is located 21 feet from the Study Area and requires an additional 14-foot setback to meet the 35-foot setback criteria consistent with SCVHP policy. However, an additional 14-foot setback from the drainage would result in the loss of numerous parcel developments leading to the potential economic unviability of the project due to it's limited size and location within an already densely urbanized area. Therefore, meeting the criteria listed in Exception #2.

- Exception No. 4: The Study Area contains non-native grassland and disturbed habitat unsuitable for most protected species. Additionally, through adherence to federal, state, and applicable General Plan policies would reduce impacts to any special-status species and functional groups potentially present within the Study Area to a less than significant level. Therefore, an additional 14-foot setback from the drainage would not preclude the achievement of the biological goals and objectives of the SCVHP or conflict with other applicable requirements of the Habitat Plan and local policies, meeting the criteria listed in Exception #4.

Therefore, it can be concluded, that the proposed project would qualify for Exceptions No. 2 and No. 4 thus eliminating the need for an additional 14-foot setback. The proposed project would therefore adhere to SCVHP policies and would not conflict with the Habitat Plan.

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Appendix A:
Database Search Results

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Selected Elements by Scientific Name

California Department of Fish and Wildlife

California Natural Diversity Database

Query Criteria: Quad IS (Mt. Madonna (3712116) OR Gilroy (3712115) OR Mt. Sizer (3712125) OR Morgan Hill (3712126) OR Isabel Valley (3712135) OR Lick Observatory (3712136) OR Loma Prieta (3712117) OR Santa Teresa Hills (3712127) OR San Jose East (3712137))

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Actinemys marmorata northwestern pond turtle	ARAAD02031	Proposed Threatened	None	G2	SNR	SSC
Adela oplerella Opler's longhorn moth	IILEE0G040	None	None	G2	S2	
Agelaius tricolor tricolored blackbird	ABPBXB0020	None	Threatened	G1G2	S2	SSC
Ambystoma californiense pop. 1 California tiger salamander - central California DPS	AAAAA01181	Threatened	Threatened	G2G3T3	S3	WL
Ambystoma macrodactylum croceum Santa Cruz long-toed salamander	AAAAA01082	Endangered	Endangered	G5T1T2	S2	FP
Ammodramus savannarum grasshopper sparrow	ABPBXA0020	None	None	G5	S3	SSC
Amsinckia lunaris bent-flowered fiddleneck	PDBOR01070	None	None	G3	S3	1B.2
Aneides niger Santa Cruz black salamander	AAAAD01070	None	None	G3	S3	SSC
Anniella pulchra Northern California legless lizard	ARACC01020	None	None	G3	S2S3	SSC
Anodonta californiensis California floater	IMBIV04220	None	None	G3	S2?	
Antrozous pallidus pallid bat	AMACC10010	None	None	G4	S3	SSC
Aquila chrysaetos golden eagle	ABNKC22010	None	None	G5	S3	FP
Arctostaphylos andersonii Anderson's manzanita	PDERI04030	None	None	G2	S2	1B.2
Ardea alba great egret	ABNGA04040	None	None	G5	S4	
Ardea herodias great blue heron	ABNGA04010	None	None	G5	S4	
Arizona elegans occidentalis California glossy snake	ARADB01017	None	None	G5T2	S2	SSC
Athene cunicularia burrowing owl	ABNSB10010	None	None	G4	S2	SSC
Balsamorhiza macrolepis big-scale balsamroot	PDAST11061	None	None	G2	S2	1B.2

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Bombus caliginosus obscure bumble bee	IIHYM24380	None	None	G2G3	S1S2	
Bombus crotchii Crotch's bumble bee	IIHYM24480	None	Candidate Endangered	G2	S2	
Bombus occidentalis western bumble bee	IIHYM24252	None	Candidate Endangered	G3	S1	
Buteo swainsoni Swainson's hawk	ABNKC19070	None	Threatened	G5	S4	
Calyptridium parryi var. hesseae Santa Cruz Mountains pussypaws	PDPOR09052	None	None	G3G4T2	S2	1B.1
Castilleja affinis var. neglecta Tiburon paintbrush	PDSCR0D013	Endangered	Threatened	G4G5T1T2	S1S2	1B.2
Castilleja rubicundula var. rubicundula pink creamsacs	PDSCR0D482	None	None	G5T2	S2	1B.2
Ceanothus ferrisiae Coyote ceanothus	PDRHA041N0	Endangered	None	G1	S1	1B.1
Centromadia parryi ssp. congdonii Congdon's tarplant	PDAST4R0P1	None	None	G3T2	S2	1B.1
Chlorogalum pomeridianum var. minus dwarf soaproot	PMLIL0G042	None	None	G5T3	S3	1B.2
Chorizanthe pungens var. pungens Monterey spineflower	PDPGN040M2	Threatened	None	G2T2	S2	1B.2
Chorizanthe robusta var. robusta robust spineflower	PDPGN040Q2	Endangered	None	G2T1	S1	1B.1
Cirsium fontinale var. campylon Mt. Hamilton thistle	PDAST2E163	None	None	G2T2	S2	1B.2
Clarkia concinna ssp. automixa Santa Clara red ribbons	PDONA050A1	None	None	G5?T3	S3	4.3
Collinsia multicolor San Francisco collinsia	PDSCR0H0B0	None	None	G2	S2	1B.2
Corynorhinus townsendii Townsend's big-eared bat	AMACC08010	None	None	G4	S2	SSC
Coturnicops noveboracensis yellow rail	ABNME01010	None	None	G4	S2	SSC
Cypseloides niger black swift	ABNUA01010	None	None	G4	S3	SSC
Delphinium californicum ssp. interius Hospital Canyon larkspur	PDRAN0B0A2	None	None	G3T3	S3	1B.2
Dicamptodon ensatus California giant salamander	AAAAH01020	None	None	G2G3	S2S3	SSC
Dipodomys venustus venustus Santa Cruz kangaroo rat	AMAFD03042	None	None	G4T1	S1	

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Dudleya abramsii ssp. setchellii Santa Clara Valley dudleya	PDCRA040Z0	Endangered	None	G4T2	S2	1B.1
Egretta thula snowy egret	ABNGA06030	None	None	G5	S4	
Elanus leucurus white-tailed kite	ABNKC06010	None	None	G5	S3S4	FP
Eriastrum tracyi Tracy's eriastrum	PDPLM030C0	None	Rare	G3Q	S3	3.2
Eryngium aristulatum var. hooveri Hoover's button-celery	PDAPI0Z043	None	None	G5T1	S1	1B.1
Euphilotes enoptes smithi Smith's blue butterfly	IILEPG2026	Endangered	None	G5T2	S2	
Euphydryas editha bayensis Bay checkerspot butterfly	IILEPK4055	Threatened	None	G5T1	S3	
Fritillaria liliacea fragrant fritillary	PMLIL0V0C0	None	None	G2	S2	1B.2
Gonidea angulata western ridged mussel	IMBIV19010	None	None	G3	S2	
Hesperoleucus venustus subditus southern coastal roach	AFCJB19032	None	None	GNRT2	S2	SSC
Hoita strobilina Loma Prieta hoita	PDFAB5Z030	None	None	G2?	S2?	1B.1
Icteria virens yellow-breasted chat	ABPBX24010	None	None	G5	S4	SSC
Lanius ludovicianus loggerhead shrike	ABPBR01030	None	None	G4	S4	SSC
Lasiurus cinereus hoary bat	AMACC05032	None	None	G3G4	S4	
Lasthenia conjugens Contra Costa goldfields	PDAST5L040	Endangered	None	G1	S1	1B.1
Lavinia exilicauda harengus Monterey hitch	AFCJB19013	None	None	G4T3	S3	SSC
Legenere limosa legenere	PDCAM0C010	None	None	G2	S2	1B.1
Leptosyne hamiltonii Mt. Hamilton coreopsis	PDAST2L0C0	None	None	G2	S2	1B.2
Lessingia micradenia var. glabrata smooth lessingia	PDAST5S062	None	None	G2T2	S2	1B.2
Lomatium observatorium Mt. Hamilton lomatium	PDAPI1B2J0	None	None	G1	S1	1B.2
Malacothamnus arcuatus var. arcuatus arcuate bushmallow	PDMAL0Q0E0	None	None	G2Q	S2	1B.2

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Malacothamnus hallii Hall's bushmallow	PDMAL0Q0F0	None	None	G2	S2	1B.2
Meconella oregana Oregon meconella	PDPAP0G030	None	None	G2G3	S2	1B.1
Microcina homi Hom's micro-blind harvestman	ILARA47020	None	None	G1	S2	
Microcina jungi Jung's micro-blind harvestman	ILARA47030	None	None	G1	S1	
Monolopia gracilens woodland woollythreads	PDAST6G010	None	None	G3	S3	1B.2
Myotis evotis long-eared myotis	AMACC01070	None	None	G5	S3	
Myotis yumanensis Yuma myotis	AMACC01020	None	None	G5	S4	
Neotoma fuscipes annectens San Francisco dusky-footed woodrat	AMAFF08082	None	None	G5T2T3	S2S3	SSC
Nycticorax nycticorax black-crowned night heron	ABNGA11010	None	None	G5	S4	
Oncorhynchus mykiss irideus pop. 8 steelhead - central California coast DPS	AFCHA0209G	Threatened	None	G5T3Q	S3	SSC
Oncorhynchus mykiss irideus pop. 9 steelhead - south-central California coast DPS	AFCHA0209H	Threatened	None	G5T2Q	S2	SSC
Penstemon rattanii var. kleei Santa Cruz Mountains beardtongue	PDSCR1L5B1	None	None	G4T2	S2	1B.2
Pentachaeta exilis ssp. aeolica San Benito pentachaeta	PDAST6X041	None	None	G5T2	S2	1B.2
Phacelia phacelioides Mt. Diablo phacelia	PDHYD0C3Q0	None	None	G2	S2	1B.2
Phrynosoma blainvillii coast horned lizard	ARACF12100	None	None	G4	S4	SSC
Plagiobothrys glaber hairless popcornflower	PDBOR0V0B0	None	None	GX	SX	1A
Plagiobothrys verrucosus warty popcornflower	PDBOR0V1D0	None	None	G4G5	S1	2B.1
Rana boylii pop. 4 foothill yellow-legged frog - central coast DPS	AAABH01054	Threatened	Endangered	G3T2	S2	
Rana draytonii California red-legged frog	AAABH01022	Threatened	None	G2G3	S2S3	SSC
Ravenella exigua chaparral harebell	PDCAM020A0	None	None	G2	S2	1B.2
Sanicula saxatilis rock sanicle	PDAPI1Z0H0	None	Rare	G2	S2	1B.2

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Senecio aphanactis chaparral ragwort	PDAST8H060	None	None	G3	S2	2B.2
Serpentine Bunchgrass Serpentine Bunchgrass	CTT42130CA	None	None	G2	S2.2	
Streptanthus albidus ssp. albidus Metcalf Canyon jewelflower	PDBRA2G011	Endangered	None	G2T1	S1	1B.1
Streptanthus albidus ssp. peramoenus most beautiful jewelflower	PDBRA2G012	None	None	G2T2	S2	1B.2
Streptanthus callistus Mt. Hamilton jewelflower	PDBRA2G0A0	None	None	G1	S1	1B.2
Sycamore Alluvial Woodland Sycamore Alluvial Woodland	CTT62100CA	None	None	G1	S1.1	
Taxidea taxus American badger	AMAJF04010	None	None	G5	S3	SSC
Trifolium buckwestiorum Santa Cruz clover	PDFAB402W0	None	None	G2	S2	1B.1
Vireo bellii pusillus least Bell's vireo	ABPBW01114	Endangered	Endangered	G5T2	S3	
Vulpes macrotis mutica San Joaquin kit fox	AMAJA03041	Endangered	Threatened	G4T2	S3	

Record Count: 91

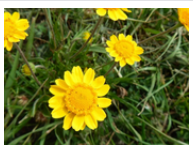
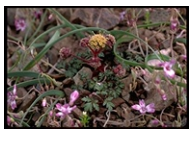
CALIFORNIA NATIVE PLANT SOCIETY

CNPS Rare Plant Inventory

Search Results

9 matches found. Click on scientific name for details

Search Criteria: CRPR is one of [**1A:1B:2A:2B:3:4**] Fed List is one of [**FE:FT:FC**] **or** State List is one of [**CE:CT:CR:CC**] , S Rank is one of [**S1:S2:S3:S4**], Quad is one of [**3712126:3712127:3712136:3712135:3712125:3712115:3712116:3712117:3712137**]

▲ SCIENTIFIC NAME	COMMON NAME	FAMILY	LIFEFORM	BLOOMING PERIOD	FED LIST	STATE LIST	GLOBAL RANK	STATE RANK	CA RARE PLANT RANK	CA ENDEMIC	DATE ADDED	PHOTO
Castilleja affinis var. *neglecta*	Tiburon paintbrush	Orobanchaceae	perennial herb (hemiparasitic)	Apr-Jun	FE	CT	G4G5T1T2	S1S2	1B.2	Yes	1974-01-01	No Photo Available
Ceanothus ferrisiae	Coyote ceanothus	Rhamnaceae	perennial evergreen shrub	Jan-May	FE	None	G1	S1	1B.1	Yes	1974-01-01	No Photo Available
Chorizanthe pungens var. *pungens*	Monterey spineflower	Polygonaceae	annual herb	Apr-Jun(Jul-Aug)	FT	None	G2T2	S2	1B.2	Yes	1980-01-01	No Photo Available
Chorizanthe robusta var. *robusta*	robust spineflower	Polygonaceae	annual herb	Apr-Sep	FE	None	G2T1	S1	1B.1	Yes	1980-01-01	No Photo Available
Dudleya abramsii ssp. *setchellii*	Santa Clara Valley dudleya	Crassulaceae	perennial herb	Apr-Oct	FE	None	G4T2	S2	1B.1	Yes	1988-01-01	No Photo Available
Eriastrum tracyi	Tracy's eriastrum	Polemoniaceae	annual herb	May-Jul	None	CR	G3Q	S3	3.2	Yes	1974-01-01	© 2012 Neal Kramer
Lasthenia conjugens	Contra Costa goldfields	Asteraceae	annual herb	Mar-Jun	FE	None	G1	S1	1B.1	Yes	1974-01-01	 © 2013 Neal Kramer
Sanicula saxatilis	rock sanicle	Apiaceae	perennial herb	Apr-May	None	CR	G2	S2	1B.2	Yes	1974-01-01	 © 1998 John Game
Streptanthus albidus ssp. *albidus*	Metcalf Canyon jewelflower	Brassicaceae	annual herb	Apr-Jul	FE	None	G2T1	S1	1B.1	Yes	1974-01-01	Photo of Streptanthus albidus ssp. albidus © 2015 Aaron Schusteff

Showing 1 to 9 of 9 entries

Suggested Citation:

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IPaC **U.S. Fish & Wildlife Service**

IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

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Location

Santa Clara County, California

Local office

Sacramento Fish And Wildlife Office

(916) 414-6600
(916) 414-6713

Federal Building
2800 Cottage Way, Room W-2605
Sacramento, CA 95825-1846

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Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species[1] and their critical habitats are managed by the Ecological Services Program of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries[2]).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact NOAA Fisheries for species under their jurisdiction.

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1. Species listed under the Endangered Species Act are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the listing status page for more information. IPaC only shows species that are regulated by USFWS (see FAQ).

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2. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

Mammals

NAME	STATUS
San Joaquin Kit Fox Vulpes macrotis mutica Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/2873	Endangered

Birds

NAME	STATUS
California Condor Gymnogyps californianus There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/8193	Endangered
California Least Tern Sternula antillarum browni Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/8104	Endangered

Reptiles

NAME	STATUS
Northwestern Pond Turtle Actinemys marmorata Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/1111	Proposed Threatened

Amphibians

NAME	STATUS
California Red-legged Frog Rana draytonii Wherever found There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/2891	Threatened

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California Tiger Salamander Ambystoma californiense — Threatened

There is **final** critical habitat for this species. Your location does not overlap the critical habitat.
https://ecos.fws.gov/ecp/species/2076

Foothill Yellow-legged Frog Rana boylii — Threatened

No critical habitat has been designated for this species.
https://ecos.fws.gov/ecp/species/5133

Insects

NAME	STATUS

Bay Checkerspot Butterfly Euphydryas editha bayensis — Threatened

Wherever found

There is **final** critical habitat for this species. Your location does not overlap the critical habitat.
https://ecos.fws.gov/ecp/species/2320

Monarch Butterfly Danaus plexippus — Candidate

Wherever found

No critical habitat has been designated for this species.
https://ecos.fws.gov/ecp/species/9743

Flowering Plants

NAME	STATUS

Metcalf Canyon Jewelflower Streptanthus albidus ssp. albidus — Endangered

Wherever found

No critical habitat has been designated for this species.
https://ecos.fws.gov/ecp/species/4186

Santa Clara Valley Dudleya Dudleya setchellii — Endangered

Wherever found

No critical habitat has been designated for this species.
https://ecos.fws.gov/ecp/species/3207

Tiburon Paintbrush Castilleja affinis ssp. neglecta — Endangered

Wherever found

No critical habitat has been designated for this species.
https://ecos.fws.gov/ecp/species/2687

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Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

There are no critical habitats at this location.

You are still required to determine if your project(s) may have effects on all above listed species.

Bald & Golden Eagles

Bald and golden eagles are protected under the Bald and Golden Eagle Protection Act[1] and the Migratory Bird Treaty Act[2].

Any person or organization who plans or conducts activities that may result in impacts to bald or golden eagles, or their habitats[3], should follow appropriate regulations and consider implementing appropriate conservation measures, as described in the links below. Specifically, please review the "Supplemental Information on Migratory Birds and Eagles".

Additional information can be found using the following links:

- Eagle Management https://www.fws.gov/program/eagle-management
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide conservation measures for birds https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf
- Supplemental Information for Migratory Birds and Eagles in IPaC https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action

There are likely bald eagles present in your project area. For additional information on bald eagles, refer to Bald Eagle Nesting and Sensitivity to Human Activity

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, see the PROBABILITY OF PRESENCE SUMMARY below to see when these birds are most likely to be present and breeding in your project area.

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NAME	BREEDING SEASON
Bald Eagle Haliaeetus leucocephalus This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Jan 1 to Aug 31
Golden Eagle Aquila chrysaetos This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1680	Breeds Jan 1 to Aug 31

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read "Supplemental Information on Migratory Birds and Eagles", specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week

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12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.

3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

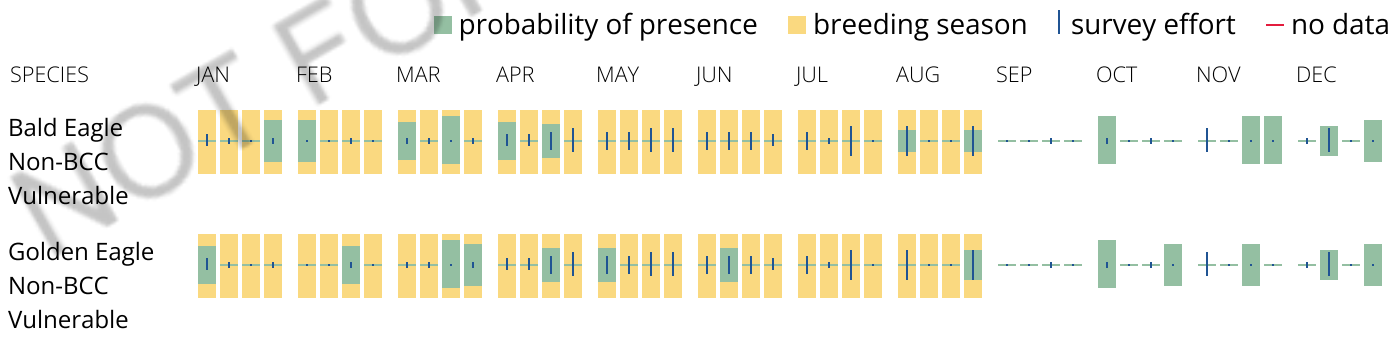
Breeding Season (▪)
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

To see a bar's survey effort range, simply hover your mouse cursor over the bar.

No Data (–)
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.



What does IPaC use to generate the potential presence of bald and golden eagles in my specified location?

The potential for eagle presence is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (Eagle Act requirements may apply). To see a list of all birds potentially present in your project area, please visit the Rapid Avian Information Locator (RAIL) Tool.

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What does IPaC use to generate the probability of presence graphs of bald and golden eagles in my specified location?

The Migratory Bird Resource List is comprised of USFWS Birds of Conservation Concern (BCC) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (Eagle Act requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the Rapid Avian Information Locator (RAIL) Tool.

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to obtain a permit to avoid violating the Eagle Act should such impacts occur. Please contact your local Fish and Wildlife Service Field Office if you have questions.

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Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act[1] and the Bald and Golden Eagle Protection Act[2].

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats[3] should follow appropriate regulations and consider implementing appropriate conservation measures, as described in the links below. Specifically, please review the "Supplemental Information on Migratory Birds and Eagles".

1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.

Additional information can be found using the following links:

- Eagle Management https://www.fws.gov/program/eagle-management
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide conservation measures for birds https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf
- Supplemental Information for Migratory Birds and Eagles in IPaC https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-

golden-eagles-may-occur-project-action

The birds listed below are birds of particular concern either because they occur on the USFWS Birds of Conservation Concern (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ below. This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the E-bird data mapping tool (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found below.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, see the PROBABILITY OF PRESENCE SUMMARY below to see when these birds are most likely to be present and breeding in your project area.

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NAME	BREEDING SEASON
Bald Eagle *Haliaeetus leucocephalus* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Jan 1 to Aug 31
Belding's Savannah Sparrow *Passerculus sandwichensis beldingi* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/8	Breeds Apr 1 to Aug 15
Black-chinned Sparrow *Spizella atrogularis* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9447	Breeds Apr 15 to Jul 31
Bullock's Oriole *Icterus bullockii* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds Mar 21 to Jul 25

California Gull Larus californicus — Breeds Mar 1 to Jul 31
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

California Thrasher Toxostoma redivivum — Breeds Jan 1 to Jul 31
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Clark's Grebe Aechmophorus clarkii — Breeds Jun 1 to Aug 31
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Common Yellowthroat Geothlypis trichas sinuosa — Breeds May 20 to Jul 31
This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA
https://ecos.fws.gov/ecp/species/2084

Golden Eagle Aquila chrysaetos — Breeds Jan 1 to Aug 31
This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.
https://ecos.fws.gov/ecp/species/1680

Lawrence's Goldfinch Spinus lawrencei — Breeds Mar 20 to Sep 20
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9464

Northern Harrier Circus hudsonius — Breeds Apr 1 to Sep 15
This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA
https://ecos.fws.gov/ecp/species/8350

Nuttall's Woodpecker Dryobates nuttallii — Breeds Apr 1 to Jul 20
This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA
https://ecos.fws.gov/ecp/species/9410

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Oak Titmouse Baeolophus inornatus — Breeds Mar 15 to Jul 15
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9656

Olive-sided Flycatcher Contopus cooperi — Breeds May 20 to Aug 31
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/3914

Santa Barbara Song Sparrow Melospiza melodia graminea — Breeds Mar 1 to Sep 5
This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA
https://ecos.fws.gov/ecp/species/5513

Tricolored Blackbird Agelaius tricolor — Breeds Mar 15 to Aug 10
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/3910

Western Grebe aechmophorus occidentalis — Breeds Jun 1 to Aug 31
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/6743

Western Gull Larus occidentalis — Breeds Apr 21 to Aug 25
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Western Screech-owl Megascops kennicottii cardonensis — Breeds Mar 1 to Jun 30
This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

Wrentit Chamaea fasciata — Breeds Mar 15 to Aug 10
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Yellow-billed Magpie Pica nuttalli — Breeds Apr 1 to Jul 31
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9726

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Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read "Supplemental Information on Migratory Birds and Eagles", specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (▪)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

Breeding Season (▪)

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

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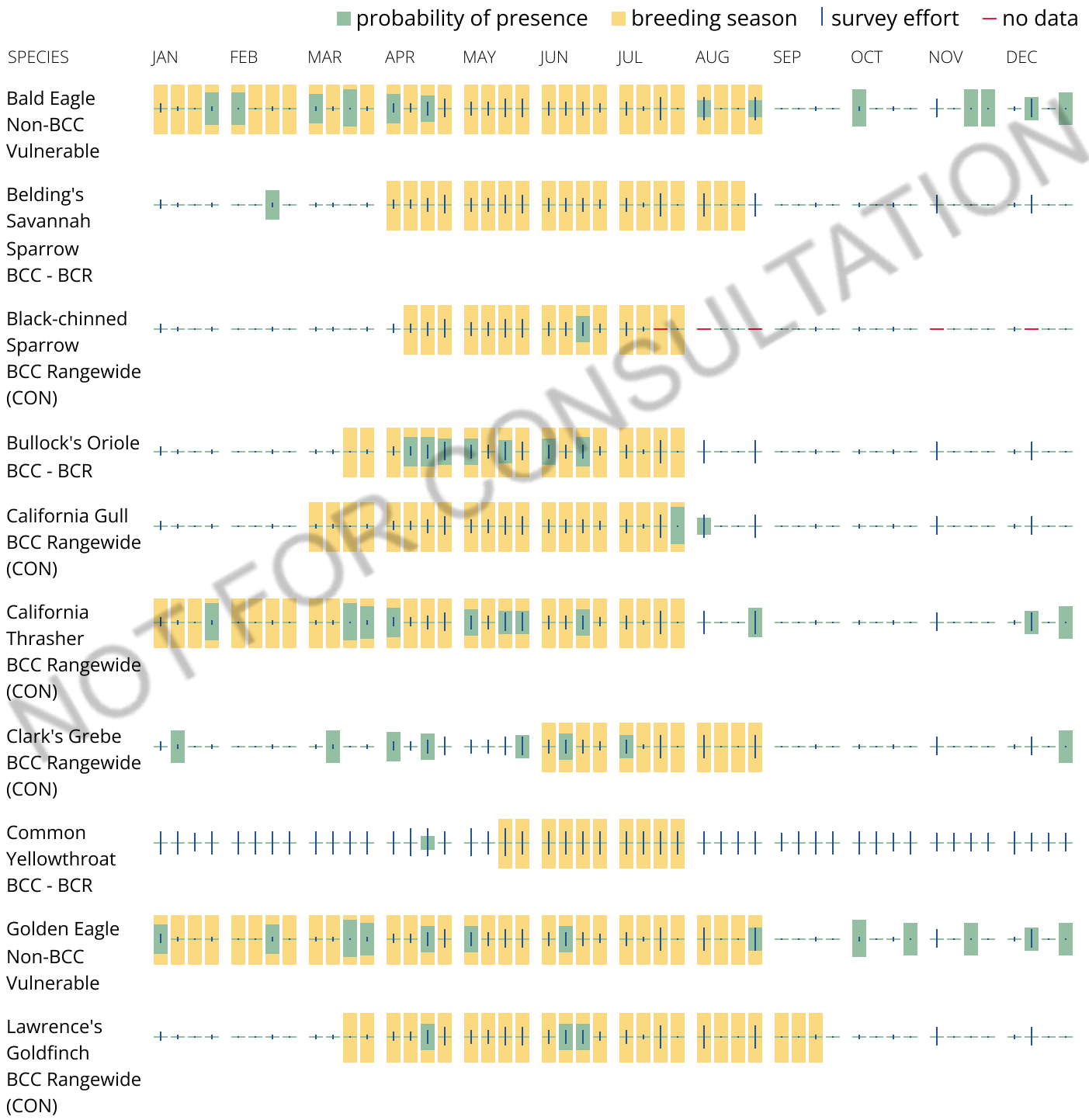
To see a bar's survey effort range, simply hover your mouse cursor over the bar.

No Data (–)

A week is marked as having no data if there were no survey events for that week.

Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.



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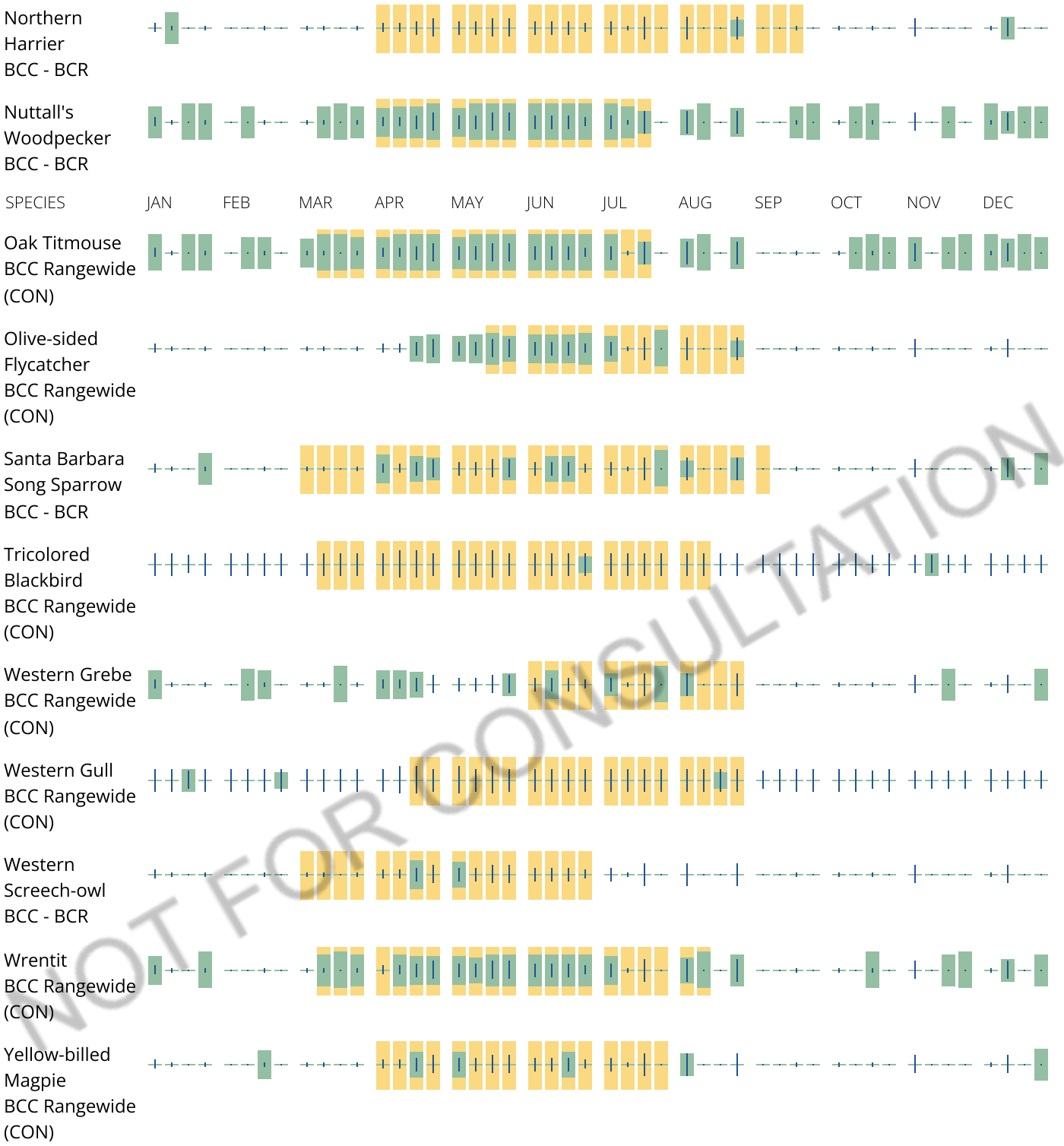

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Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

Nationwide Conservation Measures describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. Additional measures or permits may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the list of migratory birds that potentially occur in my specified location?

The Migratory Bird Resource List is comprised of USFWS Birds of Conservation Concern (BCC) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (Eagle Act requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the Rapid Avian Information Locator (RAIL) Tool.

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the Avian Knowledge Network (AKN). This data is derived from a growing collection of survey, banding, and citizen science datasets.

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering or migrating in my area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may query your location using the RAIL Tool and look at the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are Birds of Conservation Concern (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the Eagle Act requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

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Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the Northeast Ocean Data Portal. The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the Diving Bird Study and the nanotag studies or contact Caleb Spiegel or Pam Loring.

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to obtain a permit to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

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Facilities

National Wildlife Refuge lands

Any activity proposed on lands managed by the National Wildlife Refuge system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

There are no refuge lands at this location.

Fish hatcheries

There are no fish hatcheries at this location.

Wetlands in the National Wetlands Inventory (NWI)

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

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Wetland information is not available at this time

This can happen when the National Wetlands Inventory (NWI) map service is unavailable, or for very large projects that intersect many wetland areas. Try again, or visit the NWI map to view wetlands at this location.

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tuberficid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate Federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

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Appendix B:
Special-status Species Occurrence Evaluation

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Table 1: Special-status Plant Species Habitat Value Evaluation

Scientific Name Common Name	Status			Habitat Description4	Habitat Value and Rationale
	ESA[1]	CESA[2]	CRPR[3]		
Amsinckia lunaris bent-flowered fiddleneck	—	—	1B.2	Coastal bluff scrub, cismontane woodland, valley and foothill grassland. Found on gravelly slopes on serpentine. Elevation: 3-500 m. Bloom period: March-June	**None.** The Study Area does not contain suitable coastal bluff scrub, cismontane woodland or gravelly slopes habitat to support this species.
Arctostaphylos andersonii Anderson's manzanita	—	—	1B.2	Coastal dunes, marshes and swamps, coastal scrub. Mesic sites in dunes or along streams or coastal salt marshes. Elevation: 0-155 m. Blooming period: Feb-May	**None:** The Study Area does not contain suitable coastal dune or marsh habitat to support this species.
Balsamorhiza macrolepis big-scale balsamroot			1B.2	Chaparral, cismontane woodland and valley and foothill grassland. Sometimes occurs in serpentinite soils. Elevation: 45-1555 m. Bloom period: March-June.	**None.** The Study Area does not contain suitable habitat to support this species. Serpentinite soils, chaparral, or cismontane woodlands are not present.
Calyptridium parryi var. hesseae Santa Cruz Mountains pussypaws	—	—	1B.1	Found in Chaparral and Cismontane woodlands, and micro habitats are in gravelly (sometimes), openings, and sandy (sometimes). Blooming Period: May-Aug Elevation: 1647" - 5052"	**None:** The Study Area does not contain suitable chaparral and cismontane woodlands to support this species.
Castilleja affinis var. neglecta Tiburon paintbrush	FE	CT	1B.2	Valley and foothill grassland. Rocky serpentine sites. Elevation: 120-400 m. Bloom period: April-June	**None**: Study Area does not contain suitable foothill grassland or rocky serpentine to support this species.
Castilleja rubicundula var. rubicundula pink creamsacs	—	—	1B.2	Chaparral in openings, cismontane woodland, meadows and seeps, and valley and foothill grassland. Needs serpentine soils. Elevation: 20-910 m. Bloom period: April-June	**None**: The Study Area does not contain chaparral, cismontane woodland, meadows, or seeps to support this species.
Ceanothus ferrisiae Coyote ceanothus	FE	—	1B.1	Chaparral, Coastal scrub, Valley and foothill grassland. Serpentinite. Elevation: 0-300 m. Blooming period: January - May	**None:** Although the site does contain non-native annual grassland, it has been significantly impacted via mowing and anthropogenic disturbances, lowering the likelihood of presence. The site does not contain coastal scrub or chaparral.

Scientific Name Common Name	Status			Habitat Description4	Habitat Value and Rationale
	ESA[1]	CESA[2]	CRPR[3]		
Centromadia parryi ssp. congdonii Congdon's tarplant	—	—	1B.1	Valley and foothill grassland. Alkaline soils sometimes described as heavy white clay. Elevation: 0-230 m. Blooming period: May-Oct	**None**: Study Area does not contain suitable foothill grassland to support this species.
Calyptridium parryi var. hesseae Santa Cruz Mountains pussypaws	—	—	1B.1	Found in Chaparral and Cismontane woodlands, and micro habitats are in gravelly (sometimes), openings, and sandy (sometimes). Elevation: 41-128 m. Blooming Period: May-Aug	**None:** The Study Area does not contain suitable chaparral and cismontane woodlands to support this species.
Chorizanthe pungens var. pungens Monterey spineflower	FT	—	1B.2	Chaparral, cismontane woodland, coastal dunes, coastal scrub, and valley and foothill grassland. Needs sandy soils. Elevation: 3-450 m. Bloom period: April-June	**None**: The Study Area does not contain suitable chaparral, cismontane woodland, or coastal dune habitat to support this species.
Chorizanthe robusta var. robusta robust spineflower	FE	—	1B.1	Cismontane woodland, coastal dunes, coastal scrub, chaparral. Sandy terraces and bluffs or in loose sand. Elevation: 5-245 m. Blooming Period: April-September	**None**: Lack of suitable habitat and high level of disturbance at site preclude presence. Lack of woodland, dune, or chaparral habitat on site.
Cirsium fontinale var. campylon Mt. Hamilton thistle	—	—	1B.2	Cismontane woodland, chaparral, valley and foothill grassland. Often grows in seasonal and perennial drainages on serpentine soils. Elevation: 300-750 m. Blooming period: April – October	**None:** No suitable habitat present such as cismontane woodland, chaparral, or foothill grassland to support this species.
Clarkia concinna ssp. automixa Santa Clara red ribbons	—	—	4.3	Foothill woodland Elevation: 90-1500 m. Bloom period: April-July	**None:** The Study Area does not contain any foothill woodland to support this species.
Collinsia multicolor San Francisco collinsia	—	—	1B.2	Closed-cone coniferous forest, coastal scrub. On decomposed shale (mudstone) mixed with humus; sometimes on serpentine. Elevation: 10-275 m. Blooming period: March-May	**None:** The Study Area does not contain suitable coniferous forest or coastal scrub habitat to support this species.
Delphinium californicum ssp. interius Hospital Canyon larkspur	—	—	1B.2	Cismontane woodland, chaparral, coastal scrub. In wet, boggy meadows, openings in chaparral and in canyons. Elevation: 195-1095.	**None**: Lack of suitable habitat and high level of disturbance at site preclude presence. Lack of chaparral and coastal scrub on site.

Scientific Name Common Name	Status			Habitat Description4	Habitat Value and Rationale
	ESA[1]	CESA[2]	CRPR[3]		
				Blooming period: May-Jun	
Dudleya abramsii ssp. setchellii Santa Clara Valley dudleya	FE	—	1B.1	Valley and foothill grassland, cismontane woodland. On rocky serpentine outcrops and on rocks within grassland or woodland. Elevation: 118-301 Blooming period: April – October	**None:** Occurrence was recorded less than 3 miles away from the site, but no suitable habitat such as valley and foothill grassland are present due to disturbance onsite.
Eriastrum tracyi Tracy's eristrium	—	—	3	Chaparral, cismontane woodland Elevation: 315-1645 m. Bloom period: May-July	**None**: No suitable habitat is present and the site occurs well below the elevation at which this species has been documented.
Eryngium aristulatum var. hooveri Hoover's button-celery	—	—	1B.1	Vernal pools. Elevation: 3-45 m. Bloom period: June-August	**None**: The Study Area does not contain vernal pool habitat to support this species.
Fritillaria liliacea fragrant fritillary	—	—	1B.2	Coastal scrub, valley and foothill grassland, coastal prairie, and cismontane woodland. Often on serpentine; various soils reported though usually on clay, in grassland. Elevation: 3-385 m. Blooming period: Feb-Apr	**None**: Study Area is disturbed and offers no habitat value. Necessary habitats such as coastal scrub, valley, and foothill grasslands to support this species are not present on site.
Hoita strobilina Loma Prieta hoita	—	—	1B.1	Chaparral, cismontane woodland, riparian woodland. Serpentine; mesic sites. Elevation: 60-975 m. Blooming period: May-Jul	**None**: Study Area is disturbed and offers no habitat value. Necessary habitats such as chaparral, cismontane woodland, or riparian woodland to support this species are not present on site.
Lasthenia conjugens Contra Costa goldfields	FE	—	1B.1	Valley and foothill grassland, vernal pools, alkaline playas, cismontane woodland, swales, low depressions, in open grassy areas. Elevation: 1-450 m. Blooming Period: March-June	**None**: Lack of suitable habitat and high level of development at site preclude presence. Lack of vernal pools and cismontane woodlands onsite.
Legenere limosa legenere	—	—	1B.1	Vernal pools and in beds of vernal pools. Elevation: 1-1005 m. Bloom period: April-June	**None.** The Study Area does not contain suitable vernal pool habitat to support this species.
Leptosyne hamiltonii Mt. Hamilton coreopsis	—	—	1B.2	Cismontane woodland Elevation: 600-1,300 m. Blooming period: March - May	**None:** No suitable habitats present such as cismontane woodland.

Scientific Name Common Name	Status			Habitat Description4	Habitat Value and Rationale
	ESA[1]	CESA[2]	CRPR[3]		
Lessingia micradenia var. glabrata smooth lessingia	—	—	1B.2	Chaparral, cismontane woodland, valley and foothill grassland. Often found growing on serpentine soils and on roadsides. Elevation: 61-1,142 m. Blooming period: July – November	**None:** No suitable habitats present such as chaparral, cismontane woodland, or foothill grassland.
Lomatium observatorium Mt. Hamilton lomatium	_	_	1B.2	Habitat in cismontane woodlands. Elevation: 40-105 Blooming period: March-May	**None:** No suitable habitat present within the Study Area such as cismontane woodlands.
Malacothamnus arcuatus arcuate bush-mallow	—	—	1B.2	Chaparral, cismontane woodland. Often found growing on gravelly alluvium substrates. Elevation: 0–735 m. Blooming period: April–September	**None.** The Study Area is disturbed and does not contain suitable habitat such as chaparral or cismontane woodland to support this species.
Malacothamnus hallii Hall's bush-mallo	—	—	1B.2	Chaparral, coastal scrub. Some populations on serpentine soils. 10-735 m.	**None**: Lack of suitable habitat and high level of disturbance at site preclude presence. Lack of chaparral and coastal scrub onsite.
Meconella oregana Oregon meconella	—	—	1B.1	Coastal prairie, coastal scrub. Open, moist places. Elevation: 60-640 m. Blooming period: March-Apr	**None**: Lack of suitable habitat and high level of disturbance at site preclude presence. Lack of prairie and coastal scrub onsite.
Monolopia gracilens woodland woollythreads	—	—	1B.2	Chaparral, valley and foothill grassland, cismontane woodland, broadleafed upland forest, North Coast coniferous forest. Grassy sites, in openings; sandy to rocky soils. Often seen on serpentine after burns but may have only weak affinity to serpentine. Elevation: 120-975 m. Blooming Period: March-July	**None:** The Study Area does not contain suitable forest, chaparral, or grassland habitat to support this species.
Penstemon rattanii var. kleei Santa Cruz Mountains beardtongue	—	—	1B.2	Valley and foothill grassland. Grows in relatively open areas in dry grassy meadows on serpentine soils and serpentine balds. Elevation: 400-1,000 m. Blooming period: April – July	**None:** No suitable habitat present such as foothill grassland or serpentine soils.
Pentachaeta exilis ssp. aeolica San Benito pentachaeta	FE	SE	1B.1	Valley Grassland. Elevation: 29-71 m. Blooming Period: March-May	**None:** The site does contain non-native grassland, but it has been significantly impacted by human disturbance and does not contain suitable present.

Scientific Name Common Name	Status			Habitat Description4	Habitat Value and Rationale
	ESA[1]	CESA[2]	CRPR[3]		
Phacelia phacelioides Mt. Diablo phacelia	—	—	1B.2	Chaparral, cismontane woodland. Adjacent to trails, on rock outcrops and talus slopes; sometimes on serpentine. Elevation: 605-1345 m. Blooming period: Apr-May	**None**: Lack of suitable habitat and high level of disturbance at site preclude presence. Lack chaparral or woodland habitat onsite.
Plagiobothrys glaber hairless popcornflower	—	—	1A	Meadows and seeps in alkaline soils and marshes and swamps. Elevation: 15-180 m. Bloom period: March-May	**None:** The Study Area does not contain meadows, seeps in alkaline soils or swamps to support this species.
Plagiobothrys verrucosus warty popcornflower	—	—	1B.2	Foothill Woodland, Valley Grassland Elevation: 29-71 m. Blooming Period: March-May	**None**: Lack of suitable habitat and high level of disturbance at site preclude presence. Lack valley grassland or woodland habitat onsite.
Ravenella exigua chaparral harebell	—	—	1B.2	Chaparral on rocky areas, usually serpentinite. Elevation: 275-1250 m. Bloom period: May-June	**None**: Lack of suitable habitat and high level of disturbance at site preclude presence. The Study Area lacks chaparral or rocky area habitat.
Sanicula saxatilis rock sanicle	—	—	1B.2	Broadleafed upland forest, chaparral, valley and foothill grassland. Bedrock outcrops and talus slopes in chaparral or oak woodland habitat. Elevation: 670-1250 m. Blooming period: Apr-May	**None**: Lack of suitable habitat and high level of disturbance at site preclude presence. Lack forest, grassland, or chaparral habitat onsite.
Senecio aphanactis chaparral ragwort	—	—	1B.2	Dicot annual herb found in chaparral, cismontane woodland, and coastal scrub habitat. Prefers drying alkaline flats. Elevation: 15-800m. Bloom period: January-April.	**None:** The Study Area does not contain chaparral/cismontane or coastal scrub habitat to support this species.
Streptanthus albidus ssp. albidus Metcalf Canyon jewelflower	FE	—	1B.1	Valley and foothill grassland. Grows in relatively open areas in dry grassy meadows on serpentine soils and serpentine balds. Elevation: 61-366 m. Blooming period: April – July	**None:** No suitable habitat present such as \foothill grasslands.
Streptanthus albidus ssp. peramoenus most beautiful jewelflower	—	—	1B.2	Chaparral, cismontane woodland, and valley and foothill grassland. Grows on serpentinite. Elevation: 95-1000 m. Bloom period: April-September	**None:** The Study Area does not contain chaparral/cismontane woodland or grassland habitat to support this species.

Scientific Name Common Name	Status ESA[1]	 CESA[2]	 CRPR[3]	Habitat Description4	Habitat Value and Rationale
Streptanthus callistus Mt. Hamilton jewelflower	—	—	1B.3	Chaparral, cismontane woodland, known only from the Mt. Hamilton Range. Possibly threatened by erosion and road construction and maintenance. Elevation: 1970 - 2590 feet Blooming period: April - May	**None:** The Study Area does not contain chaparral/cismontane woodland habitat to support this species.
Trifolium buckwestiorum Santa Cruz clover	—	—	1B.1	Broadleafed upland forest, cismontane woodland and coastal prairies. Often found along gravelly road margins. Elevation: 105-610 m. Bloom period: April-October	**None.** The Study Area does not contain suitable woodland habitat to support this species.

Code Designations

[1] Federal Status: 2024 Endangered Species Act (ESA) Listing	[2] State Status: 2024 California Endangered Species Act (CESA) Listing	[3] California Rare Plant Rank (CRPR): 2024 CRPR Listing
ESU = Evolutionary Significant Unit is a distinctive population. **FE** = Listed as endangered under the Endangered Species Act. **FT** = Listed as threatened under the Endangered Species Act. **FC** = Candidate for listing (threatened or endangered) under the Endangered Species Act. **FD** = Delisted in accordance with the Endangered Species Act. **FPD** = Federally Proposed to be Delisted. **MBTA** = Protected by the Migratory Bird Treaty Act **—** = Not federally listed	**SE** = Listed as endangered under the California Endangered Species Act. **ST** = Listed as threatened under CESA. **SSC** = Species of Special Concern as identified by the CDFW. **FP** = Listed as fully protected under the Fish and Game Code. **CFG** = FGC =protected by Fish and Game Code 3503.5 **CR** = Rare in California. **—** = Not State-listed	**Rank 1A** = Plants species that presumed extinct in California. **Rank 1B** = Plant species that are rare, threatened, or endangered in California and elsewhere. **Rank 2** = Plant species that are rare, threatened, or endangered in California, but more common elsewhere. **Rank 3** = Plants about which we need more information–A Review List **Rank 4** = Plants of limited distribution–A Watch List **Blooming period:** Months in parentheses are uncommon.

Notes:

[4] **Habitat Description**: Habitat description adapted from CNDDB and CNPS online inventory or other specified source.

[5] **Potential to Occur and Rationale**: Location of recorded species occurrences determined by geospatial information from BIOS 6 or other specified source.

Sources:

California Department of Fish and Wildlife (CDFW). 2024. CNDDB RareFind 5 California Natural Diversity Database Query for Special-Status Species. Website: https://apps.wildlife.ca.gov/rarefind/view/RareFind.aspx. Accessed July 18, 2024.
California Native Plant Society (CNPS). 2024. California Native Plant Society Rare and Endangered Plant Inventory. Website: http://www.rareplants.cnps.org/. Accessed July 18, 2024.
California Department of Fish and Wildlife (CDFW). 2024. Biogeographic Information and Observation System (BIOS 6). Website: https://wildlife.ca.gov/Data/BIOS. Accessed July 18, 2024.

Table 2: Special-status Wildlife Species Habitat Value Evaluation

Scientific Name Common Name	Status		Habitat Description[3]	Habitat Value and Rationale
	ESA[1]	CESA/FGC[2]		
Amphibians				
Ambystoma californiense pop. 1 California tiger salamander - central California DPS	FT	ST WL	Need underground refuges, especially ground squirrel burrows, and vernal pools, ponds, or other standing water bodies for breeding.	**None**: The site contains 12 recent occurrences of this species within 5 miles, the nearest of which is 1.6 miles southwest from the site. All occurrences of this species are found in undisturbed, upland habitat and occurrences are separated from the Study Area by dispersal barriers in the form of roadways and urban developments, lowering the likelihood of dispersal. Although there is a drainage channel adjacent to the site, the site does not contain adequate habitat to support this species.
Ambystoma macrodactylum croceum Santa Cruz long-toed salamander	FE	SE CFP	Freshwater marsh, found only close to a few isolated ponds in Santa Cruz and Monterey Counties.	**None**: The Study Area does not contain suitable habitat to support this species. The site is devoid of isolated ponds or freshwater marsh habitats.
Aneides niger Santa Cruz black salamander	–	SSC	Mixed deciduous and coniferous woodlands and coastal grasslands in San Mateo, Santa Cruz, and Santa Clara counties. Adults found under rocks, talus, and damp woody debris.	**None**: The Study Area does not contain suitable habitat to support this species. The site is devoid of deciduous, coniferous woodlands, or coastal grassland to support this species.
Dicamptodon ensatus California giant salamander	–	SSC	Temperate forests, rivers, freshwater lakes, and freshwater marshes in northern California.	**None**: The Study Area does not contain suitable habitat to support this species. The site is devoid of temperate forests, rivers, freshwater lakes, or freshwater marshes to support this species.
Rana boylii pop. 4 foothill yellow-legged frog - central coast DPS	FC	CE	Partly shaded, shallow streams and riffles with a rocky substrate in a variety of habitats. Needs at least some cobble-sized substrate for egg-laying. Needs at least 15 weeks to attain metamorphosis.	**None**: The Study Area does not contain streams to support this species. Moreover, the adjacent drainage channel does not provide them microhabitat to support this species.
Rana draytonii California red-legged frog	FT	SSC	Lowlands and foothills in or near permanent sources of deep water with dense, shrubby or emergent riparian vegetation. Requires 11-20 weeks of permanent water for larval development	**None**: There are 14 recent occurrences of this species within 5 miles of the Study Area, the nearest of which is located 1.23 miles southwest of the site. There is a drainage channel adjacent to the Study Area, but this feature does not contain perennial water, is devoid of emergent vegetation, and lacks the aquatic microhabitats to support this species. Therefore, the site does not contain adequate habitat to support this species.

Scientific Name Common Name	Status		Habitat Description[3]	Habitat Value and Rationale
	ESA[1]	CESA/FGC[2]		
Birds				
Agelaius tricolor tricolored blackbird	MBTA	FT SSC FGC	Occurs and nests in large freshwater marshes with dense stands of hydrophytic vegetation (cattails, bulrushes, etc.). Short-distance migrant.	**None:** The Study Area does not contain suitable habitat(s) that would support occurrence of this species. There is one historical record between five and ten miles from the Study Area.
Ammodramus savannarum grasshopper sparrow	MBTA	SSC	Found in dense grasslands on rolling hills, lowland plains, in valleys, and on hillsides on lower mountain slopes. Favors native grasslands with a mix of grasses, forbs, and scattered shrubs. A loosely colonial species when nesting.	**None**: The Study Area does not contain suitable nesting or foraging habitat to support this species such as rolling hills, lowland plains in valleys, and on hillsides on lower mountain slopes.
Aquila chrysaetos golden eagle	MBTA	FP	Typically frequents rolling foothills, mountain areas, sage-juniper flats, and desert.	**Low**: The Study Area contains potential nesting habitat in the form of mature oak trees.
Athene cunicularia burrowing owl	MBTA	SSC FGC	Occurs and nests in open, dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. A subterranean nester, dependent upon burrowing mammals, most notably the California ground squirrel. Short-distance migrant.	**Low:** The Study Area does contain 5 recent occurrences within 5 miles of the site, the nearest of which is 0.4 miles north of the site. No sign of burrowing owl was observed during the field survey. However, the site does contain grassland suitable for foraging and California ground squirrel burrows were observed onsite.
Buteo swainsoni Swainson's hawk	MBTA	FT FGC	Occurs and nests in grasslands with scattered trees, juniper-sage flats, riparian areas, savannahs, and agricultural or ranch lands with groves or lines of trees. Requires adjacent suitable foraging areas such as grasslands, or alfalfa or grain fields supporting rodent populations. Long-distance migrant.	**None:** The Study Area itself does not contain adequate habitat to support this species such as juniper-sage flats, riparian areas, savannahs, and agricultural or ranch lands.
Coturnicops noveboracensis yellow rail	MBTA	SSC	Occurs in wet meadows, shallow marshes, and agricultural fields with grassy cover or heavy stubbles with fairly short vegetation. Often nest among sedges of the genus *Carex*.	**None**. The Study Area does not contain suitable wetland habitat to support this species such as wet meadows, or shallow marshes. The nearest recorded occurrence of this species is approximately 16 miles north of the Study Area.
Cypseloides niger black swift	MBTA	SSC FGC	Occurs and nests on cliffs behind or adjacent to waterfalls in deep canyons and sea-bluffs above the surf, forages widely.	**None:** The Study Area does not contain suitable habitat(s) that would support occurrence of this species such as waterfalls in deep canyons and sea-bluffs.
Elanus leucurus white-tailed kite	MBTA	FP FGC	Found in rolling foothills and valley margins with scattered oaks and river bottomlands or marshes next to deciduous woodland. Requires open grasslands, meadows, or marshes for foraging close to the isolated, dense-topped trees for nesting and perching.	**Low**: There are 3 recent occurrences of this species within 5 miles of the site. The site contains suitable nesting habitat in the form of on-site mature oak trees and marginal foraging habitat in the form of on-site grasslands.

Scientific Name Common Name	Status		Habitat Description[3]	Habitat Value and Rationale
	ESA[1]	CESA/FGC[2]		
Icteria virens yellow-breasted chat	MBTA	SSC	A summer resident; inhabits riparian thickets of willow and other bushy tangles near watercourses. Nests in low, dense riparian habitat consisting of willow, blackberry, and wild grape. Forages and nests within 10 feet of ground level.	**None.** The Study Area does not contain suitable nesting or foraging habitat for this species such as riparian thickets or willow or other bushy tangles near watercourses.
Lanius ludovicianus loggerhead shrike	MBTA	SSC	Broken woodlands, savannah, pinyon-juniper, Joshua tree, and riparian woodlands, desert oases, scrub & washes. Prefers open country for hunting, with perches for scanning, and fairly dense shrubs and brush for nesting.	**None.** The Study Area does not contain suitable habitat for this species such as broken woodlands, savannah, pinyon-juniper, Joshia tree, or riparian woodlands.
Vireo bellii pusillus Least Bell's Vireo	FE MBTA	SE FGC	Occurs and nests in low riparian habitat in the vicinity of water or in dry river bottoms. Long-distance migrant.	**None:** The Study Area does not contain suitable habitat(s) that would support occurrence of this species. The Study Area is devoid of riparian habitat.
Invertebrates				
Bombus crotchii Crotch bumble bee	—	SC	Occurs in grassland and scrubland habitats. Nests in abandoned rodent burrows.	**None.** The site does not contain suitable grassland or scrubland habitat to support this species. Current development and non-native annual grassland onsite reduces the likelihood of this species occurring. The nearest recorded occurrence of this species is approximately 3 miles south of the Study Area from 1959. No bees were observed during the 2024 field survey.
Bombus occidentalis western bumble bee	—	SC	Formerly found in large parts of California but has been reduced in abundance and is now mostly restricted to high meadows or coastal environments. Species requires floral resources, and undisturbed nest and overwintering sites	**None**: High development around the Study Area lowers likelihood of presence. The site does not provide habitat for this species in the form of high meadows or coastal environments. No bees were observed during the 2024 field survey.
Euphilotes enoptes smithi Smith's blue butterfly	FE	—	Depends entirely on coast buckwheat and sea cliff buckwheat.	**None**: The Study Area does not provide suitable habitat for this species. The site lacks coast buckwheat or sea cliff buckwheat.
Euphydryas editha bayensis Bay checkerspot butterfly	FT	—	Restricted to native grasslands on outcrops of serpentine soil in the vicinity of San Francisco Bay. *Plantago erecta* is the primary host plant; *Orthocarpus densiflorus* and *O. purpurscens* are the secondary host plants.	**None**: There are 4 recent occurrences of this species within 5 miles of the site, the nearest of which is 3 miles south of the site. However, the site does not contain host plants necessary to support this species.

Scientific Name Common Name	Status ESA[1]	 CESA/FGC[2]	Habitat Description[3]	Habitat Value and Rationale
Fish				
Hesperoleucus venustus subditus southern coastal roach	—	SSC	Spawning occurs primarily in cool (11-15 C) sections of mainstem rivers in deep pools (8-9 meters) with substrate containing small to medium sized sand, gravel, cobble, or boulder.	**None:** Although the Study Area is adjacent to a drainage channel, the site does not contain suitable aquatic habitat to support this species such as deep pooling features.
Lavinia exilicauda harengus Monterey hitch	—	SSC	Klamath/North coast flowing waters, Klamath/North coast standing waters, and riparian forest.	**None:** Although the Study Area is adjacent to a drainage channel, the site does not contain suitable aquatic habitat to support this species.
Oncorhynchus mykiss irideus pop. 8 steelhead - central California coast DPS	FT	—	Populations in the Sacramento and San Joaquin rivers and their tributaries.	**None:** Although the Study Area is adjacent to a drainage channel, the site does not contain suitable aquatic habitat to support this species.
Oncorhynchus mykiss irideus pop. 9 steelhead - south-central California coast DPS	FT	—	DPS includes all naturally spawned populations of steelhead (and their progeny) in streams from the Russian River to Aptos Creek, Santa Cruz County, California (inclusive). Also includes the drainages of San Francisco and San Pablo Bays.	**None:** Although the Study Area is adjacent a drainage channel, the site does not contain suitable aquatic habitat to support this species. The Study Area does not contain water bodies necessary for spawning.
Mammals				
Antrozous pallidus pallid bat	—	SSC	Found in deserts, grasslands, shrublands, woodlands, and forests. Most common in open, dry habitats with rocky areas for roosting. Roosts must protect bats from high temperatures and include trees and buildings. Species is very sensitive to disturbance of roosting sites.	**None**: Habitat to support this species such as desert, grasslands, shrublands, or woodlands are not present within the Study Area. High levels of disturbance onsite preclude presence.
Corynorhinus townsendii Townsend's big-eared bat	—	SSC	Throughout California in a wide variety of habitats. Most common in areas associated with mixed conifer forest, desert scrub, or pine forest habitat. Roosts in caves, mines, and buildings. Extremely sensitive to human disturbance.	**None**: The Study Area does not contain suitable habitat in the form of conifer forest, desert scrub or pine forest habitat. High levels of disturbance onsite preclude presence.
Neotoma fuscipes annectens San Francisco dusky-footed woodrat	—	SSC	Forest habitats of moderate canopy & moderate to dense understory. May prefer chaparral & redwood habitats. Constructs nests of shredded grass, leaves & other material. May be limited by availability of nest-building materials.	**None**: There are 3 recent records of this species within 5 miles of the site. The site does not contain forest habitat or dense understory to support this species.

Scientific Name Common Name	Status		Habitat Description[3]	Habitat Value and Rationale
	ESA[1]	CESA/FGC[2]		
Taxidea taxus American badger	—	SSC	Found in drier open stages of most shrub, forest and herbaceous habitats with friable soils, specifically grassland environments. Natal dens occur on slopes.	**None.** There are 13 recent occurrences of this species within 5 miles of the Study Area, the nearest of which is 1.7 miles east of the site. The site contains non-native grassland environment but has been significantly impacted through anthropologic disturbances and is surrounded by urban developments. All occurrences of this species are separated from the site by busy roadways and developments, lowering the likelihood of dispersal. No signs of American badger were observed during the site survey.
Vulpes macrotis mutica San Joaquin kit fox	FE	ST	Annual grasslands or grassy open stages with scattered shrubby vegetation.	**None**: The Study Area does not contain shrubby vegetation to support this species and although there is grassland onsite. The nearest recorded occurrence of this species is 8 miles to the north from the mid-1970's.
Reptiles				
Actinemys marmorata northwestern pond turtle	—	SSC	Marshes, streams, rivers, ponds, lakes, still or slow-moving water, areas with muddy bottoms, vegetation mats, logs, debris, and mud banks for basking, suitable upland habitat for egg laying.	**None:** The site contains 9 recent occurrences of this species within 5 miles of the Study Area, the nearest of which is 1.5 miles east of the site. This occurrence is separated from the site by developments and busy roadways. Although the site is adjacent to a drainage channel, the site lacks marshes, ponds, lakes, or vegetation mats, logs, or debris necessary to support this species.
Anniella pulchra Northern California legless lizard	—	SSC	Sandy or loose loamy soils under sparse vegetation. Soil moisture is essential. They prefer soils with a high moisture content.	**None**: The Study Area does not contain habitat with high soil moisture to support this species.
Arizona elegans occidentalis California glossy snake	—	SSC	Inhabits arid scrub, rocky washes in grasslands and chaparral. Appears to prefer microhabitats of open areas and areas with soil loose enough for easy burrowing.	**None.** The Study Area does not contain habitat such as arid scrub, rocky washes in grasslands or chaparral to support this species.
Phrynosoma blainvillii coast horned lizard	—	SSC	Inhabits open areas of sandy soil and low vegetation in valleys, foothills and semiarid mountains. Found in grasslands, coniferous forests, woodlands, and chaparral, with open areas and patches of loose soil. Often found in lowlands along sandy washes with scattered shrubs and along dirt roads. Often found near ant hills feeding on ants.	**None.** The Study Area does not contain suitable habitat that would support occurrence of this species, and intensive use of the Study Area and vicinity in recent and historical times has likely eliminated the possibility for occurrence of this species on the Study Area. There is one occurrence within the City of Morgan Hill from 1894. Subsequent development of the City has dramatically reduced this species' potential habitat within the City limits. The next nearest recorded occurrence is over 8 miles to the northwest.

Scientific Name Common Name	Status		Habitat Description[3]	Habitat Value and Rationale
	ESA[1]	CESA/FGC[2]		
Code Designations				

[1] Federal Status: 2024 Endangered Species Act (ESA) Listing		[2] State Status: 2024 California Endangered Species Act (CESA) Listing	
ESU	= Evolutionary Significant Unit is a distinctive population.	**SE**	= Listed as endangered under CESA.
FE	= Listed as endangered under the Endangered Species Act.	**ST**	= Listed as threatened under CESA.
FT	= Listed as threatened under the Endangered Species Act.	**SSC**	= Species of Special Concern as identified by the CDFW.
FC	= Candidate for listing (threatened or endangered) under the Endangered Species Act.	**FP**	= Listed as fully protected under the Fish and Game Code.
FD	= Delisted in accordance with the Endangered Species Act.	**CFG**	= FGC = protected by Fish and Game Code 3503.5
FPD	= Federally Proposed to be Delisted.	**CR**	= Rare in California.
MBTA	= protected by the Migratory Bird Treaty Act	**—**	= Not State-listed
—	= Not federally listed		

Notes:

[3] **Habitat Description**: Habitat description adapted from CNDDB or other specified source.

[4] **Potential to Occur and Rationale**: Location of recorded species occurrences determined by geospatial information from BIOS 5 or other specified source.

Sources:

California Department of Fish and Wildlife (CDFW). 2024. CNDDB RareFind 5 California Natural Diversity Database Query for Special-Status Species. Website: https://apps.wildlife.ca.gov/rarefind/view/RareFind.aspx. Accessed July 18, 2024.

California Department of Fish and Wildlife (CDFW). 2024. Biogeographic Information and Observation System (BIOS 6). Website: https://wildlife.ca.gov/Data/BIOS. Accessed July 18, 2024.

Appendix C:
Site Photographs

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Photograph 1: Drainage channel outside of the southwestern side of the site, facing southwest

Photograph 2: Coast live oak trees present in eastern portion of site, facing northwest

Photograph 3: Non-native grassland present throughout the site, facing southwest

Photograph 4: Non-native grassland, facing southwest

Photograph 5: Homes located in the northeastern portion of the site, facing southeast

Photograph 6: Mature coast live oak in northeastern portion of property, facing north

Photograph 7: Northern terminus of drainage channel, facing north

Photograph 8: Northern terminus of drainage channel at intersection of Butterfield and E Central Avenue, facing east

Photograph 9: Southern terminus of drainage, facing north

Photograph 10: Southern terminus of drainage ending at 15000 Seymour Avenue, facing south

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Appendix D:
Arborist Report

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Preliminary Arborist Report

375 Diana Avenue
Morgan Hill, CA

PREPARED FOR:
Valley Oak Partners, LLC
734 The Alameda
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January 2024

Preliminary Arborist Report

375 Diana Avenue
Morgan Hill, CA

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Exhibits

Tree Assessment Form

Tree Assessment Plan

Preliminary Arborist Report

375 Diana Avenue
Morgan Hill, CA

Introduction and Overview

Valley Oak Partners is planning to re-develop the property located at 375 Diana Avenue in Morgan Hill. Current site use consists of a single-family residence with outbuildings on an open corner lot. HortScience | Bartlett Consulting, Divisions of The F. A. Bartlett Tree Expert Company, was asked to prepare an **Arborist Report** for the trees within the project area as part of the application to the City of Morgan Hill. This report responds to that request.

This report provides the following information:

1. An assessment of the health, structural condition, and suitability for preservation of the trees located on and adjacent to the proposed project.
2. An assessment of the trees that would be preserved and removed based on preliminary development plans.
3. Preliminary guidelines for tree preservation during the design, construction, and maintenance phases of development.

Tree Assessment Methods

Trees were assessed on December 21, 2023. The assessment included all trees measuring 6 inches and larger in diameter located within and adjacent to the project area. The assessment procedure was a visual assessment from the ground, consisting of the following steps:

1. Identifying the tree species.
2. Attaching a numerically coded metal tag to the trunk of each tree.
3. Recording the tree's location on a map.
4. Measuring the trunk diameter at a point 54-inches (4.5 feet) above grade.
5. Evaluating the health and structural condition using a scale of 1 – 5:
   - ***5*** - A healthy, vigorous tree, reasonably free of signs and symptoms of disease, with good structure and form typical of the species.
   - ***4*** - Tree with slight decline in vigor, small amount of twig dieback, or minor structural defects that could be corrected.
   - ***3*** - Tree with moderate vigor, moderate twig and small branch dieback, thinning of crown, poor leaf color, moderate structural defects that might be mitigated with regular care.
   - ***2*** - Tree in decline, epicormic growth, extensive dieback of medium to large branches, significant structural defects that cannot be abated.
   - ***1*** - Tree in severe decline, dieback of scaffold branches and/or trunk; most of foliage from epicormic shoots (secondary shoots that arise along the trunk and branches); extensive structural defects that cannot be abated.
6. Rating the suitability for preservation as "high", "moderate" or "low." Suitability for preservation considers the health, age and structural condition of the tree, and its potential to remain an asset to the site for years to come.
   - ***High***: Trees with good health and structural stability that have the potential for longevity at the site.
   - ***Moderate***: Trees with somewhat declining health and/or structural defects than can be abated with treatment. The tree will require more intense management and monitoring and may have shorter life span than those in 'high' category.
   - ***Low***: Trees in poor health or with significant structural defects that cannot be mitigated. Tree is expected to continue to decline, regardless of treatment. The species or individual may have

characteristics that are undesirable for landscapes, and generally are unsuited for use areas.

Description of Trees

Fifteen (15) trees representing seven species were assessed, tagged as #75 - 89. Eleven off-site trees (#79 - 89) were included in the assessment. Overall, eight trees were in fair condition, five were good, and off-site trees #82 and 83 were in poor condition. In general species present are commonly observed in the region. Coast live oak, California black walnut, and coast redwood are native to California. The coast live oaks on the property, particularly oak #75, may be endemic to the site. Off-site trees appeared to have been planted as part of the existing landscape treatment. Descriptions of each tree are provided in the ***Tree Assessment Form*** and locations are shown on the ***Tree Assessment Plan*** (see Exhibits).

Table 1. Tree condition and frequency of occurrence.
375 Diana Ave. Morgan Hill, CA.

Common Name	Scientific Name	Condition			Total
		Poor (1-2)	Fair (3)	Good (4-5)	
Raywood ash	*Fraxinus angustifolia* 'Raywood'	-	1	1	**2**
Honey locust	*Gleditsia triacanthos*	-	1	-	**1**
California black walnut	*Juglans hindsii*	1	1	-	**2**
Glossy privet	*Ligustrum lucidum*	1	-	-	**1**
Coast live oak	*Quercus agrifolia*	-	4	1	**5**
Idaho locust	*Robinia* x *ambigua* 'Idahoensis'	-	-	1	**1**
Coast redwood	*Sequoia sempervirens*	-	1	2	**3**
Total		**2**	**8**	**5**	**15**

Four coast live oaks were growing in the east corner of the site, along a driveway to the residence. Oaks #75 – 78 were semi-mature to mature in development, with diameters from 10 to 72 inches. Oak #75 was the largest tree assessed (Photo 1). All were in fair condition.

Photo 1. Coast live oak #75 was the largest tree assessed, with a diameter of 72 inches.

Tree condition was a function of structure rather than health. All four oaks were vigorous. Trees had asymmetric form and codominant stems . Oak #75 had a history of large limb failure with decay in the area of failures. Branches of oaks #76, 77 and 78 had been cabled but only partially and not to industry standards. The base of tree trunks and roots were displacing the asphalt driveway (Photo 2).

Photo 2. Oaks #78 – 76 (L to R) were at the edge of the existing driveway. Roots from oak #78 had lifted the curb and pavement(red arrow).

Off-site coast live oak #85 was growing to the north. It was in good condition with a full, dense crown. Diameter was 15 inches.

Most of the remaining off-site trees grew at near residences to the northeast. These included:

- Three coast redwoods were in fair (#80) to good condition (#82 and 83). Diameters ranged from 12 to 18 inches (Photo 3). The redwoods in good condition were vigorous. The crown of redwood #80 had been sheared on the east side and its trunk was growing against the fence.

Photo 3. Off-site redwoods 83, 82 and 80 (L to R) were growing on either side of California black walnut #81 (yellow arrow).

- California black walnuts #81 and 84 both had diameters of 12 inches. Walnut #81 was in poor condition and topped, with codominant stems at 6 feet (Photo 3). Walnut #84 was fair and had been extensively pruned; one branch rested on the property fence.

- Raywood ash #87 was 16 inches and in good condition with a full, dense crown. Nearby ash #88 was 12 inches and fair, one-sided to the north and suppressed on the south.

- Glossy privet #79 had codominant stems of 8 inches and was in poor condition with extensive dieback.

- Honey locust #86 was in fair condition with a diameter of 13 inches. It had a girdled stem on the east side and full, dense crown.

- Idaho locust #89 was growing at the west property corner. It was in good condition with a diameter of 12 inches. It had multiple attachments at 5 feet and a dense crown with some mistletoe.

Protected Trees in Morgan Hill

The City of Morgan Hill municipal code (Chapter 12.32, Restrictions on Removal of Significant Trees) defines Ordinance Sized Tree as having a single stem or trunk of a circumference of 40 inch (12.7 in. diameter) or more for a non-indigenous species and 18 inch (5.7 in. diameter) or more for an indigenous species. This Chapter also defines Street Tree as within the street right-of-way or within 5 ft. of a sidewalk (for streets without a landscape park strip).

On-site coast live oaks #75 – 78 met the criteria for Ordinance Sized Tree as well as being an Indigenous species. Six off-site trees were Ordinance Sized; three of these were Indigenous. Ordinance Sized trees (Protected trees) are identified on the ***Tree Assessment Form*** (see Exhibits)***.*** Permits and replacement planting of trees acceptable to the community development director are required for the removal of Ordinance Sized trees. California native (Indigenous) trees are required to replace removed natives “unless practical reasons preclude this option.”

Suitability for Preservation

Trees that are preserved on sites where development or other improvements are planned, must be carefully selected to make sure that they may survive construction impacts, adapt to a new environment and perform well in the landscape. Our goal is to identify trees that have the potential for long-term health, structural stability and longevity. Evaluation of suitability for preservation considers several factors:

- **Tree health**
  Healthy, vigorous trees are better able to tolerate impacts such as root injury, demolition of existing structures, changes in soil grade and moisture, and soil compaction than are non-vigorous trees.

- **Structural integrity**
  Trees with significant amounts of wood decay and other structural defects that cannot be corrected are likely to fail. Such trees should not be preserved in areas where damage to people or property is likely. Defects such as codominant or multiple stems, lean and other deviations from the vertical, heavy branches and decay are problematic and may increase the potential for a tree to fail.

- **Species response**
  There is a wide variation in the response of individual species to construction impacts and changes in the environment. For instance, Coast live oak and coast redwood are tolerant of construction impacts, but oaks are sensitive to the addition of fill soil around the base of trunk. Coast redwood requires supplemental irrigation during construction and following any root injury. Raywood ash has moderate tolerance to construction impacts, but is intolerant of root severance. California black walnut is intolerant of site disturbance.

- **Tree age and longevity**
  Old trees, while having significant emotional and aesthetic appeal, have limited physiological capacity to adjust to an altered environment. Young trees are better able to generate new tissue and respond to change.

- **Species invasiveness**
  Species which spread across a site and displace desired vegetation are not always appropriate for retention. This is particularly true when indigenous species are displaced. The California Invasive Plant Inventory Database (www.cal-ipc.org) lists species identified as being invasive. Morgan Hill is part of the Central West Floristic Province. Glossy privet is considered invasive on a limited basis.

Each tree was rated for suitability for preservation based upon its age, health, structural condition and ability to safely coexist within a development environment (Table 2, below).

Table 2. Tree suitability for preservation.
375 Diana Ave. Morgan Hill, CA.

High	Trees with good health and structural stability that have the potential for longevity at the site. Off-site coast live oak #85 had high suitability for preservation.
Moderate	Trees in fair health and/or possessing structural defects that may be abated with treatment. Trees in this category require more intense management and monitoring, and may have shorter life-spans than those in the high category. Ten trees had moderate suitability for preservation: coast live oaks #76 – 78 and seven off-site trees (coast redwoods #80, 82 and 83; honey locust #86; Raywood ash #87 and 88; and Idaho locust #89).
Low	Trees in poor health or possessing significant defects in structure that cannot be abated with treatment. These trees can be expected to decline regardless of management. The species or individual tree may possess either characteristics that are undesirable in landscape settings or be unsuited for use areas. Four trees had low suitability for preservation: coast live oak #75 and three off-site trees (California black walnuts #81, 84, and glossy privet #79).

We consider trees with high suitability for preservation to be the best candidates for preservation during development. We do not generally recommend retention of trees with low suitability for preservation in areas where people or property will be present. Retention of trees with moderate suitability for preservation depends upon the intensity of proposed site changes.

Preliminary Evaluation of Impacts and Recommendations for Action

Appropriate tree retention develops a practical match between the location and intensity of construction activities and the quality and health of trees. The ***Tree Assessment*** was the reference point for tree condition and quality. Impacts from the proposed project were assessed using the **24_0103_TreeAssessPlan_375-Diana_Overlay** and the **Conceptual Site Study 5 (Updated)** (Dahlin, 1/4/2024). This report is preliminary because no site survey, layout, grading, utility, landscape or other construction plans were reviewed.

The site plan proposes a series of townhomes and duplexes with access drives throughout the lot. The site will be redeveloped from property line to property line and potential impacts to trees will be severe. Based on my assessment of the proposed plan and evaluation of the trees, I recommend removal of all four trees on the site (#75 – 78) and preservation of off-site trees #79 – 88. The trees proposed for removal are Ordinance Sized Trees and Indigenous species.

Successful retention of the trees to be preserved will require adherence to the **Preliminary Tree Preservation Guidelines** (below).

Preliminary Tree Preservation Guidelines

All on-site trees will be removed. Trees located off-site but close to the project boundary will be retained. The following recommendations will help reduce impacts to off-site trees from development and maintain their health and structural stability through the clearing, grading and construction phases.

Design recommendations

1. Where possible, include the location of all trees within 10 feet of the project limit. Include trunk locations on all project plans.
2. The project's perimeter security fence will also serve as the **TREE PROTECTION ZONE**. No grading, excavation, construction or storage of materials should occur outside the project limit.

3. All plans affecting trees shall be reviewed by the Consulting Arborist with regard to tree impacts. These include, but are not limited to, demolition plans, grading plans, drainage plans, utility plans, and landscape and irrigation plans.

4. Irrigation systems must be designed so that no trenching severs roots larger than 2 inches in diameter will occur within the **TREE PROTECTION ZONE**.

5. Any herbicides placed under paving materials must be safe for use around trees and labeled for that use.

Pre-demolition and pre-construction treatments and recommendations

1. The project's perimeter security fence will also serve as the **TREE PROTECTION ZONE**. No grading, excavation, construction or storage of materials should occur outside the project limit.

2. Off-site trees to be preserved may require pruning to provide clearance for demolition, grading and construction. Tree care firm providing the pruning shall be a State of California Licensed Tree Contractor (C61/D49). All pruning shall be done by Certified Arborist or Certified Tree Worker in accordance with the latest edition of the Best Management Practices for Pruning (International Society of Arboriculture) and the American National Standard for Tree Care Operations (Z133.1) and Pruning (A300).

3. Tree(s) to be removed that have branches extending into the canopy of tree(s) to remain shall be removed by a Certified Arborist or Certified Tree Worker and not by the demolition contractor. The Certified Arborist or Certified Tree Worker shall remove the trees in a manner that causes no damage to the tree(s) and understory to remain.

4. Trees to be removed shall be felled so as to fall away from **TREE PROTECTION ZONE** and avoid pulling and breaking of roots of off-site trees to remain. If roots are entwined, the Consulting Arborist may require first severing the major woody root mass before extracting the trees.

5. All tree work shall comply with the Migratory Bird Treaty Act as well as California Fish and Wildlife code 3503-3513 to not disturb nesting birds. To the extent feasible tree pruning and removal should be scheduled outside of the breeding season. Breeding bird surveys should be conducted prior to tree work. Qualified biologists should be involved in establishing work buffers for active nests.

Recommendations for tree protection during construction

1. Any approved grading, construction, demolition or other work within 5 feet of the **Tree Protection Zone** should be monitored by the Consulting Arborist.

2. Any root pruning that will occur within 5 feet of the **Tree Protection Zone** shall receive the prior approval of and may be supervised by the Consulting Arborist. Roots should be cut with a saw to provide a flat and smooth cut. Removal of roots larger than 2 inches in diameter should be avoided.

3. If roots 2 inches and greater in diameter are encountered during site work and must be cut to complete the construction, the Consulting Arborist must be consulted to evaluate effects on the health and stability of the tree and recommend treatment.

4. If injury should occur to any tree during construction, it should be evaluated as soon as possible by the Consulting Arborist so that appropriate treatments can be applied.

If you have any questions regarding my observations or recommendations, please contact me.

HortScience | Bartlett Consulting

Pam Nagle
Consulting Arborist and Urban Forester
Certified Arborist #WE-9617A
Registered Consulting Arborist #805
ISA Tree Risk Assessment Qualified

Exhibits

Tree Assessment Form

Tree Assessment Plan

Tree Assessment

375 Diana Avenue
Morgan Hill, CA
December 2023

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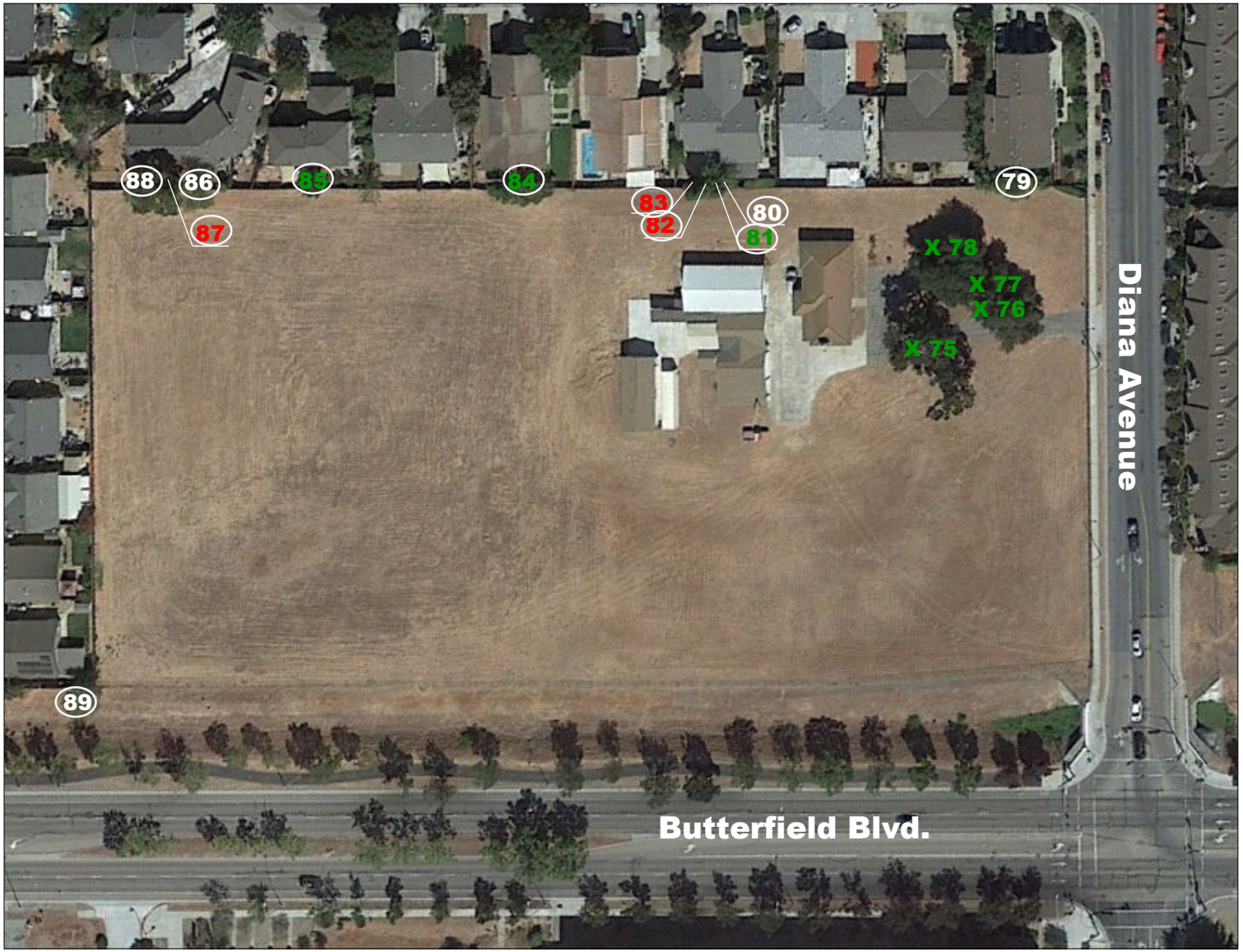
Tree No.	Species	Trunk Diameter (in.)	Canopy Spread (ft.) North	South	East	West	Ordinance Sized Tree? (*=Indigenous)	Condition 1=poor 5=excellent	Suitability for Preservation	Comments
75	Coast live oak	72	35	27	38	40	Yes*	3	Low	Massive tree; history of large branch failures with decay in areas of failures; bark peeling from trunk and areas of black bark; insect boring holes; asymmetric crown; good vigor.
76	Coast live oak	19	10	26	22	24	Yes*	3	Moderate	Codominant stems at 5'; suppressed on north; one-sided to south; displacing asphalt driveway; substandard cabling system with rope and rubber; full crown; good vigor.
77	Coast live oak	14,10	21	20	28	16	Yes*	3	Moderate	Codominant stems at 3'; displacing asphalt driveway; substandard cabling system with rope and rubber; full crown; good vigor.
78	Coast live oak	24,22	31	30	33	21	Yes*	3	Moderate	Codominant stems at 3' with included bark; several other sets of codominant stems; displacing asphalt driveway; substandard cabling system with rope and rubber; rope is girdling branches in some areas; full crown; good vigor.
79	Glossy privet	8,8				5	No	2	Low	Off-site; no tag; can't see trunk or base; diameter size is estimated; codominant trunks; extensive dieback.
80	Coast redwood	12				3	No	3	Moderate	Off-site; no tag; can't see trunk or base; diameter size is estimated; sheared on east side; thin canopy; trunk pushing against fence.
81	California black walnut	12				4	Yes*	2	Low	Off-site; no tag; can't see trunk or base; diameter size is estimated; codominant at 6'; topped.
82	Coast redwood	18				2	Yes	4	Moderate	Off-site; no tag; can't see trunk or base; diameter size is estimated; slightly thin in lower trunk; good vigor.
83	Coast redwood	16				2	Yes	4	Moderate	Off-site; no tag; can't see trunk or base; diameter size is estimated; dense crown; good vigor.
84	California black walnut	12				4	Yes*	3	Low	Off-site; no tag; can't see trunk or base; diameter size is estimated; extensively pruned; branch to south rests on fence.
85	Coast live oak	15				8	Yes*	4	High	Off-site; no tag; can't see trunk or base; diameter size is estimated; codominant trunks; full, dense crown.
86	Honey locust	13				10	No	3	Moderate	Off-site; no tag; can't see trunk or base; diameter size is estimated; codominant stems at 7'; full, dense crown; stem on east is girdled.
87	Raywood ash	16				13	Yes	4	Moderate	Off-site; no tag; can't see trunk or base; diameter size is estimated; multiple attachments at 7'; full, dense crown; dominant tree.
88	Raywood ash	12				14	No	3	Moderate	Off-site; no tag; can't see trunk or base; diameter size is estimated; codominant stems at 6'; one-sided to north; suppressed on south.
89	Idaho locust	12	7				No	4	Moderate	Off-site; no tag; on property corner; multiple attachments at 5'; mistletoe; full, dense crown.

Tree Assessment Plan

375 Diana Avenue
Morgan Hill, CA

Prepared for:
Valley Oak Partners, LLC
San Jose, CA

December 2023



No Scale

Notes:

Green = Indigenous/Ordinance Size
Red = Ordinance Size (not indigenous)
White = Not protected by ordinance
X = Trees to be removed
Circle = Trees to be preserved

Base map provided by:
Google Earth

Numbered tree locations are approximate

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Appendix C

Phase I Cultural Resources Assessment

FCS
An ADEC Innovation

Phase I Cultural Resources Assessment
Diana MH Townhomes Project
City of Morgan Hill, Santa Clara County, California

Morgan Hill, California USGS 7.5-minute Topographic Quadrangle Map, Township 09 South, Range 03 East, Sections 21 and 28
Assessor's Parcel Numbers (APNs) 726-12-001 and 726-12-004

Prepared for:
Diana MH Homes, LLC
734 The Alameda
San José, CA 95126

Contact: Jeff Aguilar

Prepared by:
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Walnut Creek, CA 94597
925.357.2562

Report Authored by: Natalie Adame
Fieldwork Conducted by: Dana DePietro, PhD, RPA

Report Date: July 26, 2024
Revised Date: December 17, 2024

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MANAGEMENT SUMMARY

At the request of Diana MH Homes, LLC, FirstCarbon Solutions (FCS) conducted a Phase I Cultural Resources Assessment (Phase I CRA) for the proposed Diana Morgan Hill Townhomes Project (proposed project) located in the City of Morgan Hill, in Santa Clara County, California. The purpose of this assessment is to identify the presence or absence of potentially significant cultural resources within the project area and, if impacted by the proposed development, propose recommendations for mitigation. Completion of this investigation fulfills the requirements associated with the California Environmental Quality Act (CEQA) Guidelines. This report follows the California Office of Historic Preservation (OHP) procedures for cultural resource surveys and the OHP Archaeological Resource Management Report (ARMR) format for archaeological reports. This report is also intended to fulfill any City of Morgan Hill cultural resources survey and reporting guidelines.

On July 17, 2024, a records search was conducted at the Northwest Information Center (NWIC) located at Sonoma State University located in Rohnert Park, California, for the proposed project and a 0.50-mile radius beyond the project boundaries. The current inventories of the National Register of Historic Places (NRHP), the California Register of Historical Resources (CRHR), the California Historical Landmarks (CHL) list, the California Points of Historical Interest (CPHI) list, and the California Built Environment Resource Directory (BERD) for Santa Clara County were also reviewed to determine the existence of previously documented local historic resources. The results of the records search indicate that 12 historic resources have been recorded within the 0.5-mile search radius, none of which are located within the project boundaries. In addition, 65 area-specific survey reports are on file within the 0.5-mile search radius, none of which address the project site, indicating that the proposed project site has not been surveyed for cultural resources.

On June 18, 2024, FCS sent a request to the Native American Heritage Commission (NAHC) in an effort to determine whether any sacred sites are listed on its Sacred Lands File (SLF) for the project site. A response was received on July 17, 2024, indicating that the SLF search was positive for Native American cultural resources in the immediate project site. The NAHC included a list of 16 Tribal representatives available for consultation. To ensure that all Native American knowledge and concerns over potential Tribal Cultural Resources (TCRs) that may be affected by the proposed project are addressed, a letter containing project information and requesting any additional information was sent to each Tribal representative on July 18, 2024. No responses have been received to date.

On July 19, 2024, FCS Senior Archaeologist and Historian Dr. Dana DePietro surveyed the project site to identify any unrecorded cultural resources within the project boundary. The project site consists of a large rectangular parcel with corners oriented toward the cardinal directions located on the corner of Diana Avenue and Butterfield Boulevard in the City of Morgan Hill. Having previously been used for agricultural purposes, the parcel is largely undeveloped, with a single residence, ancillary storage buildings, and several large oak trees situated in the southeast. The project site is bordered by residential neighborhoods to the northeast, northwest, and southeast and by the Santa Clara County Superior Court to the southwest.

The survey began on the southernmost corner of the site and moved north using east/west transects spaced at 10-meter intervals whenever possible. With the exception of limited areas where recent construction or bioturbation have taken place, visibility of native soils across the was poor (less than 5–10 percent) due to ground cover and dried vegetation. Where visible, native soils were uniformly composed of tan-brown (Munsel 10 YR 4/3) soil interspersed with small (4–5 centimeter [cm]) stones composed primarily of unworked chert, schist, and granite.

Survey conditions were documented using digital photographs and field notes. During the survey, Dr. DePietro examined all areas of the exposed ground surface for prehistoric artifacts (e.g., fire-affected rock, milling tools, flaked stone tools, toolmaking debris, ceramics), soil discoloration and depressions that might indicate the presence of a cultural midden, faunal and human osteological remains, and features indicative of the former presence of structures or buildings (e.g., postholes, standing exterior walls, foundations) or historic debris (e.g., glass, metal, ceramics). Particular attention was paid to the main residence on the property, the construction of which assessor's records date to 1951. Historic aerial photographs show the existing residence appearing on the property between the years of 1974 and 1953, corroborating the assessor's construction date. The structure is therefore over 50 years in age and has not been previously evaluated for significance as a potential historic resource at the local, State, or national level.

The single-family residence (375 Diana Avenue) was subsequently recorded and evaluated for historic significance on the appropriate set of California Department of Parks and Recreation (DPR) form in consideration of NRHP and CRHR designation criteria and integrity requirements. The evaluation determined that the single-family residence (375 Diana Avenue) was found not eligible under all State and local designation criteria due to a lack of significant historic association or architectural merit and integrity.

Based on the results of the records searches, archival research, the positive results from the NAHC SLF search for TCRs, Tribal correspondence, the pedestrian survey, buried site potential, and Architectural and Historical Assessment, FCS considers the potential for the proposed project to have an adverse effect on historic or pre-contact cultural resources to be low to moderate. No pre-contact resources were identified during the record search; however, a single-family residence (375 Diana Avenue) more than 45 years in age that had not been previously evaluated was identified during the pedestrian survey The subsequent architectural assessment determined that the single-family residence (375 Diana Avenue) was found ineligible for inclusion in the NRHP and CRHR.

FCS therefore recommends that an Archaeologist who meets the Secretary of the Interior's Professional Qualification Standards for archaeology conduct a Workers Environmental Awareness Program (WEAP) training for archaeological resources to be given to all construction personnel directly involved with project-related ground disturbance. The training should include visual aids, a discussion of applicable laws and statutes relating to archaeological resources, types of resources that may found within the project site, and procedures to be followed in the event such resources are encountered. In the event exposed soils indicate cultural materials may be present, this may be followed by regular or periodic archaeological monitoring as determined by the Archaeologist, but full-time archaeological monitoring is not recommended at this time.

In addition, the proposed project must adhere to the City of Morgan Hill 2035 General Plan (2035 General Plan) Goal HC-8 and Policies HC-8.1 through HC-8.5, which specifies the identification and protection of historic, archaeological and pre-contact cultural resources, in addition mitigation (Policy HC-8.5) that must be implemented in the event cultural resources are uncovered during construction-related ground-disturbing activities. Compliance with the 2035 General Plan Goals and Policies would reduce potential impacts to cultural resources (historic, archaeological and pre-contact) during construction-related ground-disturbing activities to less than significant. The 2035 General Plan Goals and Policies can be found in Appendix F: Cultural Resources Regulations and Evaluation Criteria, Local Regulations.

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SECTION 1: INTRODUCTION

1.1 - Project Location

The 5.30-acre project site is located at 375 Diana Avenue in the City of Morgan Hill, in Santa Clara County, California (Exhibit 1). The project site is located on the *Morgan Hill, California* United States Geological Survey (USGS) 7.5-minute Topographic Quadrangle Map, Township 09 South, Range 03 East, Section 21 and 28 (Exhibit 2). The project site is bounded by Calle Cabezal to the northwest, Markross Court to the northeast, Diana Avenue to the southeast, and Butterfield Boulevard to the southwest (Exhibit 3).

1.2 - Project Description

The proposed project would demolish all existing on-site structures and one tree and construct 93 townhome residential units in 15 separate buildings, at a density of 17.5 dwelling units per acre (du/acre). Townhomes would be grouped into buildings of six or seven units, with a total building construction area of approximately 222,921 square feet. In addition, the proposed project would construct approximately 36,270 square feet of common open space, 13,950 square feet of private open space, and two bioretention basins, one being 3,190 square feet and the other being 1,150 square feet. The proposed common open space would include various amenities such as barbecue areas, benches, exercise structures, etc. (Exhibit 3).

The proposed project would be accessed via a driveway connecting to Diana Avenue in the northeast corner of the project site, and internal circulation would be provided by an internal road. Additionally, the proposed project would provide 218 residential parking spaces and 28 visitor parking spaces.

1.3 - Assessment Team

FCS Director and Lead Investigator Dana DePietro, PhD, RPA, conducted the pedestrian survey and authored the Historic Resource Assessment/DPR forms, and FCS Field Supervisor and Archaeologist Natalie Adame authored this report. Professional qualifications for Dr. DePietro and Ms. Adame can be found in Appendix A.

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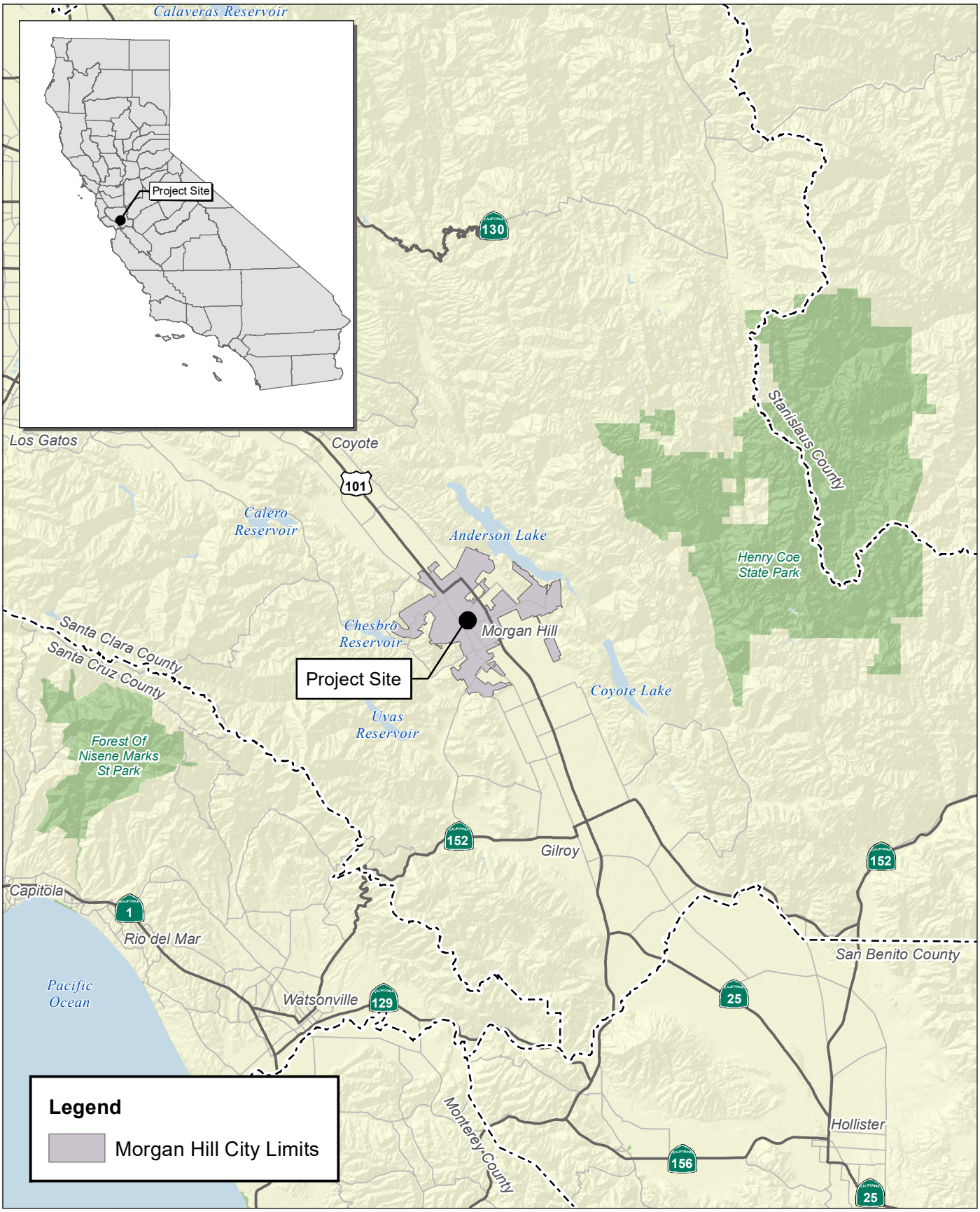

Source: Census 2000 Data, The California Spatial Information Library (CaSIL).

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5 2.5 0 5 Miles

Exhibit 1
Regional Location Map

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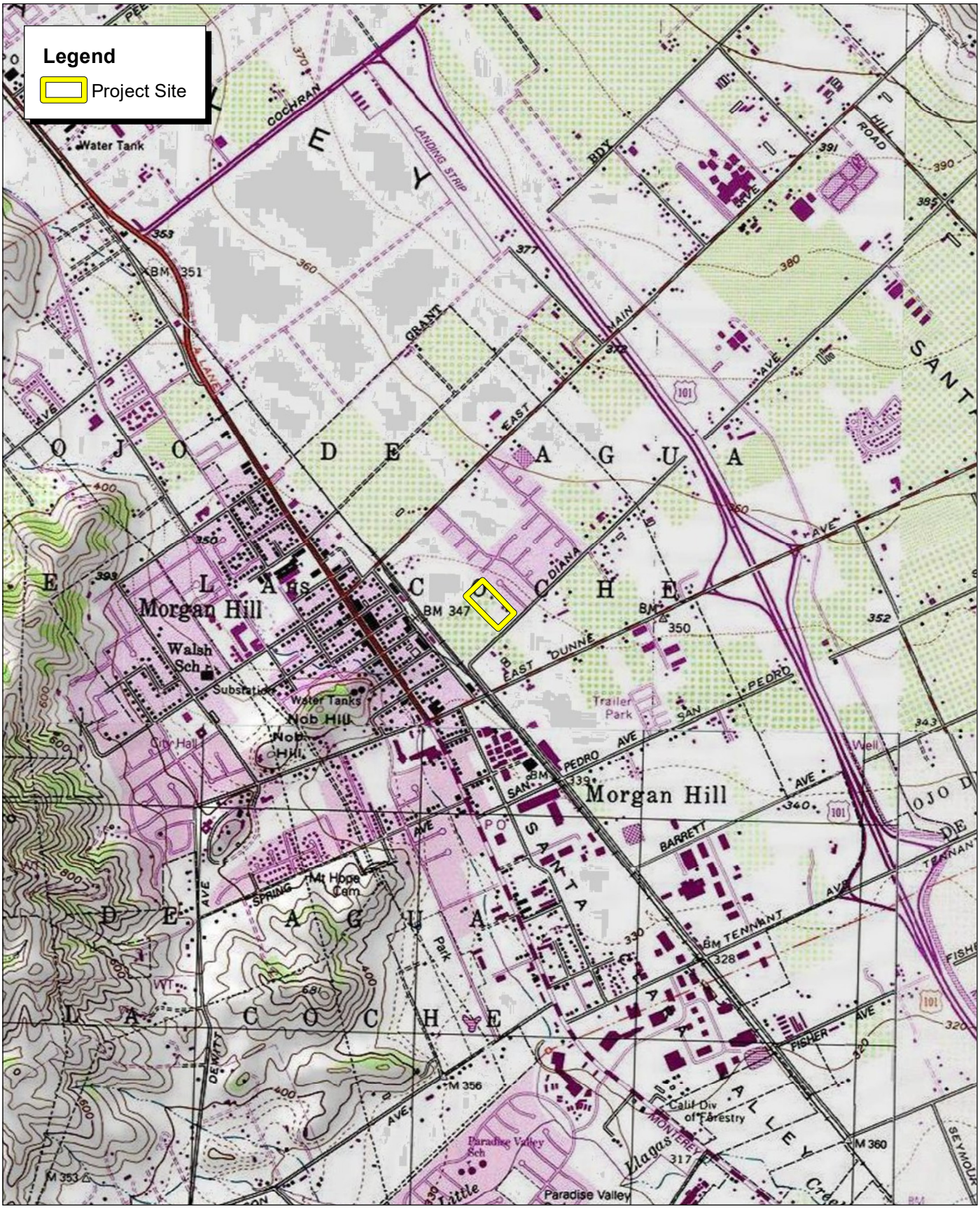

Source: USGS Morgan Hill 7.5' Quadrangle / T09S,R03E,sec21,28.

FIRSTCARBON SOLUTIONS™

2,000 1,000 0 2,000 Feet

Exhibit 2
Local Vicinity Map
Topographic Base

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Source:ESRI Aerial Imagery.

FIRSTCARBON SOLUTIONS™

1,000 500 0 1,000 Feet

Exhibit 3
Local Vicinity Map
Aerial Base

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SECTION 2: CULTURAL SETTING

Following is a brief overview of the pre-contact, ethnography, and historic background, providing a context in which to understand the background and relevance of sites found in the general project area. This section is not intended to be a comprehensive review of the current resources available; rather, it serves as a general overview.

Further details can be found in ethnographic studies, mission records, and major published sources, including Beardsley (1948 and 1954), Bennyhoff (1950), Fredrickson (1973), Kroeber (1925), Chartkoff and Chartkoff (1984), and Moratto (1984) Heizer (1978), and Jones and Klar (2007).

2.1 - Pre-contact Background and Ethnographic Background

In general, archaeological research in the greater San Francisco Bay Area has focused on coastal areas, where large shell mounds were relatively easily identified on the landscape. This research and its chronological framework, however, is relevant to and has a bearing on our understanding of prehistory in areas adjacent to the San Francisco Bay, including modern Santa Clara County.

The San Francisco Bay Area supported a dense population of hunter-gatherers over thousands of years, leaving a rich a varied archaeological record. The Bay Area was a place of incredible language diversity, with seven languages spoken at the time of Spanish settlement in 1776. The diverse ecosystem of the bay and surrounding lands supported an average of three to five persons per square mile but reached 11 persons per square mile in the North Bay. At the time of Spanish contact, the people of the Bay Area were organized into local tribelets that defended fixed territories under independent leaders. Typically, individual Bay Area tribelets included 200 to 400 people distributed among three to five semi-permanent villages, within territories measuring approximately 10 to 12 miles in diameter (Milliken et al. 2007).

Native American occupation and use of the greater Bay Area, including the regions comprising modern Richmond, extends over 5,000 to 7,000 years and may be longer. Early archaeological investigations in Central California were conducted at sites located in the Sacramento-San Joaquin Delta region. The first published account documents investigations in the Lodi and Stockton area. The initial archaeological reports typically contained descriptive narratives with more systematic approaches sponsored by Sacramento Junior College in the 1930s. At the same time, the University of California at Berkeley excavated several sites in the lower Sacramento Valley and Delta region, which resulted in recognizing archaeological site patterns based on a variation of intersite assemblages. Research during the 1930s identified temporal periods in Central California prehistory and provided an initial chronological sequence. In 1939, researcher Jeremiah Lillard of Sacramento Junior College noted that each cultural period led directly to the next and that influences spread from the Delta region to other regions in Central California (Lillard and Purves 1936). In the late 1940s and early 1950s, researcher Richard Beardsley of the University of California Berkeley documented similarities in artifacts among sites in the San Francisco Bay region and the Delta and refined his findings into a cultural model that ultimately became known as the Central California

Taxonomic System (CCTS). This system proposed a uniform, linear sequence of cultural succession (Beardsley 1948).

To address some of the flaws in the CCTS system, D.A. Fredrickson introduced a revision that incorporated a system of spatial and cultural integrative units (Fredrickson 1973). Fredrickson separated cultural, temporal, and spatial units from each other and assigned them to six chronological periods: Paleo-Indian (12000 to 8000 years Before Present [BP]; Lower, Middle, and Upper Archaic [8000 to 1500 BP], and Emergent [Upper and Lower, 1500 to 250 BP]). The suggested temporal ranges are similar to earlier horizons, which are broad cultural units that can be arranged in a temporal sequence. In addition, Fredrickson defined several patterns—a general way of life shared within a specific geographical region. These patterns include:

- Windmiller Pattern or Early Horizon (4500 to 3500 BP)
- Berkeley Pattern or Middle Horizon (3500 to 1500 BP)
- Augustine Pattern or Late Horizon (1500 to 250 BP)

Brief descriptions of these temporal ranges and their unique characteristics follow.

2.1.1 - Windmiller Pattern or Early Horizon (4500 to 3500 BP)

Characterized by the Windmiller Pattern, the Early Horizon was centered in the Cosumnes District of the Delta and emphasized hunting rather than gathering, as evidenced by the abundance of projectile points in relation to plant processing tools. Additionally, atlatl, dart, and spear technologies typically included stemmed projectile points of slate and chert but minimal obsidian. The large variety of projectile point types and faunal remains suggests exploitation of numerous types of terrestrial and aquatic species (Bennyhoff 1950). Burials occurred in cemeteries and intra-village graves. These burials typically were ventrally extended, although some dorsal extensions are known with a westerly orientation and a high number of grave goods. Trade networks focused on acquisition of ornamental and ceremonial objects in finished form rather than on raw material. The presence of artifacts made of exotic materials such as quartz, obsidian, and shell, indicates an extensive trade network that may represent the arrival of Utian populations into Central California. Also indicative of this period are rectangular Haliotis and Olivella shell beads and charmstones that usually were perforated (Ragir 1972).

2.1.2 - Berkeley Pattern or Middle Horizon (3500 to 1500 BP)

The Middle Horizon is characterized by the Berkeley Pattern, which displays considerable changes from the Early Horizon. This period exhibited a strong milling technology represented by minimally shaped cobble mortars and pestles, although metates and manos were still used. Dart and atlatl technologies during this period were characterized by non-stemmed projectile points made primarily of obsidian. Fredrickson suggests that the Berkeley Pattern marked the eastward expansion of Miwok groups from the San Francisco Bay Area. Compared with the Early Horizon, there is a higher proportion of grinding implements at this time, implying an emphasis on plant resources rather than on hunting. Typical burials occurred within the village with flexed positions, variable cardinal orientation, and some cremations. As noted by Lillard, the practice of spreading ground ochre over the burial was common at this time (Lillard et al. 1939). Grave goods during this period are generally

sparse and typically include only utilitarian items and a few ornamental objects. However, objects such as charmstones, quartz crystals, and bone whistles occasionally were present, which suggest the religious or ceremonial significance of the individual (Lillard et.al. 1939). During this period, larger populations are suggested by the number and depth of sites compared with the Windmiller Pattern. According to Fredrickson (1973), the Berkeley Pattern reflects gradual expansion or assimilation of different populations rather than sudden population replacement and a gradual shift in economic emphasis.

2.1.3 - Augustine Pattern or Late Horizon (1500 to 250 BP)

The Late Horizon is characterized by the Augustine Pattern, which represents a shift in the general subsistence pattern. Changes include the introduction of bow and arrow technology; and most importantly, acorns became the predominant food resource. Trade systems expanded to include raw resources as well as finished products. There are more baked clay artifacts and extensive use of Haliotis ornaments of many elaborate shapes and forms. According to Moratto, burial patterns retained the use of flexed burials with variable orientation, but there was a reduction in the use of ochre and widespread evidence of cremation (Moratto 1984). Judging from the number and types of grave goods associated with the two types of burials, cremation seems to have been reserved for individuals of higher status, whereas other individuals were buried in flexed positions. Johnson (1976) suggests that the Augustine Pattern represents expansion of the Wintuan population from the north, which resulted in combining new traits with those established during the Berkeley Pattern.

Central California research has expanded from an emphasis on defining chronological and cultural units to a more comprehensive look at settlement and subsistence systems. This shift is illustrated by the early use of burials to identify mortuary assemblages and more recent research using osteological data to determine the health of pre-contact populations (Dickel et al. 1984). Although debate continues over a single model or sequence for California, the general framework consisting of three temporal/cultural units is generally accepted, although the identification of regional and local variation is a major goal of current archaeological research.

2.1.4 - The Ohlone (Costanoan)

At the time of European contact in the eighteenth century, the San Francisco Bay and Monterey Bay areas was occupied by the Costanoan-speaking Native American tribelets. The Costanoan group designates a linguistic family consisting of eight different, yet related, languages. The eight languages are the Karkin, Ramaytush, Chochenyo, Tamyen, Awaswas, Chalon, Mutsun, and Rumsen. The Costanoan languages were quite different from one another, with each language being related to its geographically contiguous neighbors. The term Costanoan comes from the Spanish word “Costanos” which means Coast People. There are two other terms that were used to identify the Costanoan-speaking people, Olhonean and Mutsun. Olhonean is the name of a tribelet, Olxon, that is in San Mateo County near the San Gregorio Creek. Mutsun is the name of the village in a place called Natividad, which is in the hills between the Salinas and Pajaro rivers (Heizer 1978).

The arrival of Costanoan-speaking groups into the Bay Area appears to be temporally consistent with the appearance of the Late Horizon artifact assemblage in the archaeological record, as documented

at sites such as the Emeryville Shellmound or the Ellis Landing Shellmound. It is probable that the Costanoan moved south and west from the Delta region of the San Joaquin-Sacramento River region into the Bay Area. The Tribal group that most likely occupied the project area is the Tamyen language group, or Santa Clara Costanoan, whose territory extended from the south end of the San Francisco Bay to the lower end of the Santa Clara Valley (Heizer 1978).

The various Costanoan Tribes subsisted as hunter-gatherers and relied on local terrestrial and marine flora and fauna for subsistence. The predominant plant food source was the acorn, but they also exploited a wide range of other plants, including various seeds, buckeye, berries, and roots. Protein sources included grizzly bear, elk, sea lions, antelope, and black-tailed deer, as well as smaller mammals such as raccoon, brush rabbit, ground squirrels, and wood rats. Waterfowl, including Canadian geese, mallards, green-winged teal, and American widgeon, were captured in nets using decoys to attract them. Fish also played an important role in the Costanoan diet and included steelhead, salmon, and sturgeon.

The Costanoan constructed watercraft from tule reeds and possessed bow and arrow technology. They fashioned blankets from sea otter pelts, fabricated basketry from twined reeds of various types, and assembled a variety of stone and bone tools in their assemblages. Costanoan villages typically consisted of domed dwelling structures, communal sweathouses, dance enclosures, and assembly houses constructed from thatched tule reeds and a combination of wild grasses, wild alfalfa, and ferns.

The Costanoan were politically organized into autonomous tribelets that had distinct cultural territories. Individual tribelets contained one or more villages with several seasonal camps for resource procurement within the tribelet territory. The tribelet chief could be either male or female, and the position was inherited patrilineally, but approval of the community was required. The tribelet chief and council were essentially advisers to the community and were responsible for feeding visitors and directing hunting and fishing expeditions, ceremonial activities, and warfare on neighboring tribelets.

The first European contact with the Costanoan, specifically the Rumsen tribelets, was in 1602 when Sebastian Vizcaíno's expedition arrived in Monterey. The estimated Costanoan population in 1770—when the first mission was established in Ohlone territory—was approximately 10,000. By 1832, the population had declined to fewer than 2,000, mainly due to diseases introduced by the European explorers and settlers. When the Spanish mission system rapidly expanded across California, the Costanoan traditional way of life was irreversibly altered. The pre-contact hunter-gatherer subsistence economy was replaced by an agricultural economy, and the Spanish missionaries prohibited traditional social activities. After secularization of the missions between 1834 and 1836, some Native Americans returned to traditional religious and subsistence practices while others labored on Mexican ranchos. Thus, multi-ethnic Indian communities grew up in and around the area and provided informant testimony to ethnologists from 1878 to 1933 (Hart 1987).

The California Gold Rush brought further disease to the native inhabitants, and by the 1850s, nearly all of the Costanoan-speaking groups had adapted in some way or another to economies based on cash income. Hunting and gathering activities continued to decline and were rapidly replaced with

economies based on ranching and farming. The Costanoan languages most likely went extinct by 1935. By the 1970s the estimated number of Costanoan descendants or Ohlone descendants in the San Francisco Bay Area was approximately 200. The descendants of the Costanoan united to form the Ohlone Indian Tribe and received ownership of the Ohlone Indian Cemetery where their ancestors of Mission San José are buried. Some of the Costanoan descendants in the Monterey Bay area prefer the term "Ohlone," which comes from the name of a village on the San Francisco Peninsula (Jones and Klar 2007; Heizer 1978).

2.2 - Regional Historic Background

2.2.1 - Spanish Period (1769 to 1821)

The first European to enter the area was Captain José Francisco de Ortega, who was a scout for the Portola Expedition; however, the region was not officially explored until the De Anza Expedition, when Father Junípero Serra consecrated the Mission Santa Clara de Asís. Named after Italian Saint Santa Chiara di Assisi, the mission was founded on January 12, 1777, and was the eighth mission in the chain of 21 Franciscan missions established by Padre Junípero Serra (Mission Santa Clara de Asís 2020; Hall 1871). The mission would eventually be moved or rebuilt five times due to architectural faults or natural disasters. The final location is adjacent to where the current chapel now stands.

The pueblo of San José de Guadalupe was established on November 29, 1777, in an effort by the Spanish government to provide a permanent and secure settlement to the religious and military personnel passing through the area; it was the first town to be established in California. On June 11, 1797, Mission San José was consecrated, making it the fourteenth of the 21 Franciscan Missions. Santa Clara Valley grew and expanded rapidly, chiefly due to fertile land surrounding Mission San José, excellent water supply, large numbers of Native American laborers, and proximity to San Francisco Bay. However, Spanish mission records indicate that local Native American inhabitants were being taken to Mission San José until secularization of the missions in 1833. Many Native Americans were not willing converts; there are numerous accounts of neophytes fleeing the missions, and a series of "Indian Wars" broke out when the Spanish tried to return them to the missions. During this period, Native American populations were declining rapidly from an influx of Euro-American diseases. In 1832, a party of trappers from the Hudson's Bay Company led by John Work, traveled down the Sacramento River unintentionally spreading a malaria epidemic to Native Californians. Four years later, a smallpox epidemic decimated the local population, and it is estimated that up to 75 percent of the native population died (Cook 1955).

2.2.2 - Mexican Period (1821-1848)

With the declaration of Mexican independence in 1821, Spanish control of Alta California ended, although little change occurred. Political change did not take place until mission secularization in 1834, when Native Americans were released from missionary control and the mission lands were granted to private individuals. Shoup and Milliken (1999) state that mission secularization removed the social protection and support on which Native Americans had come to rely. It exposed them to further exploitation by outside interests, often forcing them into a marginal existence as laborers for large ranchos. Following mission secularization, the Mexican population grew as the native population continued to decline. Anglo-American settlers began to arrive in Alta California during

this period and often married into Mexican families, becoming Mexican citizens, which made them eligible to receive land grants. In 1842, Francisco Estrada and his wife, Inez Castro, were given the land grant to Rancho Pastoria de las Borregas Francisco Estrada, and in 1844, Lupe Yñigo, a Native American Ohlone man, was given a land grant that he named Rancho Posolmi in honor of the Ohlone Posolmi village that once stood in the area. Rancho Posolmi was later known as Rancho Yñigo (Beck and Hasse 1974). These Ranchos later became modern-day Sunnyvale and Mountain View.

In 1846, on the eve of the U.S.-Mexican War (1846 to 1848), the estimated population of Alta California was 8,000 non-Natives and 10,000 Natives. However, these estimates have been debated. Cook (1976) suggests the Native American population was 100,000 in 1850; the U.S. Census of 1880 reports the Native American population as 20,385 during the Gold Rush and American Expansion. After the upheaval of the Bear Flag Revolt in 1846, and because of the Treaty of Guadalupe Hidalgo in 1848, California became a United States territory.

2.2.3 - Euro-American Expansion

In 1848, James W. Marshall discovered gold at Coloma in modern-day El Dorado County, which started the Gold Rush into the region that forever altered the course of California's history. The arrival of thousands of gold seekers in the territory contributed to the exploration and settlement of the entire State. By late 1848, approximately four out of five men in California were gold miners. The Gold Rush originated along the reaches of the American River and other tributaries to the Sacramento River, and Hangtown, present-day Placerville, became the closest town offering mining supplies and other necessities for the miners in El Dorado County. Gold subsequently was found in the tributaries to the San Joaquin River, which flowed north to join the Sacramento River in the Great Delta east of San Francisco Bay (Robinson 1948).

By 1864, the California Gold Rush had essentially ended. The rich surface and river placers were largely exhausted and the miners either returned to their homelands or stayed to start new lives in California. After the Gold Rush, people in towns such as Jackson, Placerville, and Sonora turned to other means of commerce, such as ranching, agriculture, and timber production. With the decline of gold mining, agriculture and ranching came to the forefront in the State's economy. California's natural resources and moderate climate proved well suited for cultivation of a variety of fruits, nuts, vegetables, and grains (Beck and Hasse 1974).

2.2.4 - County of Santa Clara

The County of Santa Clara derives its name from Mission Santa Clara de Asís, and it is one of the original counties created at statehood, sharing its name with the City of Santa Clara. The County of Santa Clara was founded on February 18, 1850, originally having been named San José County a month prior; the California legislature decided to change the name after recommendations from General Mariana Guadalupe Vallejo's committee. Santa Clara is made up of 15 cities, with San José serving as the county seat, and encompasses 1,312 square miles (National Park Service 2018).

As more and more settlers came to the area, they found the climate and soil in the County of Santa Clara pristine for farming and agricultural use, compounded with the underground aquifers underlying the entire valley, making the land particularly valuable (Kyle et al. 2012; National Park

Service 2018). When gold was discovered in California in 1848, it brought an influx of settlers to the region, prompting several cities and towns to be established in Santa Clara County, thus expanding its borders. Some of the prominent individuals who helped in the growth of the valley were Martin Murphy Jr., who by 1849 controlled six of the county's largest ranchos, planted the valley's first orchards, and helped institute Santa Clara University; Senator Leland Stanford, who established Leland Stanford Junior University in Palo Alto; and Rafael Soto, who helped layout Palo Alto's original townsite in 1888 (National Park Service 2018). The addition of several rail lines was pivotal in facilitating the growth of the agricultural business. After World War II, the communities in the County of Santa Clara experienced a population boom with thousands of veterans settling in the area seeking suburban living.

Today, the County of Santa Clara is nicknamed Silicon Valley and is home to Apple, Facebook, Google, and Tesla, etc. Its population of nearly 1,877,592 million is one of the largest in the State and the largest of the nine Bay Area counties (CSAC 2014; United States Census Bureau 2024). Aside from being a leader in technology, the County of Santa Clara is also home to Stanford University, San José State University, and Santa Clara University, as well as several sports teams, including the San José Sharks. The County of Santa Clara is consistently listed as one of the best places to live in the United States and is celebrated for its high standards of living and natural diversity.

2.2.5 - City of Morgan Hill

The region that would eventually become Morgan Hill was acquired when Martin Murphy Sr. (father of the founder of Sunnyvale) purchased the 9,000-acre Rancho de Ojo de Agua de la Coche from Don Juan Maria Hernandez in 1846. In 1851, Daniel Murphy, Martin Murphy Sr.'s youngest son, married Mary Fisher and acquired 19,000 acres of Rancho de Laguna Seca from the union. By 1876, the Murphy Family owned the majority of land that is now North Gilroy, Uvas, San Martin, Madrone, Coyote, and Sunnyvale. Following his union with Mary Fisher, Daniel Murphy continued to invest in land and cattle. After his death, his daughter, Diana Helen Murphy, inherited half of Rancho de Ojo de Agua de la Coche (her brother inherited the other half). The same year that Diana's father passed away, she married Hiram Morgan Hill and, together, they constructed Villa Mira Monte, also known as Morgan Hill House, located between the railroad and Monterey Road in 1884. By 1896, the community had a population of 250 and boasted a school, several churches, a post office, a train depot, two hotels, and a restaurant. Hence when the Southern Pacific Railroad station was built in 1898 in close proximity the Morgan Hill House, it colloquially became known as Morgan Hill Station, and when Morgan Hill was incorporated on November 10, 1906, it was an obvious choice as to what the newly incorporated community would be called (Sharma 2005).

By 1910, the population of Morgan Hill rose to over 1000 residents. Morgan Hill quickly became known as a close-knit community, with a budding industry in agricultural production. Following the end of World War II, Morgan Hill experienced a shift from agriculture to residential expansion. The portion of the population that relocated for the war effort were now looking for a place to raise their families, and Morgan Hill offered both the safety of a small town and local amenities dedicated to assisting growing families. This sentiment continued through the 1970s and 1980s, as Silicon Valley workers chose to reside in Morgan Hill, attracted by the small town feel and affordable housing (City of Morgan Hill 2024). Currently, 45,500 people call Morgan Hill home (US Census Bureau 2024)

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SECTION 3: RESULTS

3.1 - Record Search

3.1.1 - Northwest Information Center Search

On July 17, 2024, staff of the NWIC, located at Sonoma State University in Rohnert Park, California, conducted a records search for the project site and a 0.5-mile radius beyond the project boundaries. To identify any historic properties or resources, the current inventories of the NRHP, the CRHR, the CHL list, the CPHI list, and the BERD for Santa Clara County were also reviewed to determine the existence of previously documented local historic resources.

Results from the NWIC indicate that 12 historic resources have been recorded within a 0.5-mile radius of the project site; none of which located within the project boundaries (Table 1). In addition, 65 area-specific survey reports (Table 2) are on file with the NWIC for the search radius, none of which address the project site, indicating that the proposed project site has not been surveyed for cultural resources. NWIC records search results can be found in Appendix B

Table 1: Cultural Resources Within 0.5 Mile of the Project Site

Resource No.	Resource Description	Date Recorded
P-43-001054	Will Bone House; OHP Property Number - 013784; OHP PRN - 5037-0097-0000: AH04 Privies/dumps/trash scatters;	1979
P-43-001801	16835 Monterey Street: HP02 Single-family property; HP06 1-3 story commercial building	2004
P-43-002632	OHP PRN - 5037-0014-0000; Morgan Hill Times Building; Boutell Building; OHP Property Number–013702: HP06 1-3 story commercial building	1979
P-43-002633	OHP PRN - 5037-0015-0000; Block 18, Lot 2; Aiken House; OHP Property Number–013703; HP02; Single-family property	1979
P-43-002634	OHP PRN - 5037-0016-0000; Sumi's Beauty Shop; Swope Residence; OHP Property Number–013704; 45 East 3rd Street: HP02; Single-family property	1979
P-43-002635	OHP PRN - 5037-0017-0000; Block 18, Lot 19; F.M. Phelps Residence; OHP Property Number– 013705: HP02; Single-family property	1979
P-43-002636	OHP PRN - 5037-0018-0000; Block 18, Lot 18; Kate Robinson Bungalow; OHP Property Number–013706; 57 East 3rd Street.: HP02; Single-family property	1979
P-43-002637	OHP PRN - 5037-0019-0000; Block 18, Lot 17; John and Annabelle Allen House; Glenwood Lumber Co. House; OHP Property Number–013707: HP02; Single-family property	1979
P-43-002638	OHP PRN - 5037-0020-0000; Block 18, Lot 16; Lindsay House; I.B. Briscoe House; OHP Property Number–013708; HP02; Single-family property	1979

Resource No.	Resource Description	Date Recorded
P-43-002639	OHP PRN - 5037-0021-0000; Block 18, Lots 5, 6, 7 and 15; Old Dee-Hi Plant (95 East 3rd Street); Original Farmer's Union Store; OHP Property Number–013709; HP06 1-3 story commercial building	1979
P-43-003041	Hale's Lumber; HP06 1–3 story commercial building	2001
P-43-004018	T-Mobile West, LLC Candidate SF04833A; Greif Brothers: HP06 1–3 story commercial building	2016
Source: Northwestern Information Center (NWIC) Records Search. July 17, 2024.		

Table 2: Previous Investigations Within 0.5 Mile of the Project Site

Report Number	Report Title/Project Focus	Author	Date
S-004286	Archaeological Impact Evaluation: The Llagas Creek Project	Thomas F. King and Patricia P. Hickman	1973
S-006938	Cultural Resource Evaluation of a Parcel on East Dunne Avenue and Rosemary Lane in the City of Morgan Hill, County of Santa Clara	Robert Cartier	1984
S-008478	Cultural Resources Evaluation of the Llagas Creek Watershed	Robert Cartier, Glory Anne Laffey, Charlene Detlefs, and Peter Johnson	1981
S-008478a	Addendum to the Llagas Creek Watershed Cultural Resources Evaluation: Identification and Evaluation of Potentially Significant Bridge Structures Within Reaches 2, 3 and 9	Robert Cartier, Charlene Detlefs, and Glory Laffey	1981
S-008478b	Addendum to the Llagas Creek Watershed Cultural Resources Evaluation: Identification and Evaluation of Potentially Significant Bridge and Culvert Structures Within Reaches 7a, 7b, 8a, and 11a	Robert Cartier and Charlene Detlefs	1981
S-008483	Cultural Resource Evaluation of a Parcel on West Dunne Avenue in the City of Morgan Hill, Santa Clara County	N/A	1981
S-008711	Archaeological evaluation of three lots located at 17485 Monterey Street at West First Street, Morgan Hill (APN 767-7-27, 28, & 29) (letter report)	Katherine Flynn	1986
S-009900	Archaeological survey of the proposed location of the Parkwood Apartments, West Dunne Avenue at Del Monte Avenue, Morgan Hill (letter report)	Katherine Flynn	1988
S-010379	Results of Phase I Archaeological Reconnaissance with Recommendations for Cultural Resource Management, Greg Mussallem Project Parcel, APN 764-16-08, West Main Avenue at Del Monte Avenue, Morgan Hill, Santa Clara County, California	Larry Bourdeau	1988

Report Number	Report Title/Project Focus	Author	Date
S-010494	Results of Phase I Archaeological Reconnaissance with Recommendations for Cultural Resource Management, Woodcrest Subdivision Project Parcel, APN 727-6-48, Morgan Hill, Santa Clara County, California	Larry Bourdeau	1989
S-010729	Results of Phase I Cultural Resource Evaluation and Archaeological Reconnaissance with Recommendations for Cultural Resource Management, Shelle' Thomas Project Parcel, APN 764-16-15, 50 Keystone Avenue, Morgan Hill, Santa Clara County, California	Larry Bourdeau	1989
S-010802	Archival and Field Inspection of the 12 Proposed Caltrain Extensions between San José and Gilroy, Santa Clara County, California	Miley Paul Holman	1989
S-011054	Results of Phase II Archaeological Monitoring, Mechanical Subsurface Testing with Recommendations for Cultural Resource Management, Woodcrest Subdivision Project Parcel, APN 727-6-48, 630 East Main Avenue, City of Morgan Hill, Santa Clara County, California	Larry Bourdeau	1989
S-011673	Cultural Resource Evaluation for 65-85 West First Street in the City of Morgan Hill, County of Santa Clara	Robert Cartier	1990
S-011674	Cultural Resource Evaluation for the Epperson Project, 140 W. Main Avenue in the City of Morgan Hill, County of Santa Clara	Robert Cartier	1990
S-012173	Results of Phase II Archaeological Investigations with Recommendations for Cultural Resource Management: the Will Bone House, Historic Archaeological Site CASCL-670H, Greg Mussallem Project Parcel, APN 764-16-08, West Main Avenue at Del Monte Avenue, Morgan Hill, Santa Clara County, California	Larry Bourdeau	1990
S-013455	Cultural Resources Assessment, Sutter Boulevard Extension Project, Morgan Hill, Santa Clara County, California	Angela M. Banet and Steven J. Rossa	1991
S-014249	Cultural Resource Evaluation of the Morgan Hill Caltrain Park and Ride in the City of Morgan Hill, County of Santa Clara	Robert Cartier	1992
S-014755	Cultural Resource Evaluation of the Shelle' Thomas Property, City of Morgan Hill, Santa Clara County	Robert Cartier	1992
S-015124	Cultural Resource Evaluation of Nob Hill Terrace Properties, City of Morgan Hill, Santa Clara County	N/A	1993

Report Number	Report Title/Project Focus	Author	Date
S-015650	Preliminary Cultural Resources Reconnaissance for Road Widening on East Dunne Avenue in Morgan Hill, Santa Clara County, California	Anna Runnings and Gary S. Breschini	1993
S-016695	Cultural Resource Evaluation of Coast Federal Bank Property, City of Morgan Hill, Santa Clara County	N/A	1994
S-016700	Cultural Resource Evaluation of Skeel's Building Site, APN 767-07-50, City of Morgan Hill	N/A	
S-016715	Cultural Resource Evaluation, Simonsen and De Rosa Properties, APN 767-05-055 and 056, City of Morgan Hill	Robert Cartier	1994
S-017636	Cultural Resource Evaluation of a 4 Acre Parcel of Land for the 76-Unit Apartment Project, City of Morgan Hill	Lynne Eckert	1995
S-022619	Cultural Resources Evaluation of the Villa Ciolino Project in the City of Morgan Hill	N/A	1995
S-022819	Cultural Resources Survey for the Level Communications Long Haul Fiber Optics Project, Segment WS05: San José to San Luis Obispo	Wendy J. Nelson, Maureen Carpenter, and Julia G. Costello	2000
S-023355	Cultural Resources Assessment, Parcel Located at Butterfield Boulevard and Diana Avenue, City of Morgan Hill, Santa Clara County, California	Colin I. Busby and Stuart A. Guedon	1999
S-025094	Phase I Archaeological Resources Inventory, San Marco Meadows, Pittsburg, Contra Costa County, California	Ric Windmiller	2002
S-025322	Archaeological Investigations for the Nob Hill Cell Tower Site	John A. Nadolski	2000
S-025322a	Archaeological Reports for Cell Tower Sites	John A. Nadolski	2000
S-025322b	Telecommunication Facilities; FCC001127AD: CA-1109, adjacent to Canyon Road near American Canyon Road and Interstate 80, Napa, CA; 100 West Third Street, Morgan Hill, CA; 9055 South Gate Ridge Road, San Ramon, CA; 2210 West College Avenue, Santa Rosa, CA	Daniel Abeyta	2000
S-029657	Archaeological Inventory for the Caltrain Electrification Program Alternative in San Francisco, San Mateo, and Santa Clara Counties, California	Wendy J. Nelson, Tammara Norton, Larry Chiea, and Reinhard Pribish	2002
S-029657a	Finding of No Adverse Effect, Caltrain Electrification Program, San Francisco, San Mateo, and Santa Clara Counties, California	Rand F. Herbert	2002
S-029657b	Historic Property Survey for the Proposed Caltrain Electrification Program, San Francisco, San Mateo, and Santa Clara Counties, California	N/A	2002

Report Number	Report Title/Project Focus	Author	Date
S-029657c	FTA021021A; Caltrain Electrification Program, San Francisco, San Mateo, and Santa Clara Counties	Knox Mellon	2002
S-029657d	Final Finding of Effect Amendment, Caltrain Electrification Project, San Francisco, San Mateo, and Santa Clara Counties, California	Meta Bunse	2003
S-029657e	Draft Finding of No Adverse Effect, Caltrain Electrification Program, San Francisco, San Mateo, and Santa Clara Counties, California	Rand F. Herbert	2001
S-029657f	Cultural Resources Addendum for the Caltrain Electrification Program Alternative: San Francisco, San Mateo, and Santa Clara Counties, California	Sharon A. Waechter, Jack Meyer, and Laura Leach-Palm	2008
S-029657g	Addendum Finding of Effect, Caltrain Electrification Program, San Francisco to San José (MP 0.0 to 52.0); San Francisco, San Mateo, and Santa Clara Counties, California	Meta Bunse	2008
S-029657h	Inventory and Evaluation of Historic Resources, Caltrain Electrification Program, San Francisco to Gilroy	N/A	2002
S-029663	Construction of a 47-foot slimline monopole and new equipment cabinets, Morgan Hill Plastics/SF-10300A, 640 East Dunne Avenue, Morgan Hill, CA	Scott Billat	2004
S-031428	Historical Evaluation of the Property at 16835 Monterey Road in the City of Morgan Hill	N/A	2004
S-033061	Cultural Resources Final Report of Monitoring and Findings for the Qwest Network Construction Project, State of California	Nancy Sikes, Cindy Arrington, Bryon Bass, Chris Corey, Kevin Hunt, Steve O'Neil, Catherine Pruett, Tony Sawyer, Michael Tuma, Leslie Wagner, and Alex Wesson	2006
S-033061a	Cultural Resources Final Report of Monitoring and Findings for the Qwest Network Construction Project, State of California	N/A	2006
S-033061b	Final Report of Monitoring and Findings for the Qwest Network Construction Project	Nancy E. Sikes	2007
S-036266	A Cultural Resources Survey for the Horizons at Morgan Hill Housing Project, 98 East Central Avenue, Morgan Hill, Santa Clara County, California	Vicki Beard	2009
S-037010	Archaeological Survey Report for the Third Street Promenade Project, City of Morgan Hill, Santa Clara County, CML-5152 (016)	Miley Paul Holman	2008
S-037010a	Historic Resource Evaluation Report (HRER) for City of Morgan Hill Third Street Promenade Project, 2007 Proposed Third Street Promenade Project: Between	Sheila McElroy	2008

Report Number	Report Title/Project Focus	Author	Date
	Monterey Road and Depot Street in Morgan Hill, California, Federal Identification Number (FIN): CML-5152 (016)		
S-049126	Historic Property Survey Report, City of Morgan Hill proposal to resurface two sections of Monterey Road, 4-SCL STPL- 5152(021)	Judith Marvin	2016
S-049126a	Archaeological Survey Report for the City of Morgan Hill Monterey Road Preservation Project, Santa Clara County, California	Ian Patrick, Melinda Pacheco Patrick, and Judith Marvin	2016
S-052066	Cultural Resources Records Search and Site Visit Results for T-Mobile West, LLC Candidate SF04833A (SF833 Barrett Avenue), 235 San Pedro Avenue, Morgan Hill, Santa Clara County, California (letter report)	Cher L. Peterson, Carrie D. Wills, and Kathleen A. Crawford	2016
S-052066a	Direct APE Historic Architectural Assessment for T-Mobile West, LLC, Candidate SF04833A (SF833 Barrett Avenue), 235 San Pedro Avenue, Morgan Hill, Santa Clara County, California	Carrie D. Wills and Kathleen A. Crawford	2016
S-053037	A Cultural Resources Study of APNs 817-36- 032 and 817-36-033, Monterey Road, Morgan Hill, Santa Clara County, California	Eileen Barrow	2017
S-053380	Cultural Resources Study Of The Morgan Hill Water Tank Project, Cingular Wireless Site No. SNFCCA2007B, 100 W. Third Street, Morgan Hill, Santa Clara County, California 95037	Dana E. Supernowicz	2006
Source: Northwestern Information Center (NWIC) Records Search. July 17, 2024.			

3.1.2 - Native American Heritage Commission Record Search

On June 18, 2024, FCS sent a request to the NAHC to determine whether any sacred sites are listed on its SLF for the project site. A response was received on July 17, 2024, indicating that the SLF search was positive for the presence of Native American cultural resources in the immediate proposed project site. The NAHC included a list of 16 Tribal representatives available for consultation. To ensure that all Native American knowledge and concerns over potential TCR that may be affected by the proposed project are addressed, a letter containing project information and requesting any additional information was sent to each Tribal representative on July 18, 2024. No responses have been received to date. NAHC correspondence can be found in Appendix C.

3.1.3 - Historic Aerials Search

A review of 14 topographic maps (dating back to 1917) and 22 historic aerials depicting the project site from 1948 to 2020 indicate that, from the earliest aerial in 1948, the project site remained undeveloped. However, between 1948 and 1953 development of a homestead(s) occurred within

the project site. From 1956 to 1968, an additional structure was built on the property. . From 1968 to 2020, no additional development occurred within the project boundary (Historic Aerials 2024).

3.2 - Pedestrian Survey, Architectural and Historic Assessment, and Buried Site Potential

3.2.1 - Pedestrian Survey

On July 19, 2024, FCS Senior Archaeologist and Historian Dr. Dana DePietro surveyed the project site to identify any unrecorded cultural resources within the project boundary. The project site consists of a large rectangular parcel with corners oriented toward the cardinal directions located on the corner of Diana Avenue and Butterfield Boulevard in the City of Morgan Hill. Having previously been used for agricultural purposes, the parcel is largely undeveloped, with a single residence, ancillary storage buildings, and several large oak trees situated in the southeast. The project site is bordered by residential neighborhoods to the northeast, northwest, and southeast and by the Santa Clara County Superior Court to the southwest.

The survey began on the southernmost corner of the site and moved north using east/west transects spaced at 10-meter intervals whenever possible. With the exception of limited areas where recent construction or bioturbation have taken place, visibility of native soils across the was poor (less than 5–10 percent) due to ground cover and dried vegetation. Where visible, native soils were uniformly composed of tan-brown (Munsel 10 YR 4/3) soil interspersed with small (4–5 cm) stones composed primarily of unworked chert, schist, and granite.

Survey conditions were documented using digital photographs and field notes. During the survey, Dr. DePietro examined all areas of the exposed ground surface for prehistoric artifacts (e.g., fire-affected rock, milling tools, flaked stone tools, toolmaking debris, ceramics), soil discoloration and depressions that might indicate the presence of a cultural midden, faunal and human osteological remains, and features indicative of the former presence of structures or buildings (e.g., postholes, standing exterior walls, foundations) or historic debris (e.g., glass, metal, ceramics. Particular attention was paid to the main residence on the property, the construction of which assessor's records date to 1951. Historic aerial photographs show the existing residence appearing on the property between the years of 1974 and 1953, corroborating the assessor's construction date. The structure is therefore over 50 years in age and has not been previously evaluated for significance as a potential historic resource at the local, State, or national level.

With the exception of the aforementioned residence, no indications of historic or prehistoric archaeological resources were encountered over the course of the pedestrian survey. Visibility of native soils was very poor; however, this does not preclude the possibility that subsurface archaeological features may be present. Pedestrian survey photos can be found in Attachment D.

3.2.2 - Architectural and Historic Resource Assessment: 375 Diana Avenue

The single-family residence located at 375 Diana Avenue, Morgan Hill, California, is over 50 years in age and has not previously been evaluated for historic significance. Properties over 50 years in age are considered potentially eligible for listing in the NRHP, CRHR, or local registers of historic

resources and, consequently, could be considered significant historic resources under CEQA Guidelines. The residence was evaluated relative to the following four State CRHR eligibility criteria, which are based on federal NRHP Standards A–D:

- **Criterion 1: Event.** It is associated with events that have made a significant contribution to the broad patterns of local or regional history or the cultural heritage of California or the United States.
- **Criterion 2: Person.** It is associated with the lives of persons important to local, California, or national history.
- **Criterion 3: Architecture.** It embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of a master or possesses high artistic values.
- **Criterion 4: Information Potential.** It has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California, or the nation.

In brief, the building does not appear to qualify for the CRHR under any of the above criteria, and determination of ineligibility at the State level typically precludes eligibility for listing at the national level. Furthermore, the property does not appear to meet any local criteria for consideration as a significant historic resource within the City of Morgan Hill. The residential structure should therefore not be considered a significant historic resource pursuant to CEQA Guidelines.

Building Description

The subject property contains a single-family residence that, according to records obtained from the Santa Clara County Assessor's Office, was constructed in 1951. The residence's roughly rectangular massing is long and asymmetrical with porches situated along both the northwest and southeast façades. The building, which is in overall good condition, is accessed by single front and back doors adjacent to each porch that serve as the home's primary entrances. The building has a concrete foundation, is clad in light grey stucco siding, and is topped with a low-pitched, cross-hipped roof with fairly large-sized eaves that wrap around the entire structure. A thick, rectangular, red-brick chimney is situated on the outside of the structure's southwest façade, where the roof's extended eaves have been built to enclose it. The roof is clad in red tile, and the rafters are fully enclosed. Windows on all four sides of the building vary considerably in size, shape, and placement but are primarily aluminum-framed, rectangular-shaped, and range from fixed single-lite panes to double-hung sash-style windows.

Overall, the property has very limited landscaping, primarily in the form of several very large oak trees to the southeast of the main building. The concrete pad the residence is built upon appears to have been extended to the northwest, where it meets three modern, aboveground temporary storage buildings and shade structures. An asphalt driveway runs southeast from the main building to a gate which provides access to the property from Diana Avenue. Many original windows on the structure appear to have been replaced with modern aluminum sliders and a Tesla power-bank has been installed on the building's northeast façade, but no other major exterior alterations were noted.

CRHR and Local Listing Eligibility

Criterion A: Event: The subject property is located in an area that, prior to and during the first half of the 1950s, was used almost exclusively for agricultural purposes. While the old growth oak trees and undiscernible activity appear to be taking place on-site in the earliest historic aerial photographs dating to 1946, The first residence to appear in the location on historical topographic maps dates to 1956, five years after the existing building was constructed. The period of significance for the residential building is the early 1950s in the immediate postwar period. The property is part of an overall development and expansion of residential areas in and around Morgan Hill during the early 1950s to satisfy the enormous postwar demand for new housing. The postwar period saw a high rate of new household formation as these families had children, and the relatively small median family income drove the demand for new forms of affordable housing, mainly the postwar minimal and ranch-style house. The subject property is therefore part of that process of postwar expansion and growth, but does not meet Criterion A: Event, as they are examples of many similar, small-scale residential buildings built during this time in the greater Morgan Hill area.

Criterion 2: Person: The buildings' architectural history and chain of ownership were thoroughly researched at the Santa Clara County Recorder's Office, through building permits on file at the City of Morgan Hill planning department, and with archival research, including a search of the California Digital Newspaper Collection (CDNC). Unfortunately, no records dating to or prior to the 1950s were on file for the subject property at either the County Assessor's Office or the City Planning department. Earliest available records show the buildings are associated with Hortense Gaitan and the Gaitan family. While Hortense had a distinguished 43-year career with the Morgan Hill Unified School District, the relative absence of any individuals associated with the buildings' use or function in published accounts of the History of Morgan Hill indicates that they did not achieve a level of historic importance for the property to be considered eligible under Criterion 2: Person.

Criterion 3: Architecture: The building, built by unknown architects, is a typical 1950s ranch-style home that incorporates Spanish Revival elements such as the red tile roof, domed windows, and stucco exterior. Both styles were commonplace during the early 1950s, and the building appears to be a fairly standard, undistinguished example of both in terms of construction design and technique. The building is generally in fair condition; however, some modifications to the windows, concrete pad, and to accommodate electrical charging have been made over the years to the original design. As such, the building does not appear eligible for listing on the CRHR under Criteria 3.

Criterion 4: Information Potential: Is most often used to evaluate archaeological sites or buildings that employ unusual building techniques. There is no evidence that the building in question exhibits any unusual construction features or has the ability to contribute significant information to the overall history of Morgan Hill.

Therefore, the residential structure located at 375 Diana Avenue does not appear to meet any of the criteria for historic and/or architectural significance required for listing on the CRHR or NRHP. The building also does not appear to possess sufficient artistic merit or historical association to meet any local standard for historical importance for listing on the City of Morgan Hill Historical Inventory. No analysis of integrity is required where the property fails to meet all four criteria, and the residential

building should not be considered a significant historical resource under CEQA. California Department of Parks and Recreation (DPR) recordation forms were prepared for the property, and can be found in Appendix E.

3.2.3 - Buried Site Potential

In addition to the pedestrian survey, the potential for not yet identified cultural resources in the project vicinity was reviewed against geologic and topographic geographic information system data for the general area and information from other nearby projects. The proposed project was evaluated against a set of criteria originally identified by a geoarchaeological overview of the Nine Bay Area Counties in Caltrans District 4 that was prepared for the California Department of Transportation (Caltrans) (Meyer and Rosenthal 2007). This study mapped the "archaeological sensitivity," or potential to support the presence of buried pre-contact archaeological deposits, throughout the Bay Area based on geology and environmental parameters, including distance to water and landform slope. The methodology used in the study is applicable to other parts of California and generally concluded that sites consisting of flat, Holocene-era deposits in close proximity to water resources had a moderate to high probability of containing subsurface archaeological deposits when compared to earlier Pleistocene deposits situated on slopes or further away from drainages, lakes, and rivers.

Morgan Hill is situated in the Santa Clara Valley, between the Santa Cruz Mountains to the west and Mt. Diablo Range to the east. According to the geological map of Dibble and Minch (2005), the surface of the project site consists entirely of Late Pleistocene Alluvial Lake and playa deposits (Qoa), consisting of tan to reddish brown cobble sized clastic clayish-sand. Applying the criteria set forth above, all Pleistocene-era deposits have a lower potential to contain archaeological deposits. The closest natural water source to the project area is Llagas Creek, which is located 2.45 miles to the southwest and Anderson Lake, which is located 3 miles to the northeast. Although, the project site is not situated near a natural water source and lacks Holocene-era deposits, the positive SLF records search from the NAHC for TCRs would suggest a low to moderate potential for unanticipated buried cultural resources to be impacted by project construction (USGS 2024).

SECTION 4: SUMMARY AND RECOMMENDATIONS

4.1 - Summary

In accordance with CEQA Guidelines, FCS assessed the potential effects of the proposed project site on cultural resources. Results from the NWIC indicate that 12 historic resources have been recorded within the 0.5-mile search radius, none of which are located within the project boundaries. Additionally, 65 area-specific survey reports are on file within the 0.5-mile search radius, none of which address the project site, indicating that the proposed project site has not been surveyed for cultural resources.

The results of the pedestrian survey confirmed the presence of a single-family residence (375 Diana Avenue) which is more than 45 years of age, requiring an Architectural and Historical Assessment. The results from the architectural assessment concluded that the single-family residence was found ineligible for the NRHP and CRHR due to a lack of significant historical associations and architectural merit and integrity.

The NAHC SLF search reported positive results for Native American cultural resources in the immediate project site. FCS contacted Native American representatives and, to date, no responses have been received.

4.2 - Recommendations

4.2.1 - Cultural Resources Recommendations

Based on the results of the records searches, archival research, the positive results from the NAHC SLF search for TCRs, Tribal correspondence, the pedestrian survey, buried site potential, and Architectural and Historical Assessment, FCS considers the potential for the proposed project to have an adverse effect on historic or pre-contact cultural resources to be low to moderate. No pre-contact resources were identified during the record search; however, a single-family residence (375 Diana Avenue), more than 45 years in age that had not been previously evaluated was identified during the pedestrian survey. The subsequent architectural assessment determined that the commercial buildings were found ineligible for inclusion in the NRHP and CRHR.

FCS therefore recommends that an Archaeologist who meets the Secretary of the Interior's Professional Qualification Standards for archaeology conduct a WEAP training for archaeological resources to be given to all construction personnel directly involved with project-related ground disturbance. The training should include visual aids, a discussion of applicable laws and statutes relating to archaeological resources, types of resources that may found within the project site, and procedures to be followed in the event such resources are encountered. In the event that exposed soils indicate cultural materials may be present, this may be followed by regular or periodic archaeological monitoring as determined by the Archaeologist, but full-time archaeological monitoring is not recommended at this time.

In addition, the proposed project must adhere to the 2035 General Plan Goal HC-8 and Policies HC-8.1 through HC-8.5, which specifies the identification and protection of historic, archaeological and pre-contact cultural resources, in addition mitigation (Policy HC-8.5) that must be implemented in the event cultural resources are uncovered during construction-related ground-disturbing activities. Compliance with the 2035 General Plan Goals and Policies would reduce potential impacts to cultural resources (historic, archaeological and pre-contact) during construction-related ground-disturbing activities to less than significant. 2035 General Plan Goals and Policies can be found in Appendix F: Cultural Resources Regulations and Evaluation Criteria, Local Regulations.

Additional procedures for the inadvertent discovery of human remains and cultural resources, in addition, to the City's Standard Conditions of Approval are provided below.

4.3 - Inadvertent Discovery Procedures

4.3.1 - Accidental Discovery of Cultural Resources

It is always possible that ground-disturbing activities during construction may uncover previously unknown, buried cultural resources. In the event that buried cultural resources are discovered during construction, operations shall stop within a 100-foot radius of the find and a qualified Archaeologist shall be consulted to determine whether the resource requires further study. The qualified Archaeologist and shall make recommendations to the lead agency on the measures that shall be implemented to protect the discovered resources, including but not limited to excavation of the finds and evaluation of the finds in accordance with Section 15064.5 of the CEQA Guidelines. Potentially significant cultural resources consist of, but are not limited to, stone, bone, fossils, wood, or shell artifacts or features, including hearths, structural remains, or historic dumpsites. Any previously undiscovered resources found during construction within the project area should be recorded on appropriate DPR forms and evaluated for significance in terms of CEQA criteria.

If the resources are determined to be unique historic resources as defined under Section 15064.5 of the CEQA Guidelines, mitigation measures shall be identified by the monitor and recommended to the lead agency. Appropriate mitigation measures for significant resources could include avoidance or capping, incorporation of the site in green space, parks, or open space, or data recovery excavations of the finds.

No further grading shall occur in the area of the discovery until the lead agency approves the measures to protect these resources. Any archaeological artifacts recovered as a result of mitigation shall be donated to a qualified scientific institution approved by the lead agency where they would be afforded long-term preservation to allow future scientific study.

4.3.2 - Accidental Discovery of Human Remains

There is always the possibility that ground-disturbing activities during construction may uncover previously unknown, buried human remains. Should this occur, Section 7050.5 of the California Health and Safety Code applies, and the following procedures shall be followed.

In the event of an accidental discovery or recognition of any human remains, Public Resource Code Section 5097.98 must be followed. In this instance, once project-related earthmoving begins and if there is accidental discovery or recognition of any human remains, the following steps shall be taken:

1. There shall be no further excavation or disturbance of the site where human remains are discovered and/or any nearby area reasonably suspected to overlie adjacent human remains until the County Coroner is contacted to determine whether the remains are Native American and if an investigation of the cause of death is required. If the Coroner determines the remains to be Native American, the Coroner shall contact the NAHC within 24 hours, and the NAHC shall identify the person or persons it believes to be the "most likely descendant" of the deceased Native American. The most likely descendant may make recommendations to the landowner or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in Public Resources Code Section 5097.98, or
2. Where the following conditions occur, the landowner or his/her authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity either in accordance with the recommendations of the most likely descendant or on the project area in a location not subject to further subsurface disturbance:
    - The NAHC is unable to identify a most likely descendant or the most likely descendant failed to make a recommendation within 48 hours after being notified by the commission;
    - The descendant identified fails to make a recommendation; or
    - The landowner or his authorized representative rejects the recommendation of the descendant, and the mediation by the NAHC fails to provide measures acceptable to the landowner.

4.4 - Standard Conditions of Approval

4.4.1 - Significant Historic or Archaeological Materials

A moderate potential exists for unrecorded historic-period archaeological resources to be within the project area. The developer shall enter into written contracts with an Archaeologist and the Tamien Nation Tribe, and pay all fees associated with the activities required by this condition. The following policies and procedures for treatment and disposition of inadvertently discovered human remains or archaeological materials shall apply:

1. Prior to start of grading or earthmoving activity on the "first day of construction," the Archaeologist and Tamien Nation Tribal Monitor shall hold a pre-construction meeting for the purposes of "cultural sensitivity training" with the general contractor and subcontractors.
2. A Tamien Nation Tribal Monitor shall be present on-site to monitor all ground-disturbing activities and an Archaeologist shall be on-call. Where historical or archaeological artifacts are found, work in areas where remains or artifacts are found shall be restricted or stopped until proper protocols are met, as described below:

- Work at the location of the find will halt immediately within 50 feet of the find. If an Archaeologist is not present at the time of the discovery, the applicant shall contact an Archaeologist for evaluation of the find to determine whether it qualifies as a unique archaeological resource as defined by this chapter;
- If the find is determined not to be a Unique Archaeological Resource, construction can continue. The Archaeologist shall prepare a brief informal memo/letter in collaboration with a Tribal representative that describes and assesses the significance of the resource, including a discussion of the methods used to determine significance for the find;
- If the find appears significant and to qualify as a unique archaeological resource, the Archaeologist shall determine if the resource can be avoided and shall detail avoidance procedures in a formal memo/letter; and
- If the resource cannot be avoided, the Archaeologist in collaboration with a Tribal representative shall develop within 48 hours an action plan to avoid or minimize impacts. The field crew shall not proceed until the action plan is approved by the Development Services Director. The action plan shall be in conformance with California Public Resources Code 21083.2.

3. The following policies and procedures for treatment and disposition of inadvertently discovered human remains or archaeological materials shall apply. If human remains are discovered, it is probable they are the remains of Native Americans,
    - If human remains are encountered, they shall be treated with dignity and respect as due to them. Discovery of Native American remains is a very sensitive issue and serious concern. Information about such a discovery shall be held in confidence by all project personnel on a need to know basis. The rights of Native Americans to practice ceremonial observances on sites, in labs and around artifacts shall be upheld.
    - Remains should not be held by human hands. Surgical gloves should be worn if remains need to be handled.
    - Surgical mask should also be worn to prevent exposure to pathogens that may be associated with the remains.

4. In the event that known or suspected Native American remains are encountered, or significant historic or archaeological materials are discovered, ground-disturbing activities shall be immediately stopped. Examples of significant historic or archaeological materials include, but are not limited to, concentrations of historic artifacts (e.g., bottles, ceramics) or prehistoric artifacts (chipped chert or obsidian, arrow points, ground stone mortars and pestles), culturally altered ash stained midden soils associated with pre-contact Native American habitation sites, concentrations of fire-altered rock and/or burned or charred organic materials and historic structure remains such as stone lined building foundations, wells or privy pits. Ground-disturbing project activities may continue in other areas that are outside the exclusion zone as defined below.

5. An "exclusion zone" where unauthorized equipment and personnel are not permitted shall be established (e.g., taped off) around the discovery area plus a reasonable buffer zone by the Contractor Foreman or authorized representative, or party who made the discovery and initiated these protocols, or if on-site at the time or discovery, by the monitoring Archaeologist and Tribal representative (typically 25 to 50 feet for single burial or archaeological find).
6. The discovery locale shall be secured (e.g., 24-hour surveillance) as directed by the City or County if considered prudent to avoid further disturbances.
7. The Contractor Foreman or authorized representative, or party who made the discovery and initiated these protocols shall be responsible for immediately contacting by telephone the parties listed below to report the find and initiate the consultation process for treatment and disposition:
8. The Coroner has two working days to examine the remains after being notified of the discovery. If the remains are Native American the Coroner has 24 hours to notify the NAHC.
9. The NAHC is responsible for identifying and immediately notifying the Most Likely Descendant (MLD). (Note: NAHC policy holds that the Native American Monitor shall not be designated the MLD.)
    - The City of Morgan Hill Development Services Director (408) 779-7247
    - The Contractor's Point(s) of Contact
    - The Coroner of the County of Santa Clara (if human remains found) (408) 793-1900
    - The Native American Heritage Commission (NAHC) in Sacramento (916) 653-4082
    - The Amah Mutsun Tribal Band (916) 481-5785 (H) or (916) 743-5833 (C)
    - The Tamien Nation (707)295-4011 (office) and (925)336-5359 (THPO)

10. Within 24 hours of their notification by the NAHC, the MLD shall be granted permission to inspect the discovery site if they so choose.
11. Within 24 hours of their notification by the NAHC, the MLD may recommend to the City's Development Services Director the recommended means for treating or disposing, with appropriate dignity, the human remains and any associated grave goods. The recommendation may include the scientific removal and non-destructive or destructive analysis of human remains and items associated with Native American burials. Only those osteological analyses or DNA analyses recommended by the appropriate Tribe may be considered and carried out.
12. If the MLD recommendation is rejected by the City of Morgan Hill the parties shall attempt to mediate the disagreement with the NAHC. If mediation fails then the remains and all associated grave offerings shall be reburied with appropriate dignity on the property in a location not subject to further subsurface disturbance.

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Appendix A: Professional Qualifications

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DANA DOUGLAS DePIETRO, PH.D.—Cultural Resources Lead (North)

OVERVIEW

- More than 15 Years' Experience in Archaeology and Cultural Resources

Education

- Ph.D., Near Eastern Art and Archaeology, University of California at Berkeley, 2012
- M.A., Near Eastern Art and Archaeology, University of California at Berkeley, 2005
- B.A., Archaeology and History (double major), University of California at San Diego, 2002

Fellowships and Awards

- Albright Institute Educational and Cultural Affairs Fellowship (2015)
- Katherine Davis Foundation Projects for Peace Prize (2012)
- International House Gateway Fellowship (2011-2012)
- The George Franklin Dales Foundation Fellowship for Archaeological Research (2011)
- CAORC Multi-Country Dissertation Research Fellowship (2010)

Dana DePietro, Ph.D. is a Registered Professional Archaeologist who meets the Secretary of Interior's standards for historic preservation programs in archaeology. Dr. DePietro has over 15 years of experience in all aspects of cultural resource management, including prehistoric and historic archaeology, paleontology, materials conservation, history of art and architecture, and community engagement. He has experience in compliance with the National Environmental Policy Act (NEPA), the California Environment Quality Act (CEQA), the National Historic Preservation Act (NHPA), and the Archaeological Resources Protection Act (ARAP). Dr. DePietro has completed cultural resource projects that have involved agency, client, Native American, and subcontractor coordination; treatment plans and research design development; archival research; field reconnaissance; site testing; data recovery excavation; construction monitoring; site recordation; site protection/preservation, mapping/ cartography; spatial analysis/GIS; laboratory analysis; materials conservation; artifact curation and exhibition; and report production. He has completed projects in California within the jurisdiction of the Bureau of Land Management (BLM) and other federal agencies requiring compliance with Section 106 of the NHPA. He has also completed projects throughout California under CEQA for state and local governments and municipalities, including the California Department of Transportation (Caltrans) and has worked with clients to insure deliverables meet and exceed the standards set by the State Historic Preservation Office (SHPO).

RELATED EXPERIENCE AND CLIENT SUMMARY

FirstCarbon Solutions

As the Lead Archaeologist/Cultural Resource Specialist for FCS, Dr. DePietro conducts evaluations and performs field documentation of historic and prehistoric cultural resources; prepares environmental impact reports (EIRs), cultural resources assessments (CRAs), DPR forms and Section 106 reports; conducts mapping, GIS analysis, and state and county record searches; leads archaeological surveys and field monitoring efforts; and coordinates with state, federal and tribal officials and institutions for a variety of FCS projects, including the following:

- Atherton Baptist Homes Master Plan/Phase II, City of Alhambra, Los Angeles County
- Biological and Cultural Resources Assistance 140-Acre Project Site Woodcrest, Riverside County, CA
- Blanchard Road Industrial EIR Project, City of San Jose, Santa Clara County, CA
- Bonadelle Tract 6120 AQ/GHG and Bio Tech Studies, City of Clovis, Fresno County, CA
- CEQA Analysis for Mayhew Way Project, City of Walnut Creek, Contra Costa County
- 2268 El Camino Real, Mountain View—II CEQA Compliance Checklist Project, City of Mountain View, Santa Clara County
- CEQA Documentation for New Science Building, City of Fairfield, Solano County
- CEQA Services for Clover Spring Open Space Preserve Project, City of Cloverdale, Sonoma County
- Chico Walmart Expansion Project, City of Chico, CA
- Cultural Resources Services for Froom Ranch/El Villagio Specific Plan, City of San Luis Obispo, CA
- Cultural Resource & Historic Evaluation for Sacramento Dome Theatre, City of Sacramento, CA
- Cultural Resources Services for Haven Berryessa Block 7 & 8 San Jose Flea Market, San Jose, CA
- Caltrans NEPA/CEQA Documentation and Permitting for the Dogtown Road Bridges Replacement Projects (San Domingo Creek, French Gulch, and Indian Creek), Calaveras County, CA
- Due Diligence for Meadowlark Project in Pleasanton, CA
- Due Diligence Services for the Montalcino Property, Napa County, CA
- Due Diligence Site Review for Parcel APN 68-241-30 located at 260 Bartlett Way Santa Cruz, CA
- Due Diligence Level IA Entitlements for the Boscell Road Osgood Project, City of Fremont, CA
- Trellis Residential Project EIR, City of Walnut Creek, CA
- El Dorado Materials Recovery Facility Remodeling Project, El Dorado County, CA
- Farmstand IS/MND, City of Healdsburg, CA
- La Paloma Winery Demo Project IS/MND, City of Clovis, CA
- Kaiser Dublin Medical Center EIR, City of Dublin, California
- Merced Gateway Master Plan Project EIR, City of Merced, CA
- Phase 1 Cultural Resource Assessment for 44 acres TTM No. 19992, Rancho Cucamonga, CA
- Bonadelle Tract 6120 Cultural Resources Study, City of Clovis, CA
- Professional Services to Support the Development of a Preferred Development Plan and Associated Regulatory Strategies for the Solano 360 Project, Solano County, CA
- Tassajara Parks EIR, Contra Costa County, California

Other Relevant Experience

The Society for Humanitarian Archaeological Research and Exploration

Dr. DePietro is the Founder and Executive Director of The Society for Humanitarian Archaeological Research and Exploration. He manages the projects, staff, and the daily operation of this not-for-profit organization. Dr. DePietro likewise establishes relationships with partner universities and institutions, writes grant proposals, supervises fundraising projects, and maintains accounts, financial records, and the organization's online presence.

University of California at Berkeley

Dr. DePietro was a lecturer at the University of California, Berkeley from August 2003 to January 2015. During his tenure, he prepared University-level source and lectures in the history of the modern and ancient Middle East, performed student advising and evaluation, and university administrative duties. Dr. DePietro provided resources and opportunities that empower people to critically engage with other cultures as well as with their own communities.

DANA DOUGLAS DePIETRO, PH.D.—Cultural Resources Lead (North)

Penn State University—Tel Akko Total Archaeology Project

Dr. DePietro was the Director of Community Engagement from 2013 to 2014 at the Penn State University for the Tel Akko Total Archaeology Project. He developed and executed a community engagement program, supervised staff and community participants, taught excavation and conservation techniques to groups of young people in Akko, and performed outreach, dialogue, and program developments in partnership[with community leaders.

Harvard University—Leon Levy Expedition to Ashkelon, Israel

Dr. De Pietro was the excavation supervisor during the summers of 2007-2013 for the Harvard University—Leon Levy Expedition to Ashkelon, Israel. He supervised the excavation and stratagraphic interpretation and instructed students in excavation techniques, data collection, photography, analysis, and publication.

Early Iron Age Cemetery Excavation—Dhamar, Yemen

Dr. De Pietro was the Area Supervisor during the summer of 2004 for the Early Iron Age Cemetery Excavation in Dhamar, Yemen. He supervised the excavation and stratagraphic interpretation, taught excavation techniques, strategy and implementation, field conservation, surveying techniques, data collection and analysis, and site management.

Journal of Associated Graduates in Near Eastern Studies (JAGNES)

Dr. DePietro was the Associate Editor from August 2003 to May 2012 for the Journal of Associated Graduates in Near Eastern Studiers (JAGNES). He solicited and proofread submissions, fundraising, and advertisements.

"Travel Today: Egypt" Magazine

Dr. De Pietro was an Archaeological Correspondent from December 2002 to February 2005. He wrote magazine articles, conducted relevant interviews and research, and procured photos and images to compliment articles.

NATALIE ADAME—ARCHAEOLOGICAL FIELD MANAGER

OVERVIEW

- More than 7 years of experience

Education

- Bachelor of Arts, Biological Anthropology, Minor in Geology, California State University, East Bay, Hayward, CA, 2016
- Associate of Arts, Geology, Mt. San Antonio College, Walnut, CA, 2011

Technical Expertise

- Esri Aeronautical Reconnaissance Coverage Geographic Information System (ArcGIS)

Natalie Adame has more than 7 years of experience in archaeology, which she gained from extensive fieldwork and museum experience. Ms. Adame has established excellent research skills exemplified by her ability to prepare comprehensive reports and presentations. Her experience includes performing land use analyses and preparing Initial Studies and EIRs for various development projects. As an Archaeological Field Manager, Ms. Adame implements Worker Environmental Awareness Program 'tailgate' training sessions, coordinates with construction staff and Native American monitors, conducts construction monitoring, and performs salvage and recordation of archaeological resources. In addition, Ms. Adame is crossed trained in identifying paleontological resources.

RELATED EXPERIENCE AND CLIENT SUMMARY

Biological, Archaeological, and Paleontological Monitoring and Reporting Services, Los Angeles Regional Interoperable Communications System, Los Angeles County, CA

FCS provided monitoring and reporting services during the construction of more than 150 land mobile radio (LMR) facilities at sites located primarily in Los Angeles County. The LMR sites contain the infrastructure and equipment necessary to provide voice communications coverage throughout the County for emergency responders. These locations are widely dispersed across the County in both urban (intensively developed) and rural (less developed) settings and include coastal locations, sites in downtown Los Angeles, remote mountain peaks across the County, and the northern high desert. FCS conducted the biological, archaeological, and paleontological pre-construction and construction monitoring and reporting services in accordance with the Construction Management Requirements outlined in the NEPA Environmental Assessment that FCS prepared for the project. As an Archaeological Monitor, Ms. Adame investigated all ground disturbance for any cultural resources.

Griswold Residential Project Constraints Analysis, City of Covina, CA

FCS performed a constraints analysis on behalf of an applicant for the Griswold Property in the City of Covina, Los Angeles County. The proposed project would develop 48 residences on the 9.6-acre former Griswold Adult Center, located at 16209 East San Bernardino Road. An FCS Biologist assessed the project site for biological resources with the intent to research existing biological information for the site, to document the existing biological conditions, and to analyze any potential impacts to biological resources arising from the proposed project within the proposed site. The findings were summarized in a

Constraints Analysis Report, which included descriptions of on-site vegetation communities, identification of areas subject to special jurisdiction (waters and wetlands), and assessment of the potential occurrence of special-status plant and wildlife species within the project site. As a Staff Archaeologist, Ms. Adame assisted in drafting the Cultural Resources Assessment (CRA).

Walnut Avenue and Indian Avenue Industrial Project IS/MND and Technical Studies, City of Perris, CA

FCS prepared an IS/MND and technical studies for the Walnut Avenue and Indian Avenue Warehouse Project. The proposed project would construct a 205,830-square-foot industrial tilt-up warehouse building with a 36-foot clear height (42-foot maximum height). The proposed warehouse would include two 5,000-square-foot offices; 27 dock doors; 90 parking spaces, including 42 trailer stalls, four loading spaces, and four accessible spaces; an employee break area, including tables and seating, a bocce ball court, and a horseshoe court; associated landscaping; and three detention basins that would be constructed in the southern portion of the site. The project site is located within the Western Riverside County Multiple Species Habitat Conservation Plan (WR-MSHCP) area, but it is not located within a criteria cell of the WR-MSHCP. In addition to preparing the IS/MND and Air Quality, GHG Emissions, Biological Resources, Cultural Resources, Noise, and Traffic Studies, FCS prepared the WR-MSHCP Consistency Analysis. As an Archaeological Field Manager, Ms. Adame oversaw and coordinated with the archaeological field crews and provided technical help/assistance when needed. Ms. Adame communicated with the Construction Foreman, Superintendent, and Manager, and coordinated monitor availability and construction schedule.

San Gorgonio Crossing/Gateway Center Project EIR and Supporting Technical Studies, Cherry Valley, Riverside County, CA

FCS prepared an EIR for the San Gorgonio Crossing Project, which analyzed the environmental impacts associated with the development of a logistics distribution/industrial project along Cherry Valley Boulevard, north of the Interstate 10 Freeway, in the unincorporated community of Cherry Valley. The project site is 230 acres in size, although approximately 86 acres would be dedicated as natural open space. The project would construct two large industrial buildings (960,000 square feet and 1,600,000 square feet) with a total floor area of approximately 2,560,000 square feet. Key project issues included land use compatibility with nearby rural homes, air emissions from diesel trucks, traffic, noise, and an earthquake fault that traverses the site. As a Staff Archaeologist, Ms. Adame prepared the Native American Heritage Commission (NAHC) letters and the NAHC Letters Matrix.

Barton Road Logistics Center EIR, Technical Studies, and Peer Review, City of Colton, CA

FCS provided CEQA documentation and peer review services for the Barton Road Logistics Facility Project in the City of Colton, San Bernardino County. The proposed project includes the demolition of four industrial buildings, an office building, and a parking lot. The proposed project would construct two state-of-the-art speculative concrete tilt-up industrial warehouse logistics facilities with a total square footage of 960,040 square feet. FCS prepared an EIR with supporting stand-alone Air Quality and GHG Emissions Analysis with Health Risk Assessment (HRA), Biological Resources Assessment, Phase I CRA, Noise Impact Analysis, and Traffic Impact Analysis. As a Staff Archaeologist, Ms. Adame surveyed the site for any cultural resources.

Lilac Avenue Warehouse Project Due Diligence Memoranda, City of Rialto, CA

FCS prepared the Due Diligence Memoranda for the Lilac Avenue Warehouse Project. The project includes the construction of a 47,460-square-foot warehouse, including a 2,500-square-foot ground floor office, a 2,500-square-foot mezzanine, 85 dock doors, and one grade door. The Biological Resources Due Diligence Memorandum concluded that 14 special-status plant species and 31 special-status animal species have been recorded within a 5-mile radius of the project site, and provided mitigation measures for nesting birds and burrowing owls (*Athene cunicularia*). As a Staff Archaeologist, Ms. Adame assisted in drafting the Due Diligence Memorandum and the CRA.

Oak Road Townhouse Condominiums Project EIR and Peer Review of Technical Studies, Contra Costa County, CA

FCS prepared an EIR and peer reviewed technical studies for a proposed subdivision. The applicant (SummerHill Homes) is constructing 125 townhouse condominium units located in nineteen 3-story buildings and associated improvements on a 5.94-acre site in unincorporated Contra Costa County, adjacent to the City of Walnut Creek. The eight existing parcels are currently zoned Low- and Medium-density Single-family Residential (R-15), Medium- and High-density Multiple-family Residential (M-17), and High-density Multiple-family Residential (M-29). The project includes rezoning all eight parcels to Planned Unit District (P-1), a vesting tentative map to subdivide the parcels into 125 residential lots, and approval of a preliminary and final development plan. The FCS team peer reviewed the technical documents provided by the applicant, including the Air Quality/GHG Emissions Assessment, Arborist Report, Cultural Resources Memorandum and Cultural Resources Study, Environmental Noise Assessment, Phase I Environmental Site Assessment (ESA), Special-status Species Assessment, and Transportation Analysis Report. The Board of Supervisors approved the project on March 1, 2022. Ms. Adame assisted in drafting the cultural resources, Tribal Cultural Resources (TCRs), and paleontological sections of the EIR.

Willow Avenue Self-storage Facility Project Environmental Compliance Monitoring and Technical Studies, City of Hercules, CA

FCS is providing cultural resource monitoring for the construction of a self-storage facility in the City of Hercules. An IS/MND and associated Conditions of Approval have already been adopted. The approved project includes the development of a self-storage facility along with an automobile repair, car wash, oil change, and tire store contained within eight new buildings, and associated site work and landscaping on a 7.1-acre site located at the southeast corner of Willow Avenue and Palm Avenue. Other services include preparing an updated Air Quality Emissions and Construction HRA modeling, documentation demonstrating that the project applicant has purchased carbon offsets from local or regional registries, and a Construction Traffic Management Plan. As a Staff Archaeologist, Ms. Adame assisted in reviewing the monitoring logs in preparation for the monitoring report and assisted in drafting the monitoring report and the attachments that accompanied the document.

City Village Project Addendum to the North Camino Ramon Specific Plan EIR, City of San Ramon, CA

FCS prepared the City Village (Bishop Ranch 6) Project Addendum to the North Camino Ramon Specific Plan EIR and supporting technical documents to determine whether and to what extent the EIR sufficiently addresses the potential impacts of the proposed project. The City Village Project (formally known as Bishop Ranch 6) would develop a 404-unit for-sale residential community on approximately 31

acres. The site is in the heart of Bishop Ranch, surrounded by corporate offices, several major supermarkets and stores, and numerous restaurants and neighborhood services. The project approvals include an amendment to the North Camino Ramon Specific Plan to support the proposed development; Vesting Tentative Map; Development Plan; Architectural Review; and a Tree Removal Permit. In addition to the preparation of the Addendum, FCS prepared the Air Quality and GHG Emissions Analysis and Noise Analysis. FCS also peer reviewed the Biological Evaluation Tree Report and Archaeological Resources Study. Our teaming partners peer reviewed the Preliminary Stormwater Treatment Plan, Hydrology Summary, Economic and Fiscal Analysis, Phase I ESA, and Geotechnical Report. Ms. Adame drafted the Cultural and TCRs section for this Addendum.

Library/Learning Resource Center Building Project Biological and Cultural Construction Monitoring Services, Solano Community College District, Fairfield, CA

FCS prepared the IS/MND and provided the subsequent biological and cultural construction monitoring services for the construction of a new 59,252-gross-square-foot, 2-story Library/Learning Resources Center building on the Fairfield Campus of the Solano Community College. The building would be constructed on an open quad in the center of campus, replacing an open lawn. FCS conducted Assembly Bill 52 consultation in coordination with the District and tribal representatives from the Yocha Dehe Wintun Nation to address concerns about TCRs in the immediate vicinity of the site. In addition to preparing a full Phase I CRA, FCS drafted mitigation measures in coordination with the Tribe and the District to effectively allow the project to proceed while protecting the TCRs in question. The District approved the project in May 2016, with the approval of the Tribe and all parties involved. FCS would provide coordination with tribal representatives from the Yocha Dehe Wintun Nation and a “tailgate” sensitivity training session for construction personnel. As an Archaeological Monitor, Ms. Adame prepared the monitoring report.

Beef and Sheep Pasture Irrigation Project Construction Monitoring Services, University of California, Davis, CA

As part of our on-call contract, FCS provided cultural resources monitoring services for the Beef and Sheep Pasture Irrigation Project on the University of California, Davis campus. The project consisted of the installation of new irrigation infrastructure to service the pastures in the southwest of the University of California, Davis campus. The project excavated and installed new 10-, 12-, and 18-inch irrigation lines approximately 10 feet south and/or west of existing irrigation lines. Excavation depth was 4 feet for the 10- and 12-inch laterals and 5 feet for the 18-inch main line. FCS assisted the University by conducting a pre-construction site assessment, including a review of previous reports, coordination with University and tribal representatives, and a Cultural Resources Worker Sensitivity Training for construction personnel involved in ground-disturbing activities. FCS provided an Archaeological Construction Monitor who oversaw all project-related ground disturbance and drafted a monitoring report at the end of construction. As a Staff Archaeologist, Ms. Adame assisted in reviewing the monitoring logs in preparation for the monitoring report and assisted in drafting the monitoring report and the attachments that accompanied the document.

Other Relevant FCS Experience

- Legacy Anaheim Residential Project CEQA Infill Streamlining Appendix N Checklist, City of Anaheim, CA
- Travel Stop Project Planning/Entitlement and Addendum to the Master Plan EIR, City of Fillmore, CA

- Duarte Station Project Construction Monitoring, City of Duarte, CA
- Lomita and Crenshaw Boulevard Apartment Project Monitoring Studies, City of Torrance, CA
- Oxnard/Sakioka Farms Specific Plan Technical Reports, City of Oxnard, CA
- Project Bruin at The Sakioka Farms Business Park Consistency Checklist and Technical Studies, City of Oxnard, CA
- Nichols Ranch Specific Plan Biological Resources Due Diligence Peer Review Services, City of Lake Elsinore, CA
- Proposed Eastside School Phase I CRA, Riverside Unified School District, Riverside, CA
- Agua Mansa Road Project Archaeological/Paleontological Monitoring Program Services, City of Jurupa Valley, CA
- Circle K Convenience and Fuel Station Project CEQA Technical Studies, Bloomington, San Bernardino County, CA
- Confidential—Warehouse Project IS/MND and Technical Studies, City of Fresno, CA
- Baldwin Ranch North Initial Study/Addendum and Technical Studies, City of Patterson, CA
- Kern Avenue Residential Project IS/MND and Technical Studies, City of Gilroy, CA
- Confidential—Warehouse Project Consistency Checklist and Technical Studies, City of Turlock, CA
- Tracy Alliance Project EIR and Technical Studies, City of Tracy, CA
- Heritage Park Pioneer Cemetery Improvements Project Biological and Cultural Resources Services, City of Dublin, CA
- Ameresco Pipeline Project Section 106 Report, City of Pittsburg, CA

Prior Work Experience

Archaeologist, Material Culture Consulting, City of Pomona, CA

As an Archaeologist, Ms. Adame performed excavations, recorded prehistoric and historic artifacts, and catalogued data using ArcGIS. She conducted Phase I, II, and III ESAs and drafted EIRs. Ms. Adame also prepared Department of Parks and Recreation (DPR) forms, searched records, and monitored projects in the State and county.

Field Archaeologist, ICF International, City of Los Angeles, CA

As a Field Archaeologist, Ms. Adame conducted environment surveys, performed excavations, and catalogued prehistoric and historic artifacts using ArcGIS. She prepared Federal Environment Management environmental reviews, DPR forms, and ESAs. Ms. Adame also worked with different transportation agencies, including the Orange County Transportation Authority, OC 405 Partners, LA Metro, and the California Department of Transportation.

Field Archaeologist, Dudek, City of Pasadena, CA

As a Field Archaeologist, Ms. Adame performed architectural and cultural historical assessments and conducted surveys for various projects to evaluate conflicts during construction period. Her responsibilities also included evaluating historic resource significance, cataloguing exhibit pieces, and gathering daily records of environmental compliances.

NATALIE ADAME—ARCHAEOLOGICAL FIELD MANAGER

Grants and Proposal Writer—Applied Anthropology Coursework, California State University, East Bay, City of Hayward, CA

As a Grants and Proposal Writer, Ms. Adame analyzed organizational cultures, conducted needs assessment, and prepared social impact reports. Part of her task was to identify the appropriate research disciplines necessary for specific jobs.

Student Museum Docent, California State University, East Bay, City of Hayward, CA

Ms. Adame served as a docent at the University's C.E. Smith Museum of Anthropology. Her responsibilities included preparing materials for exhibits, researching and writing about artifacts, and mounting display materials in the museum.

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Appendix B:
Northwest Information Center Records Search Results

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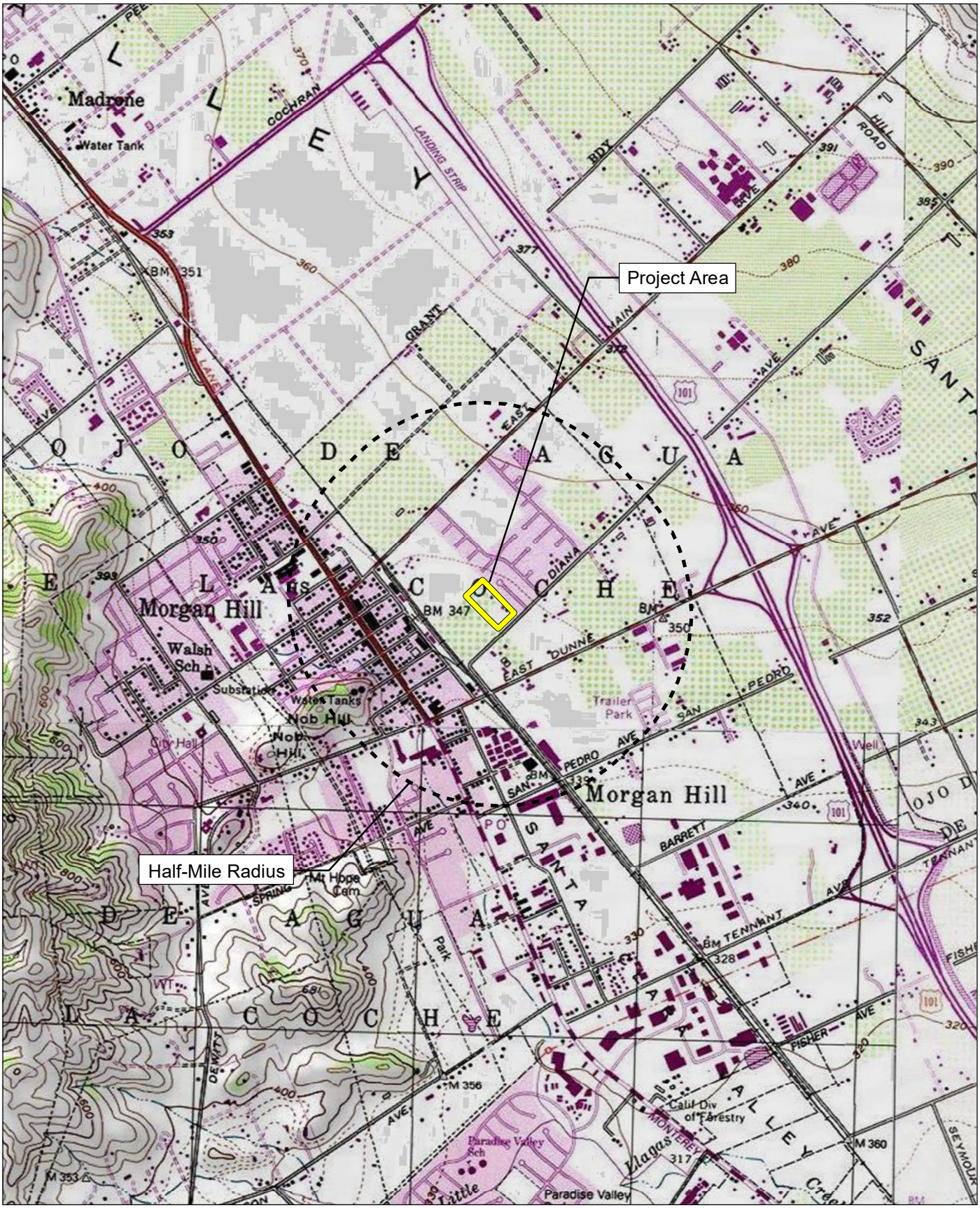

Source: USGS Morgan Hill & Mt. Madonna 7.5' Quadrangle / T09S,R03E,sec21,22,27,28

Project Site: USGS Morgan Hill 7.5' Quadrangle / T09S,R03E,sec21,28.

FIRSTCARBON SOLUTIONS™

Exhibit A
Record Search Map

Resource List

Primary No.	Trinomial	Other IDs	Type	Age	Attribute codes	Recorded by	Reports
P-43-001054	CA-SCL-000670H	Resource Name - Will Bone House; OHP Property Number - 013784; OHP PRN - 5037-0097-0000	Building	Historic	AH04; HP02	1979 (Larry Scettrini, MH Historical Society); 1988 (Larry Bourdeau, Pacific Museum Consultants)	S-010379, S-012173, S-027985
P-43-001801		Resource Name - 16835 Monterey (Street)	Building	Historic	HP02; HP06	2004 (Robert Cartier, Archaeological Resource Management)	S-031428
P-43-002632		Resource Name - APE map reference number 30; OHP PRN - 5037-0014-0000; Other - Morgan Hill Times Building; Other - Boutell Building; OHP Property Number - 013702	Building	Historic, Unknown	HP06	1979 (Larry Scettrini, MH Historical Society); 2006 (Sheila McElroy, Circa: Historic Property Development)	S-037010, S-037012
P-43-002633		Resource Name - APE map reference number 35; OHP PRN - 5037-0015-0000; Other - Block 18, Lot 2; Other - Aiken House; OHP Property Number - 013703	Building	Historic	HP02	1979 (Larry Scettrini, MH Historical Society); 2006 (Sheila McElroy, Circa: Historic Property Development)	S-037010, S-037012
P-43-002634		Resource Name - APE map reference number 45; OHP PRN - 5037-0016-0000; Other - Sumi's Beauty Shop; Other - Swope Residence; OHP Property Number - 013704; Other - 45 E 3rd Street	Building	Historic	HP02	1979 (Larry Scettrini, MH Historical Society); 2006 (Sheila McElroy, Circa: Historic Property Development)	S-037010, S-037012
P-43-002635		Resource Name - APE map reference number 55; OHP PRN - 5037-0017-0000; Other - Block 18, Lot 19; Other - F.M. Phelps Residence; OHP Property Number - 013705	Building	Historic	HP02	1979 (Larry Scettrini, MH Historical Society); 2006 (Sheila McElroy, Circa: Historic Property Development)	S-037010, S-037012
P-43-002636		Resource Name - APE map reference number 57; OHP PRN - 5037-0018-0000; Other - Block 18, Lot 18; Other - Kate Robinson Bungalow; OHP Property Number - 013706; Other - 57 E. 3rd St.	Building	Historic	HP02	1979 (Larry Scettrini, MH Historical Society); 2006 (Sheila McElroy, Circa: Historic Property Development)	S-037010, S-037012

Resource List

Primary No.	Trinomial	Other IDs	Type	Age	Attribute codes	Recorded by	Reports
P-43-002637		Resource Name - APE map reference number 65; OHP PRN - 5037-0019-0000; Other - Block 18, Lot 17; Other - John and Annabelle Allen House; Other - Glenwood Lumber Co. House; OHP Property Number - 013707	Building, Element of district	Historic	HP02	1979 (Larry Scettrini, MH Historical Society); 2006 (Sheila McElroy, Circa: Historic Property Development)	S-037010, S-037012
P-43-002638		Resource Name - APE map reference number 75; OHP PRN - 5037-0020-0000; Other - Block 18, Lot 16; Other - Lindsay House; Other - I.B. Briscoe House; OHP Property Number - 013708	Building	Historic	HP02	1979 (Larry Scettrini, MH Historical Society); 2006 (Sheila McIlroy, Circa: Historic Property Development)	S-037010, S-037012
P-43-002639		Resource Name - APE map reference number 95; OHP PRN - 5037-0021-0000; Other - Block 18, Lots 5, 6, 7 and 15; Other - Old Dee-Hi Plant (95 E 3rd Street); Other - Original Farmer's Union Store; OHP Property Number - 013709; Other - Original Farmers Union Store; Other - Old Dee-Hi Plant	Building	Historic	HP06	1979 (Larry Scettrini, MH Historical Society); 2006 (Sjeila McElroy, Circa: Historic Property Development)	S-037010, S-037012
P-43-003041		Resource Name - Hale's Lumber; Other - MP 67.70	Building	Historic	HP06	2001 (Theresa Rogers, JRP Historical Consulting Services)	S-029657, S-043525
P-43-004018		Resource Name - T-Mobile West, LLC Candidate SF04833A (SF833 Barrett Avenue); Other - Greif Brothers	Building	Historic	HP06	2016 (K. A. Crawford, Crawford Historic Services)	S-020594, S-052066

Report List

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
S-004286	Voided - E-149 SCL	1973	Thomas F. King and Patricia P. Hickman	Archaeological Impact Evaluation: The Llagas Creek Project		43-000071, 43-000233, 43-000406, 43-000408
S-006938		1984	Robert Cartier	Cultural Resource Evaluation of a Parcel on East Dunne Avenue and Rosemary Lane in the City of Morgan Hill, County of Santa Clara	Archaeological Resource Management	
S-008478	Agency Nbr - Soil Conservation Service #0494; Voided - E-985 SCL; Voided - S-5018; Voided - S-5019	1981	Robert Cartier, Glory Anne Laffey, Charlene Detlefs, and Peter Johnson	Cultural Resources Evaluation of the Llagas Creek Watershed	Archeological Resource Management	43-000112, 43-000406, 43-000407, 43-000408, 43-000453
S-008478a		1981	Robert Cartier, Charlene Detlefs, and Glory Laffey	Addendum to the Llagas Creek Watershed Cultural Resources Evaluation: Identification and Evaluation of Potentially Significant Bridge Structures Within Reaches 2, 3 and 9	Archeological Resource Management	
S-008478b		1981	Robert Cartier and Charlene Detlefs	Addendum to the Llagas Creek Watershed Cultural Resources Evaluation: Identification and Evaluation of Potentially Significant Bridge and Culvert Structures Within Reaches 7a, 7b, 8a, and 11a	Archeological Resource Management	
S-008483	Other - #0623; Voided - E-991 SCL	1981		Cultural Resource Evaluation of a Parcel on West Dunne Avenue in the City of Morgan Hill, Santa Clara County.	Archaeological Resource Management	
S-008711	Submitter - ARS 86-49	1986	Katherine Flynn	Archaeological evaluation of 3 lots located at 17485 Monterey Street at West First Street, Morgan Hill (APN 767-7-27, 28, & 29) (letter report)	Archaeological Resource Management	
S-009900	Submitter - ARS 88-27	1988	Katherine Flynn	Archaeological survey of the proposed location of the Parkwood Apartments, W. Dunne Ave. at Del Monte Ave., Morgan Hill (letter report)	Archaeological Resource Service	
S-010379		1988	Larry Bourdeau	Results of Phase I Archaeological Reconnaissance with Recommendations for Cultural Resource Management, Greg Mussallem Project Parcel, APN 764-16-08, West Main Avenue at Del Monte Avenue, Morgan Hill, Santa Clara County, California	Pacific Museum Consultants	43-001054

Report List

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
S-010494		1989	Larry Bourdeau	Results of Phase I Archaeological Reconnaissance with Recommendations for Cultural Resource Management, Woodcrest Subdivision Project Parcel, APN 727-6-48, Morgan Hill, Santa Clara County, California	Pacific Museum Consultants	
S-010729		1989	Larry Bourdeau	Results of Phase I Cultural Resource Evaluation and Archaeological Reconnaissance with Recommendations for Cultural Resource Management, Shelle' Thomas Project Parcel, APN 764-16-15, 50 Keystone Avenue, Morgan Hill, Santa Clara County, California	Pacific Museum Consultants	
S-010802		1989	Miley Paul Holman	Archival and Field Inspection of the 12 Proposed Caltrain Extensions between San Jose and Gilroy, Santa Clara County, California (letter report)	Holman & Associates	43-001217
S-011054		1989	Larry Bourdeau	Results of Phase II Archaeological Monitoring, Mechanical Subsurface Testing with Recommendations for Cultural Resource Manangement, Woodcrest Subdivision Project Parcel, APN 727-6-48, 630 East Main Avenue, City of Morgan Hill, Santa Clara County, California	Pacific Museum Consultants	
S-011673	IC Record Search Nbr - 6080-89-269	1990	Robert Cartier	Cultural Resource Evaluation for 65-85 W. First Street in the City of Morgan Hill, County of Santa Clara	Archaeological Resource Management	
S-011674	IC Record Search Nbr - 6080-89-269	1990	Robert Cartier	Cultural Resource Evaluation for the Epperson Project, 140 W. Main Avenue in the City of Morgan Hill, County of Santa Clara	Archaeological Resource Management	
S-012173		1990	Larry Bourdeau	Results of Phase II Archaeological Investigations with Recommendations for Cultural Resource Management: the Will Bone House, Historic Archaeological Site CA-SCL-670H, Greg Mussallem Project Parcel, APN 764-16-08, West Main Avenue at Del Monte Avenue, Morgan Hill, Santa Clara County, California	Pacific Museum Consultants	43-001054
S-013455		1991	Angela M. Banet and Steven J. Rossa	Cultural Resources Assessment, Sutter Boulevard Extension Project, Morgan Hill, Santa Clara County, California	Basin Research Associates, Inc.	

Report List

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
S-014249	IC Record Search Nbr - 60800-91-508	1992	Robert Cartier	Cultural Resource Evaluation of the Morgan Hill Caltrain Park and Ride in the City of Morgan Hill, County of Santa Clara	Archaeological Resource Management	
S-014755		1992	Robert Cartier	Cultural Resource Evaluation of the Shelle' Thomas Property, City of Morgan Hill, Santa Clara County	Archaeological Resource Management	
S-015124		1993		Cultural Resource Evaluation of Nob Hill Terrace Properties, City of Morgan Hill, Santa Clara County	Archaeological Resource Management	
S-015650	Submitter - AC Project 2155	1993	Anna Runnings and Gary S. Breschini	Preliminary Cultural Resources Reconnaissance for Road Widening on East Dunne Avenue in Morgan Hill, Santa Clara County, California	Archaeological Consulting	
S-016695		1994		Cultural Resource Evaluation of Coast Federal Bank Property, City of Morgan Hill, Santa Clara County	Archaeological Resource Management	
S-016700		1994		Cultural Resource Evaluation of Skeel's Building Site, APN 767-07-50, City of Morgan Hill	Archaeological Resource Management	
S-016715		1994	Robert Cartier	Cultural Resource Evaluation, Simonsen and De Rosa Properties, APN 767-05-055 & 056, City of Morgan Hill	Archaeological Resource Management	
S-017636		1995	Lynne Eckert	Cultural Resource Evaluation of a (4) Acre Parcel of Land for the 76-Unit Apartment Project, City of Morgan Hill	Archaeological Resource Management	
S-022619	IC Record Search Nbr - 60800-99-789	1999		Cultural Resources Evaluation of the Villa Ciolino Project in the City of Morgan Hill	Archaeological Resource Management	
S-022819		2000	Wendy J. Nelson, Maureen Carpenter, and Julia G. Costello	Cultural Resources Survey for the Level (3) Communications Long Haul Fiber Optics Project, Segment WS05: San Jose to San Luis Obispo	Far Western Anthropological Research Group, Inc.; Foothill Resources, Ltd.	27-001191, 27-001219, 27-001243, 27-001889, 27-002242, 27-002322, 35-000024, 35-000036, 35-000111, 43-000106, 43-000109, 43-000141, 43-000455, 43-000573, 43-000575, 43-001071
S-023355		1999	Colin I. Busby and Stuart A. Guedon	Cultural Resources Assessment, Parcel Located at Butterfield Boulevard and Diana Avenue, City of Morgan Hill, Santa Clara County, California (letter report)	Basin Research Associates	
S-025094		2002	Ric Windmiller	Phase I Archaeological Resources Inventory, San Marco Meadows, Pittsburg, Contra Costa County, California		

Report List

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
S-025322	OHP PRN - FCC001127A-D	2000	John A. Nadolski	Archaeological Investigations for the Nob Hill Cell Tower Site	Pacific Legacy, Inc.	
S-025322a		2000	John A. Nadolski	Archaeological Reports for Cell Tower Sites	Pacific Legacy, Inc.	
S-025322b		2000	Daniel Abeyta	Telecommunication Facilities; FCC001127A-D: CA-1109, adjacent to Canyon Road near American Canyon Road and Interstate 80, Napa, CA; 100 West Third Street, Morgan Hill, CA; 9055 South Gate Ridge Road, San Ramon, CA; 2210 West College Avenue, Santa Rosa, CA (Concurrance Letter)	Office of Historic Preservation	
S-029657	OHP PRN - FTA021021A; Voided - S-37863; Voided - S-42672; Voided - S-43525	2002	Wendy J. Nelson, Tammara Norton, Larry Chiea, and Reinhard Pribish	Archaeological Inventory for the Caltrain Electrification Program Alternative in San Francisco, San Mateo, and Santa Clara Counties, California	Far Western Anthropological Research Group, Inc.	38-000015, 38-004498, 38-004756, 38-004820, 38-004962, 38-005084, 38-005456, 38-005457, 38-005458, 38-005459, 38-005460, 38-005461, 38-005462, 41-000009, 41-000105, 41-000165, 41-000169, 41-000230, 41-000231, 41-000281, 41-000310, 41-000311, 41-000312, 41-000318, 41-000410, 41-000498, 41-000534, 41-000632, 41-000640, 41-000808, 41-001135, 41-001136, 41-001137, 41-001138, 41-001406, 41-002116, 41-002353, 41-002433, 41-002434, 41-002435, 41-002437, 41-002438, 41-002439, 41-002440, 41-002441, 41-002442, 41-002443, 41-002444, 41-002447, 41-002462, 41-002463, 41-002464, 41-002465, 43-000028, 43-000042, 43-000050, 43-000449, 43-000566, 43-000619, 43-000669, 43-000881, 43-000928, 43-001071, 43-001739, 43-002653, 43-002867, 43-002868, 43-002869, 43-002871, 43-002873, 43-002877, 43-002878, 43-003025, 43-003026, 43-003027, 43-003028, 43-003029, 43-003030, 43-003031, 43-003032, 43-003033, 43-003034, 43-003035, 43-003036, 43-003037, 43-003038, 43-003039, 43-003040, 43-003041, 43-003042, 43-003043, 43-003044

Report List

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
S-029657a		2002	Rand F. Herbert	Finding of No Adverse Effect, Caltrain Electrification Program, San Francisco, San Mateo, and Santa Clara Counties, California	JRP Historical Consulting Services	
S-029657b		2002		Historic Property Survey for the Proposed Caltrain Electrification Program, San Francisco, San Mateo, and Santa Clara Counties, California	Parsons; JRP Historical Consulting Services; Far Western Anthropological Research Group, Inc.	
S-029657c		2002	Knox Mellon	FTA021021A; Caltrain Electrification Program, San Francisco, San Mateo, and Santa Clara Counties	Office of Historic Preservation	
S-029657d		2003	Meta Bunse	Final Finding of Effect Amendment, Caltrain Electrification Project, San Francisco, San Mateo, and Santa Clara Counties, California	JRP Historical Consulting Services	
S-029657e		2001	Rand F. Herbert	Draft Finding of No Adverse Effect, Caltrain Electrification Program, San Francisco, San Mateo, and Santa Clara Counties, California	JRP Historical Consulting Services	
S-029657f		2008	Sharon A. Waechter, Jack Meyer, and Laura Leach-Palm	Cultural Resources Addendum for the Caltrain Electrification Program Alternative: San Francisco, San Mateo, and Santa Clara Counties, California	Far Western Anthropological Research Group, Inc.	
S-029657g		2008	Meta Bunse	Addendum Finding of Effect, Caltrain Electrification Program, San Francisco to San Jose (MP 0.0 to 52.0); San Francisco, San Mateo, and Santa Clara Counties, California	JRP Historical Consulting, LLC	
S-029657h		2002		Inventory and Evaluation of Historic Resources, Caltrain Electrification Program, San Francisco to Gilroy (MP 0.0 to 77.4) (Draft)	JRP Historical Consulting Services	
S-029663		2004	Scott Billat	Construction of a 47-foot slimline monopole and new equipment cabinets, Morgan Hill Plastics/SF-10300A, 640 E. Dunne Ave., Morgan Hill, CA.	EarthTouch, Inc	
S-031428	Voided - S-31469	2004		Historical Evaluation of the Property at 16835 Monterey Road in the City of Morgan Hill	Archaeological Resource Management	43-001801

Report List

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
S-033061	Submitter - SWCA Cultural Resources Report Database No. 06-507; Submitter - SWCA Report No. 10715-	2006	Nancy Sikes, Cindy Arrington, Bryon Bass, Chris Corey, Kevin Hunt, Steve O'Neil, Catherine Pruett, Tony Sawyer, Michael Tuma, Leslie Wagner, and Alex Wesson	Cultural Resources Final Report of Monitoring and Findings for the Qwest Network Construction Project, State of California	SWCA Environmental Consultants	01-000027, 01-000040, 01-000087, 01-000088, 01-000089, 01-000090, 07-000138, 27-000802, 27-001191, 27-001207, 28-000467, 43-000106, 43-000141, 43-000449, 43-000573, 43-000575, 43-000754, 43-000928, 43-001071, 48-000208, 48-000211, 48-000214, 48-000441, 48-000549, 49-001583, 57-000194, 57-000198, 57-000297, 57-000301, 57-000307
S-033061a		2006		Cultural Resources Final Report of Monitoring and Findings for the Qwest Network Construction Project, State of California	SWCA Environmental Consultants	
S-033061b		2007	Nancy E. Sikes	Final Report of Monitoring and Findings for the Qwest Network Construction Project (letter report)	SWCA Environmental Consultants	
S-036266	Submitter - File No. 09-35S	2009	Vicki Beard	A Cultural Resources Survey for the Horizons at Morgan Hill Housing Project, 98 East Central Avenue, Morgan Hill, Santa Clara County, California	Tom Origer and Associates	
S-037010	Submitter - CML-5152 (016); Voided - S-37012	2008	Miley Paul Holman	Archaeological Survey Report for the Third Street Promenade Project, City of Morgan Hill, Santa Clara County, CML-5152 (016)	Holman & Associates	43-002632, 43-002633, 43-002634, 43-002635, 43-002636, 43-002637, 43-002638, 43-002639
S-037010a		2008	Sheila McElroy	Historic Resource Evaluation Report (HRER) for City of Morgan Hill Third Street Promenade Project, 2007 Proposed Third Street Promendade Project: Between Monterey Road and Depot Street in Morgan Hill, California, Federal Identification Number (FIN): CML-5152 (016)	Circa: Historic Property Development	
S-049126	Agency Nbr - FA# STPL-5152(021)	2016	Judith Marvin	Historic Property Survey Report, City of Morgan Hill proposal to resurface two sections of Monterey Road, 4-SCL STPL-5152(021)	Foothills Resources, Ltd.	43-000469
S-049126a		2016	Ian Patrick, Melinda Pacheco Patrick, and Judith Marvin	Archaeological Survey Report for the City of Morgan Hill Monterey Road Preservation Project, Santa Clara County, California.	Patrick GIS Group, Inc.; Foothill Resources, Ltd.	

Report List

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
S-052066		2016	Cher L. Peterson, Carrie D. Wills, and Kathleen A. Crawford	Cultural Resources Records Search and Site Visit Results for T-Mobile West, LLC Candidate SF04833A (SF833 Barrett Avenue), 235 San Pedro Avenue, Morgan Hill, Santa Clara County, California (letter report)	Environmental Assessment Specialists, Inc.	43-004018
S-052066a		2016	Carrie D. Wills and Kathleen A. Crawford	Direct APE Historic Architectural Assessment for T-Mobile West, LLC, Candidate SF04833A (SF833 Barrett Avenue), 235 San Pedro Avenue, Morgan Hill, Santa Clara County, California (letter report)	Environmental Assessment Specialists, Inc.	
S-053037	Submitter - 17-115S; Submitter - UHC 00661 Morgan Hill	2017	Eileen Barrow	A Cultural Resources Study of APNs 817-36-032 and 817-36-033, Monterey Road, Morgan Hill, Santa Clara County, California	Tom Origer & Associates	
S-053380		2006	Dana E. Supernowicz	Cultural Resources Study Of The Morgan Hill Water Tank Project, Cingular Wireless Site No. SNFCCA2007B, 100 W. Third Street, Morgan Hill, Santa Clara County, California 95037	Historic Resource Associates	

Appendix C:
Native American Heritage Commission Correspondence

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NATIVE AMERICAN HERITAGE COMMISSION

CHAIRPERSON
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Chumash

VICE-CHAIRPERSON
Buffy McQuillen
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Pauma-Yuima Band of Luiseño Indians

EXECUTIVE SECRETARY
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Miwok, Nisenan

NAHC HEADQUARTERS
1550 Harbor Boulevard
Suite 100
West Sacramento,
California 95691
(916) 373-3710
nahc@nahc.ca.gov

July 17, 2024

Dana DePietro
FirstCarbon Solutions

Via Email to: ddepietro@fcs-intl.com

Re: Native American Tribal Consultation, Pursuant to the Assembly Bill 52 (AB 52), Amendments to the California Environmental Quality Act (CEQA) (Chapter 532, Statutes of 2014), Public Resources Code Sections 5097.94 (m), 21073, 21074, 21080.3.1, 21080.3.2, 21082.3, 21083.09, 21084.2 and 21084.3, Diana MH Townhomes Project, Santa Clara County

To Whom It May Concern:

Pursuant to Public Resources Code section 21080.3.1 (c), attached is a consultation list of tribes that are traditionally and culturally affiliated with the geographic area of the above-listed project. Please note that the intent of the AB 52 amendments to CEQA is to avoid and/or mitigate impacts to tribal cultural resources, (Pub. Resources Code §21084.3 (a)) ("Public agencies shall, when feasible, avoid damaging effects to any tribal cultural resource.")

Public Resources Code sections 21080.3.1 and 21084.3(c) require CEQA lead agencies to consult with California Native American tribes that have requested notice from such agencies of proposed projects in the geographic area that are traditionally and culturally affiliated with the tribes on projects for which a Notice of Preparation or Notice of Negative Declaration or Mitigated Negative Declaration has been filed on or after July 1, 2015. Specifically, Public Resources Code section 21080.3.1 (d) provides:

Within 14 days of determining that an application for a project is complete or a decision by a public agency to undertake a project, the lead agency shall provide formal notification to the designated contact of, or a tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice, which shall be accomplished by means of at least one written notification that includes a brief description of the proposed project and its location, the lead agency contact information, and a notification that the California Native American tribe has 30 days to request consultation pursuant to this section.

The AB 52 amendments to CEQA law does not preclude initiating consultation with the tribes that are culturally and traditionally affiliated within your jurisdiction prior to receiving requests for notification of projects in the tribe's areas of traditional and cultural affiliation. The Native American Heritage Commission (NAHC) recommends, but does not require, early consultation as a best practice to ensure that lead agencies receive sufficient information about cultural resources in a project area to avoid damaging effects to tribal cultural resources.

The NAHC also recommends, but does not require that agencies should also include with their notification letters, information regarding any cultural resources assessment that has been completed on the area of potential effect (APE), such as:

1. The results of any record search that may have been conducted at an Information Center of the California Historical Resources Information System (CHRIS), including, but not limited to:

- A listing of any and all known cultural resources that have already been recorded on or adjacent to the APE, such as known archaeological sites;
- Copies of any and all cultural resource records and study reports that may have been provided by the Information Center as part of the records search response;
- Whether the records search indicates a low, moderate, or high probability that unrecorded cultural resources are located in the APE; and
- If a survey is recommended by the Information Center to determine whether previously unrecorded cultural resources are present.

2. The results of any archaeological inventory survey that was conducted, including:

- Any report that may contain site forms, site significance, and suggested mitigation measures.

  All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum, and not be made available for public disclosure in accordance with Government Code section 6254.10.

3. The result of the Sacred Lands File (SLF) check conducted through the Native American Heritage Commission was positive. Please contact the tribes on the attached list for more information.

4. Any ethnographic studies conducted for any area including all or part of the APE; and

5. Any geotechnical reports regarding all or part of the APE.

Lead agencies should be aware that records maintained by the NAHC and CHRIS are not exhaustive and a negative response to these searches does not preclude the existence of a tribal cultural resource. A tribe may be the only source of information regarding the existence of a tribal cultural resource.

This information will aid tribes in determining whether to request formal consultation. In the event that they do, having the information beforehand will help to facilitate the consultation process.

If you receive notification of change of addresses and phone numbers from tribes, please notify the NAHC. With your assistance, we can assure that our consultation list remains current.

If you have any questions, please contact me at my email address: Cody.Campagne@nahc.ca.gov.

Sincerely,

Cody Campagne

Cody Campagne
Cultural Resources Analyst

Attachment

Native American Heritage Commission
Native American Contact List
Santa Clara County
7/17/2024

County	Tribe Name	Fed (F) Non-Fed (N)	Contact Person	Contact Address	Phone #	Fax #	Email Address	Cultural Affiliation	Counties	Last Updated
Santa Clara	Amah Mutsun Tribal Band	N	Ed Ketchum, Vice-Chairperson		(530) 578-3864		aerieways@aol.com	Costanoan Northern Valley Yokut	Alameda,Calaveras,Contra Costa,Fresno,Madera,Mariposa,Merced,Monte	7/20/2023
	Amah Mutsun Tribal Band	N	Valentin Lopez, Chairperson	P.O. Box 5272 Galt, CA, 95632	(916) 743-5833		vjltestingcenter@aol.com	Costanoan Northern Valley Yokut	Alameda,Calaveras,Contra Costa,Fresno,Madera,Mariposa,Merced,Monterey,San Benito,San Francisco,San Joaquin,San	7/20/2023
	Amah MutsunTribal Band of Mission San Juan Bautista	N	Irene Zwierlein, Chairperson	3030 Soda Bay Road Lakeport, CA, 95453	(650) 851-7489	(650) 332-1526	amahmutsuntribal@gmail.com	Costanoan	Alameda,Contra Costa,Merced,Monterey,San Benito,San Francisco,San Mateo,Santa Clara,Santa Cruz,Stanislaus	
	Costanoan Rumsen Carmel Tribe	N	Carla Munoz, Tribal Council	604 W Fernleaf Ave Pomona, CA, 91766	(415) 690-3110		carlamarieohlone@gmail.com	Costanoan	Alameda,Contra Costa,Merced,Monterey,San Benito,San Francisco,San Mateo,Santa Clara,Santa Cruz,Stanislaus	8/18/2023
	Costanoan Rumsen Carmel Tribe	N	Desiree Munoz, Tribal Liaison		(909) 491-8254		ohlonesisters@gmail.com	Costanoan	Alameda,Contra Costa,Merced,Monterey,San Benito,San Francisco,San Mateo,Santa	8/18/2023
	Indian Canyon Mutsun Band of Costanoan	N	Kanyon Sayers-Roods, MLD Contact	1615 Pearson Court San Jose, CA, 95122	(408) 673-0626		kanyon@kanyonkonsulting.com	Costanoan	Alameda,Contra Costa,Merced,Monterey,San Benito,San Francisco,San Mateo,Santa Clara,Santa Cruz,Stanislaus	3/15/2024
	Indian Canyon Mutsun Band of Costanoan	N	Ann Marie Sayers, Chairperson	P.O. Box 28 Hollister, CA, 95024	(831) 637-4238		ams@indiancanyons.org	Costanoan	Alameda,Contra Costa,Merced,Monterey,San Benito,San Francisco,San Mateo,Santa Clara,Santa Cruz,Stanislaus	3/15/2024
	Muwekma Ohlone Tribe of the SF Bay Area	N	Richard Massiatt, Councilmember/MLD Tribal Rep.	1169 S. Main Street, Ste. 336 Manteca, CA, 95377	(209) 321-0372		rmassiatt@muwekma.org	Costanoan	Alameda,Contra Costa,Marin,Merced,Napa,Sacramento,San Francisco,San Joaquin,San Mateo,Santa	3/28/2024
	Muwekma Ohlone Tribe of the SF Bay Area	N	Charlene Nijmeh, Chairperson	1169 S. Main Street, Ste. 336 Manteca, CA, 95377	(408) 464-2892		cnijmeh@muwekma.org	Costanoan	Alameda,Contra Costa,Marin,Merced,Napa,Sacramento,San Francisco,San Joaquin,San Mateo,Santa	3/28/2024
	Tamien Nation	N	Johnathan Wasaka Costillas, THPO	10721 Pingree Road Clearlake Oaks, CA, 94523	(925) 336-5359		thpo@tamien.org	Costanoan	Alameda,San Mateo,Santa Clara,Stanislaus	4/11/2023
	Tamien Nation	N	Lillian Camarena, Secretary	336 Percy Street Madera, CA, 93638	(559) 363-5914		Lcamarena@tamien.org	Costanoan	Alameda,San Mateo,Santa Clara,Stanislaus	4/11/2023
	Tamien Nation	N	Quirina Luna Geary, Chairperson	PO Box 8053 San Jose, CA, 95155	(707) 295-4011		qgeary@tamien.org	Costanoan	Alameda,San Mateo,Santa Clara,Stanislaus	4/11/2023
	The Ohlone Indian Tribe	N	Desiree Vigil, THPO	259 Winwood Avenue Pacifica, CA, 94044	(650) 290-0245		dirwin0368@yahoo.com	Bay Miwok Ohlone Patwin Plains Miwok	Alameda,Contra Costa,San Francisco,San Mateo,Santa Clara	11/30/2023
	The Ohlone Indian Tribe	N	Andrew Galvan, Chairperson	P.O. Box 3388 Fremont, CA, 94539	Phone: (510) 882-0527	(510) 687-9393	chochenyo@AOL.com	Bay Miwok Ohlone Patwin Plains Miwok	Alameda,Contra Costa,San Francisco,San Mateo,Santa Clara	7/24/2023
	The Ohlone Indian Tribe	N	Vincent Medina, Cultural Leader	17365 Via Del Rey San Lorenzo, CA, 94580	(510) 610-7587		vincent.d.medina@gmail.com	Bay Miwok Ohlone Patwin Plains Miwok	Alameda,Contra Costa,San Francisco,San Mateo,Santa Clara	7/24/2023
	Wuksachi Indian Tribe/Eshom Valley Band	N	Kenneth Woodrow, Chairperson	1179 Rock Haven Ct. Salinas, CA, 93906	(831) 443-9702		kwood8934@aol.com	Foothill Yokut Mono	Alameda,Calaveras,Contra Costa,Fresno,Inyo,Kings,Madera,Marin,Mariposa,Merced,Mono,Monterey,San Benito,San	6/19/2023

This list is current only as of the date of this document. Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resource Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources assessment for the proposed Diana MH Townhomes Project, Santa Clara County.

Record: PROJ-2024-003593
Report Type: List of Tribes
Counties: Santa Clara
NAHC Group: All

FIRSTCARBONSOLUTIONS
FCS INTERNATIONAL, INC.

July 18, 2024

Tamien Nation
Johnathan Wasaka Costillas, THPO
10721 Pingree Road
Clearlake Oaks, CA, 94523

Subject: Diana MH Townhomes Project

Dear Johnathan Wasaka Costillas:

FirstCarbon Solutions (FCS) is preparing an Phase I Cultural Resources Assessment for the Diana MH Townhomes Project in the City of Morgan Hill. As part of the environmental review process, we are conducting a cultural resources assessment.

The project site is located on 375 Diana Avenue, Morgan Hill, CA. Attached is a Record Search Map of the project site and a 0.5-mile radius.

As part of the cultural resources assessment, FCS conducted a Sacred Lands File (SLF) search and a California Historical Resource Information (CHRIS) search. The results of the SLF records search were positive. The CHRIS search found 12 historic resources within a 0.5-mile radius of the project site, none of which are in the project site itself. The CHRIS search found 38 reports within within a 0.5-mile radius of the project site, none of which are in the project site itself. The Native American Heritage Commission (NAHC) suggested you might be able to provide further information. If you have any additional information regarding potential historic or cultural resources in proximity or relation to the proposed project area, we would greatly appreciate your input.

Please note that this letter is a request for information pertaining to a cultural resources assessment and is not notification of a project under Senate Bill (SB) 18, Assembly Bill (AB) 52 or Section 106 of the National Historic Preservation Act.

Designated lead agencies under the California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA) are handling project notification and consultation requirements. Please feel free to contact me via email at ddepietro@fcs-intl.com. Thank you for your valuable assistance.

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Inland Empire
967 Kendall Drive
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San Bernardino, CA 92407

Sacramento Valley
2351 Sunset Boulevard
Suite 170-301
Rocklin, CA 95765

Utah
2901 Bluegrass Boulevard
Suite 200-62
Lehi, UT 84043

Colorado
5480 Valmont Road
Suite 200
Boulder, CO 80301

Connecticut
2 Corporate Drive
Suite 450
Shelton, CT 06484

New York
10 Monument Street
Deposit, NY 13754

56 Broome Corporate Parkway
Conklin, NY 13748

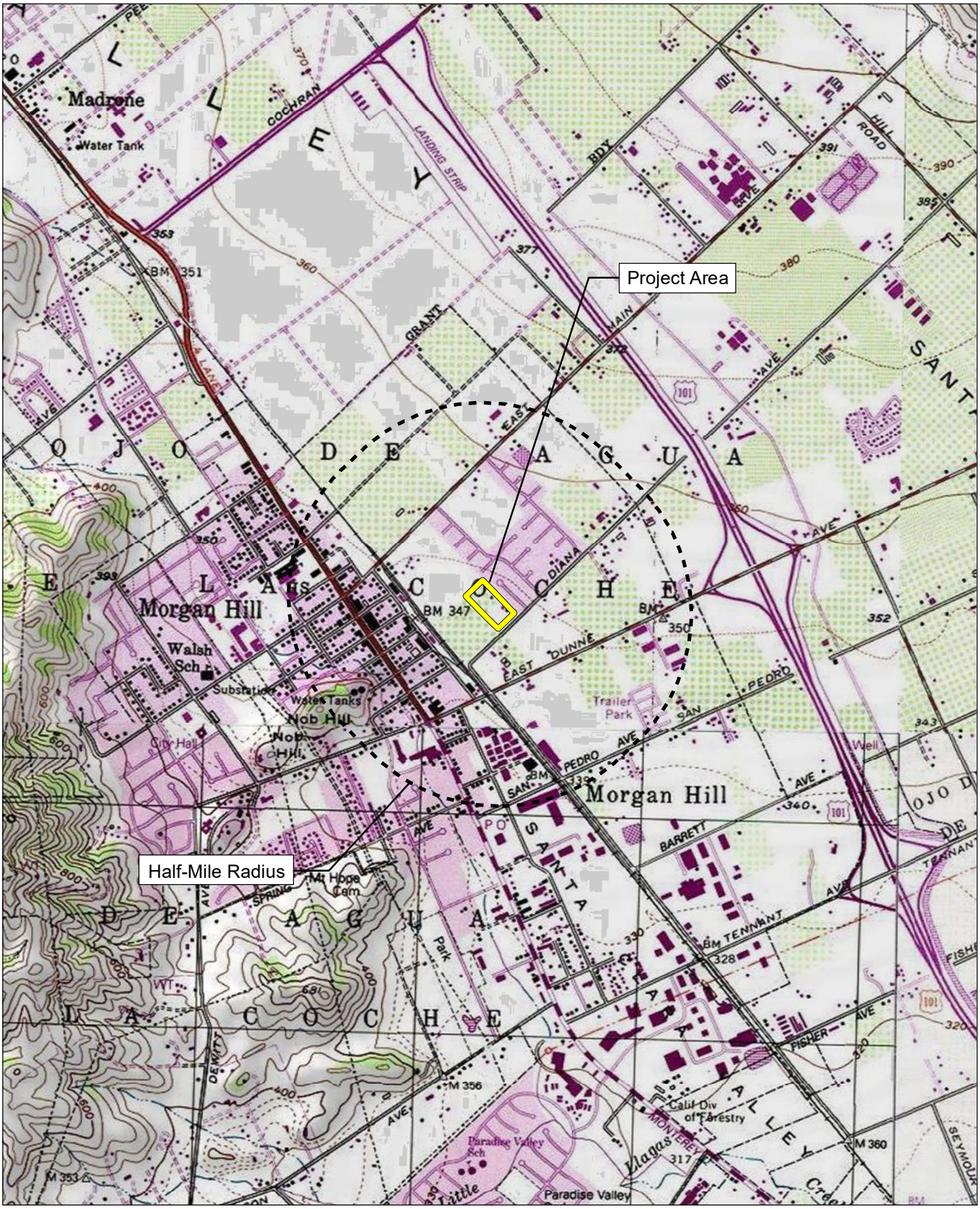
Sincerely,

Dana Douglas DePietro, PhD
Director of Cultural Resources
FirstCarbon Solutions
2999 Oak Road, Suite 250
Walnut Creek, CA 94597

Enclosed

Attachment A: Record Search Map

Attachment A:
Records Search Map



Source: USGS Morgan Hill & Mt. Madonna 7.5' Quadrangle / T09S,R03E,sec21,22,27,28

Project Site: USGS Morgan Hill 7.5' Quadrangle / T09S,R03E,sec21,28.

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Exhibit A
Record Search Map

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FCS INTERNATIONAL, INC.

July 18, 2024

Costanoan Rumsen Carmel Tribe
Desiree Munoz, Tribal Liason
604 Fernleaf Avenue
Pomona, CA 91766

Subject: Diana MH Townhomes Project

Dear Desiree Munoz:

FirstCarbon Solutions (FCS) is preparing an Phase I Cultural Resources Assessment for the Diana MH Townhomes Project in the City of Morgan Hill. As part of the environmental review process, we are conducting a cultural resources assessment.

The project site is located on 375 Diana Avenue, Morgan Hill, CA. Attached is a Record Search Map of the project site and a 0.5-mile radius.

As part of the cultural resources assessment, FCS conducted a Sacred Lands File (SLF) search and a California Historical Resource Information (CHRIS) search. The results of the SLF records search were positive. The CHRIS search found 12 historic resources within a 0.5-mile radius of the project site, none of which are in the project site itself. The CHRIS search found 38 reports within within a 0.5-mile radius of the project site, none of which are in the project site itself. The Native American Heritage Commission (NAHC) suggested you might be able to provide further information. If you have any additional information regarding potential historic or cultural resources in proximity or relation to the proposed project area, we would greatly appreciate your input.

Please note that this letter is a request for information pertaining to a cultural resources assessment and is not notification of a project under Senate Bill (SB) 18, Assembly Bill (AB) 52 or Section 106 of the National Historic Preservation Act.

Designated lead agencies under the California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA) are handling project notification and consultation requirements. Please feel free to contact me via email at ddepietro@fcs-intl.com. Thank you for your valuable assistance.

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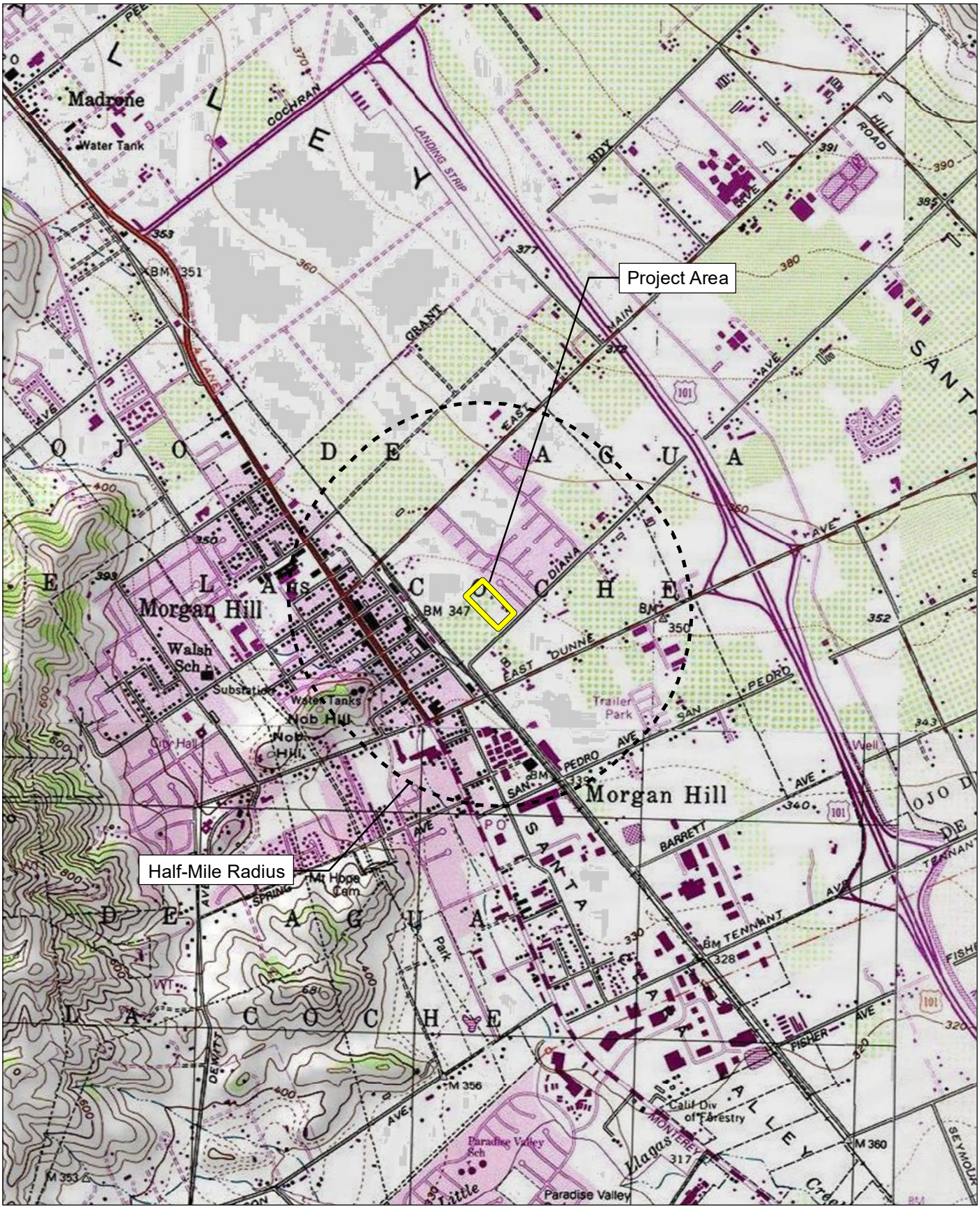

Source: USGS Morgan Hill & Mt. Madonna 7.5' Quadrangle / T09S,R03E,sec21,22,27,28
Project Site: USGS Morgan Hill 7.5' Quadrangle / T09S,R03E,sec21,28.

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Exhibit A
Record Search Map

FIRSTCARBONSOLUTIONS
FCS INTERNATIONAL, INC.

July 18, 2024

The Ohlone Indian Tribe
Andrew Galvan, Chairperson
P.O. Box 3388
Fremont, CA, 94539

Subject: Diana MH Townhomes Project

Dear Chairperson Galvan:

FirstCarbon Solutions (FCS) is preparing an Phase I Cultural Resources Assessment for the Diana MH Townhomes Project in the City of Morgan Hill. As part of the environmental review process, we are conducting a cultural resources assessment.

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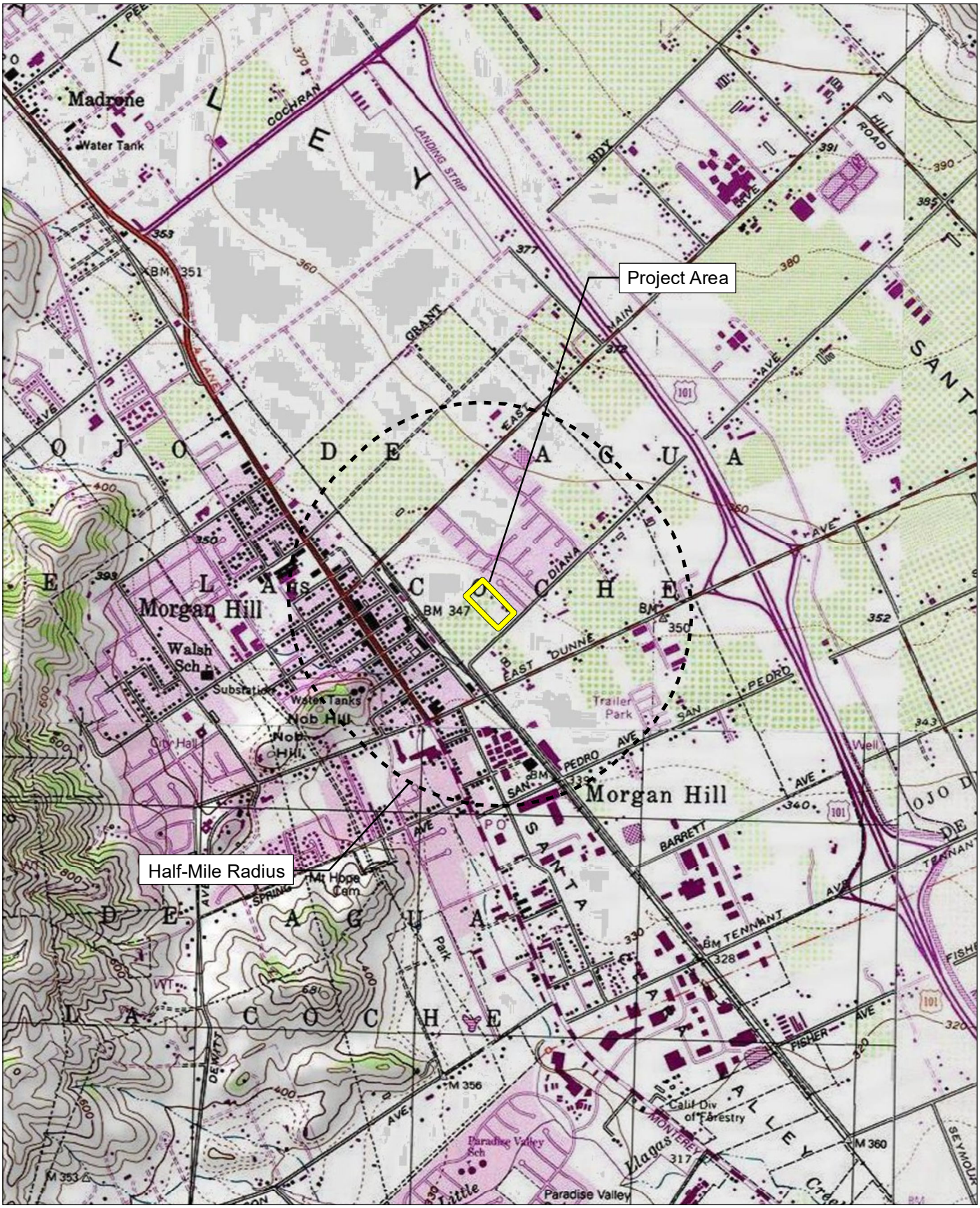

Source: USGS Morgan Hill & Mt. Madonna 7.5' Quadrangle / T09S,R03E,sec21,22,27,28
Project Site: USGS Morgan Hill 7.5' Quadrangle / T09S,R03E,sec21,28.

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Feet

Exhibit A
Record Search Map

FIRSTCARBONSOLUTIONS
FCS INTERNATIONAL, INC.

July 18, 2024

Tamien Nation
Quirina Luna Geary, Chairperson
PO Box 8053
San Jose, CA, 95155

Subject: Diana MH Townhomes Project

Dear Chairperson Geary:

FirstCarbon Solutions (FCS) is preparing an Phase I Cultural Resources Assessment for the Diana MH Townhomes Project in the City of Morgan Hill. As part of the environmental review process, we are conducting a cultural resources assessment.

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Fresno, CA 93720

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San Bernardino, CA 92407

Sacramento Valley
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Rocklin, CA 95765

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Connecticut
2 Corporate Drive
Suite 450
Shelton, CT 06484

New York
10 Monument Street
Deposit, NY 13754

56 Broome Corporate Parkway
Conklin, NY 13748

Sincerely,

Dana Douglas DePietro, PhD
Director of Cultural Resources
FirstCarbon Solutions
2999 Oak Road, Suite 250
Walnut Creek, CA 94597

Enclosed

Attachment A: Record Search Map

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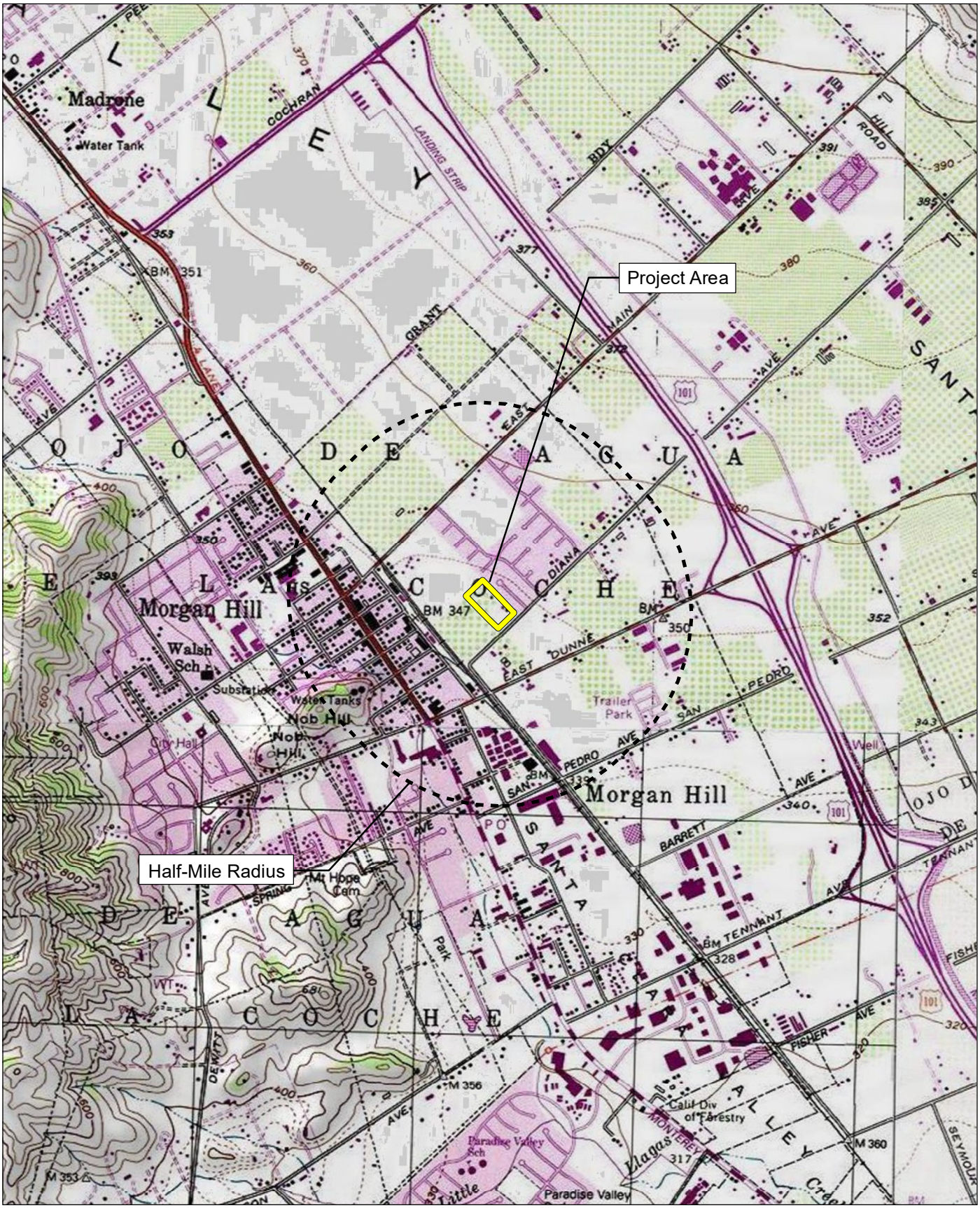
Records Search Map



Source: USGS Morgan Hill & Mt. Madonna 7.5' Quadrangle / T09S,R03E,sec21,22,27,28

Project Site: USGS Morgan Hill 7.5' Quadrangle / T09S,R03E,sec21,28.

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Exhibit A
Record Search Map

FIRSTCARBONSOLUTIONS
FCS INTERNATIONAL, INC.

July 18, 2024

Amah Mutsun Tribal Band
Ed Ketchum, Vice-Chairperson
P.O. Box 5272
Galt, CA, 95632

Subject: Diana MH Townhomes Project

Dear Vice-Chairperson Ketchum:

FirstCarbon Solutions (FCS) is preparing an Phase I Cultural Resources Assessment for the Diana MH Townhomes Project in the City of Morgan Hill. As part of the environmental review process, we are conducting a cultural resources assessment.

The project site is located on 375 Diana Avenue, Morgan Hill, CA. Attached is a Record Search Map of the project site and a 0.5-mile radius.

As part of the cultural resources assessment, FCS conducted a Sacred Lands File (SLF) search and a California Historical Resource Information (CHRIS) search. The results of the SLF records search were positive. The CHRIS search found 12 historic resources within a 0.5-mile radius of the project site, none of which are in the project site itself. The CHRIS search found 38 reports within within a 0.5-mile radius of the project site, none of which are in the project site itself. The Native American Heritage Commission (NAHC) suggested you might be able to provide further information. If you have any additional information regarding potential historic or cultural resources in proximity or relation to the proposed project area, we would greatly appreciate your input.

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Sincerely,

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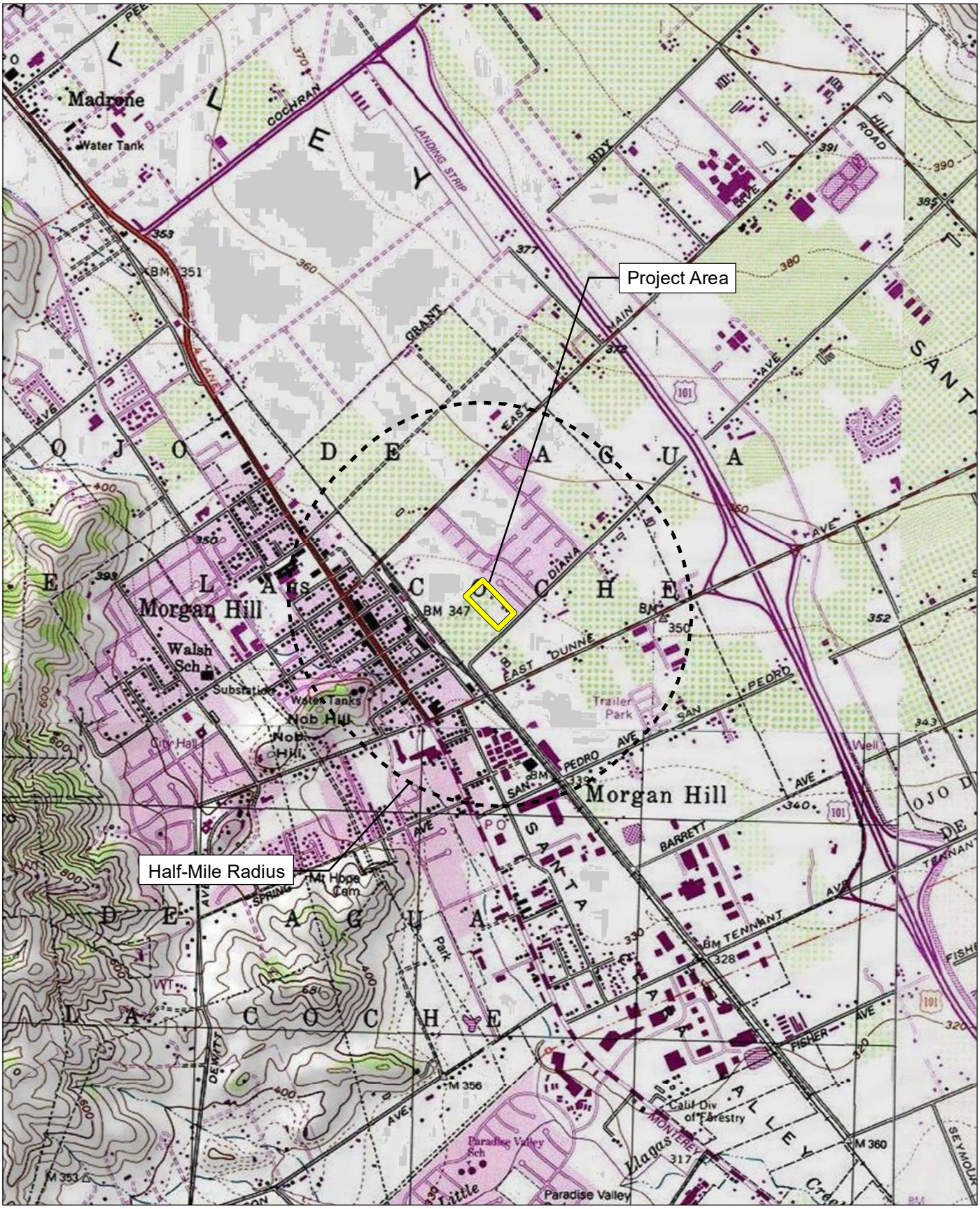

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Project Site: USGS Morgan Hill 7.5' Quadrangle / T09S,R03E,sec21,28.

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Record Search Map

FIRSTCARBONSOLUTIONS
FCS INTERNATIONAL, INC.

July 18, 2024

Amah Mutsun Tribal Band
Valentin Lopez, Chairperson
P.O. Box 5272
Galt, CA, 95632

Subject: Diana MH Townhomes Project

Dear Chairperson Lopez:

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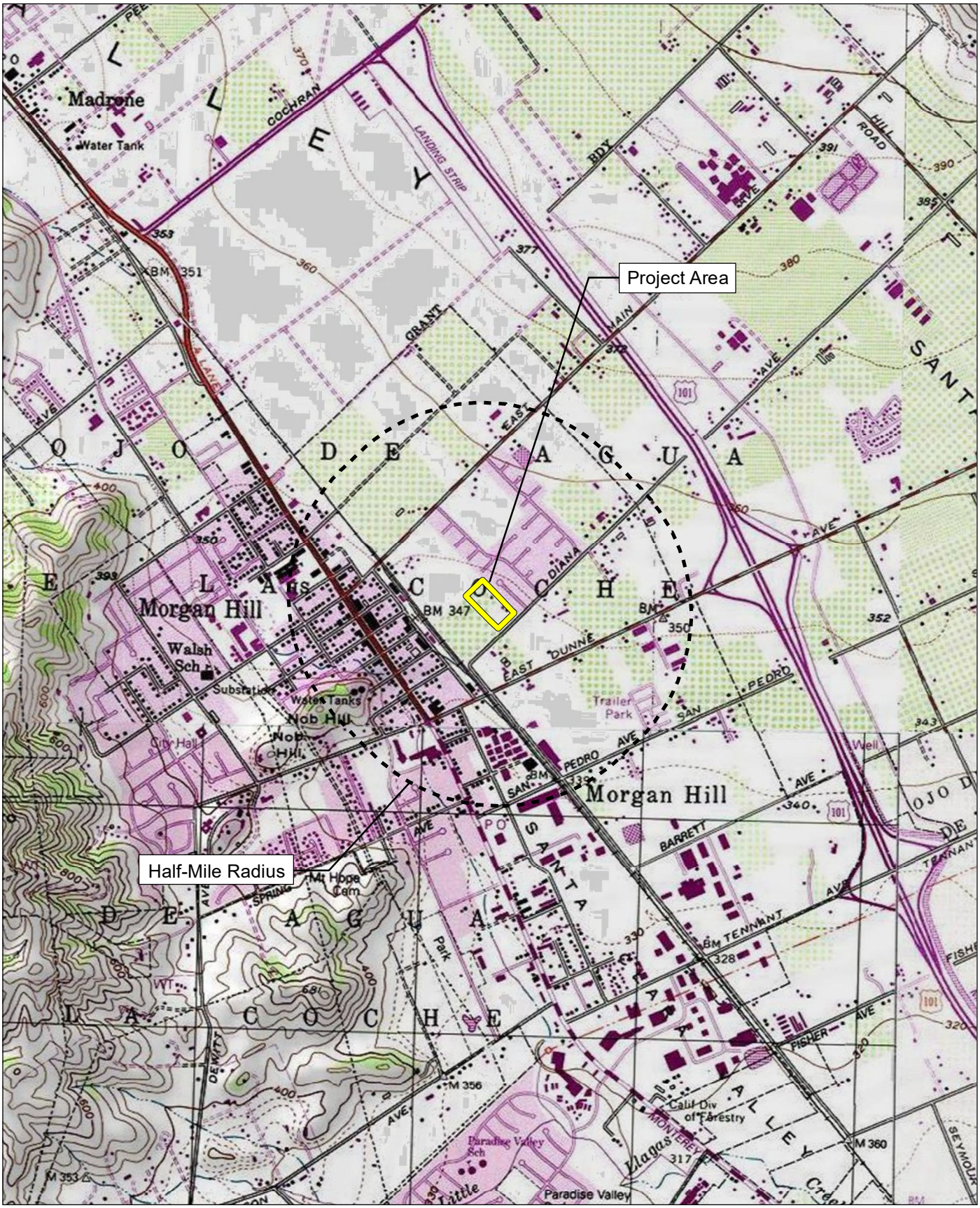

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Exhibit A
Record Search Map

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FCS INTERNATIONAL, INC.

July 18, 2024

Muwekma Ohlone Tribe of the SF Bay Area
Richard Massiatt, Councilmember/MLD Tribal Rep.
1169 S. Main Street, Ste. 336
Manteca, CA, 95377

Subject: Diana MH Townhomes Project

Dear Chairperson Sayers:

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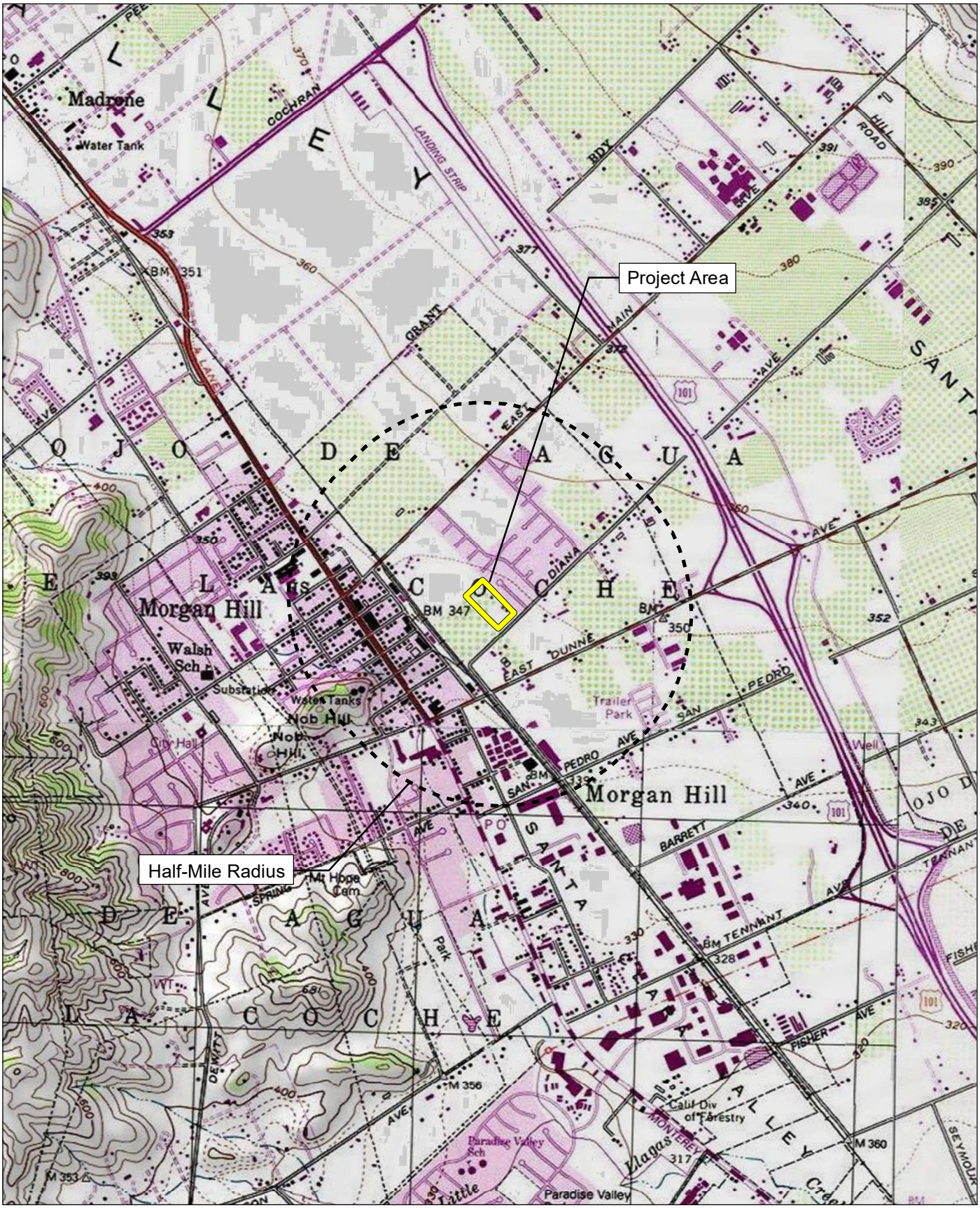

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Exhibit A
Record Search Map

FIRSTCARBONSOLUTIONS
FCS INTERNATIONAL, INC.

July 18, 2024

The Ohlone Indian Tribe
Vincent Medina, Cultural Leader
17365 Via Del Rey
San Lorenzo, CA, 94580

Subject: Diana MH Townhomes Project

Dear Vincent Medina:

FirstCarbon Solutions (FCS) is preparing an Phase I Cultural Resources Assessment for the Diana MH Townhomes Project in the City of Morgan Hill. As part of the environmental review process, we are conducting a cultural resources assessment.

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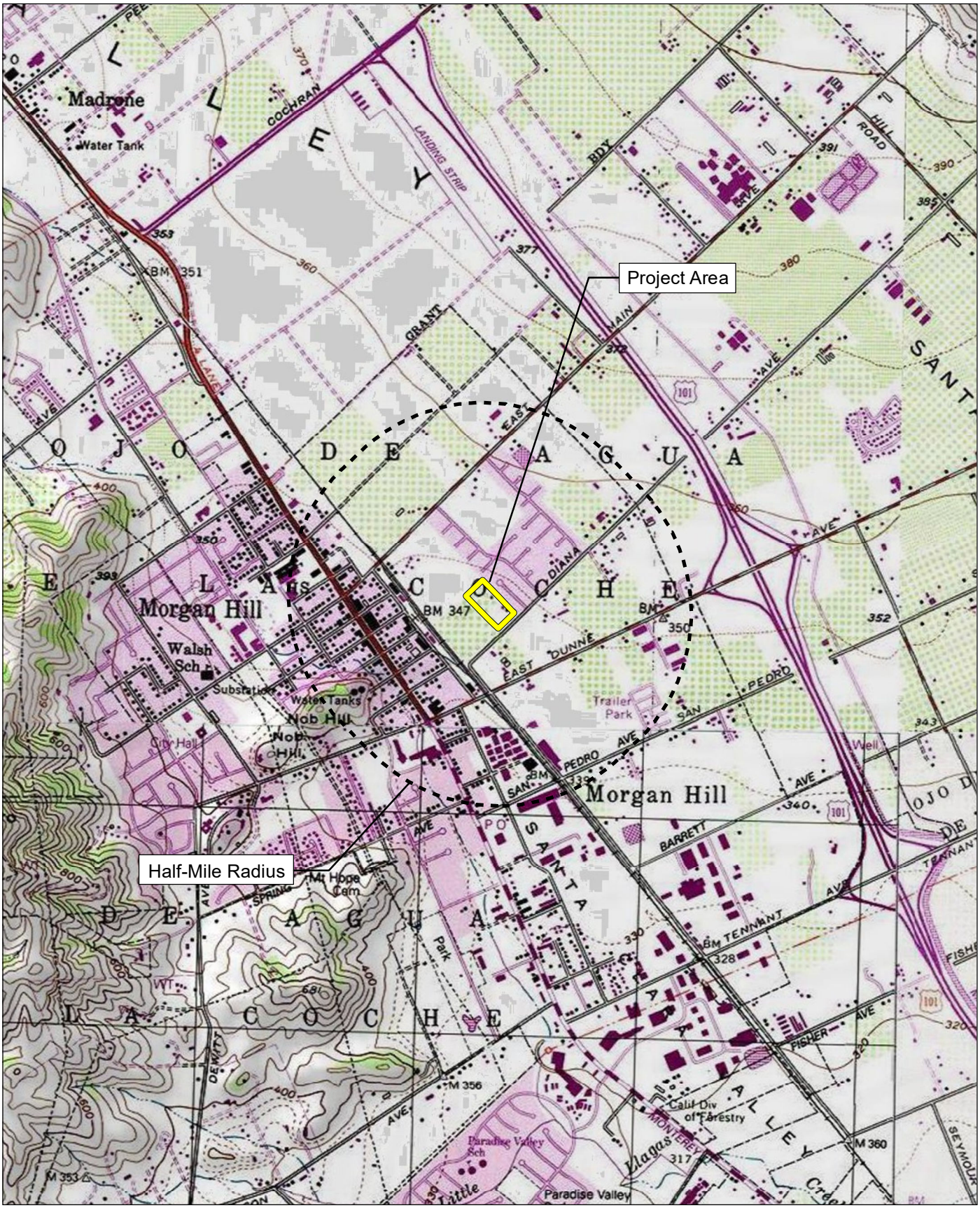

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Exhibit A
Record Search Map

FIRSTCARBONSOLUTIONS
FCS INTERNATIONAL, INC.

July 18, 2024

Costanoan Rumsen Carmel Tribe
Carla Munoz, Tribal Council
604 Fernleaf Avenue
Pomona, CA 91766

Subject: Diana MH Townhomes Project

Dear Carla Munoz:

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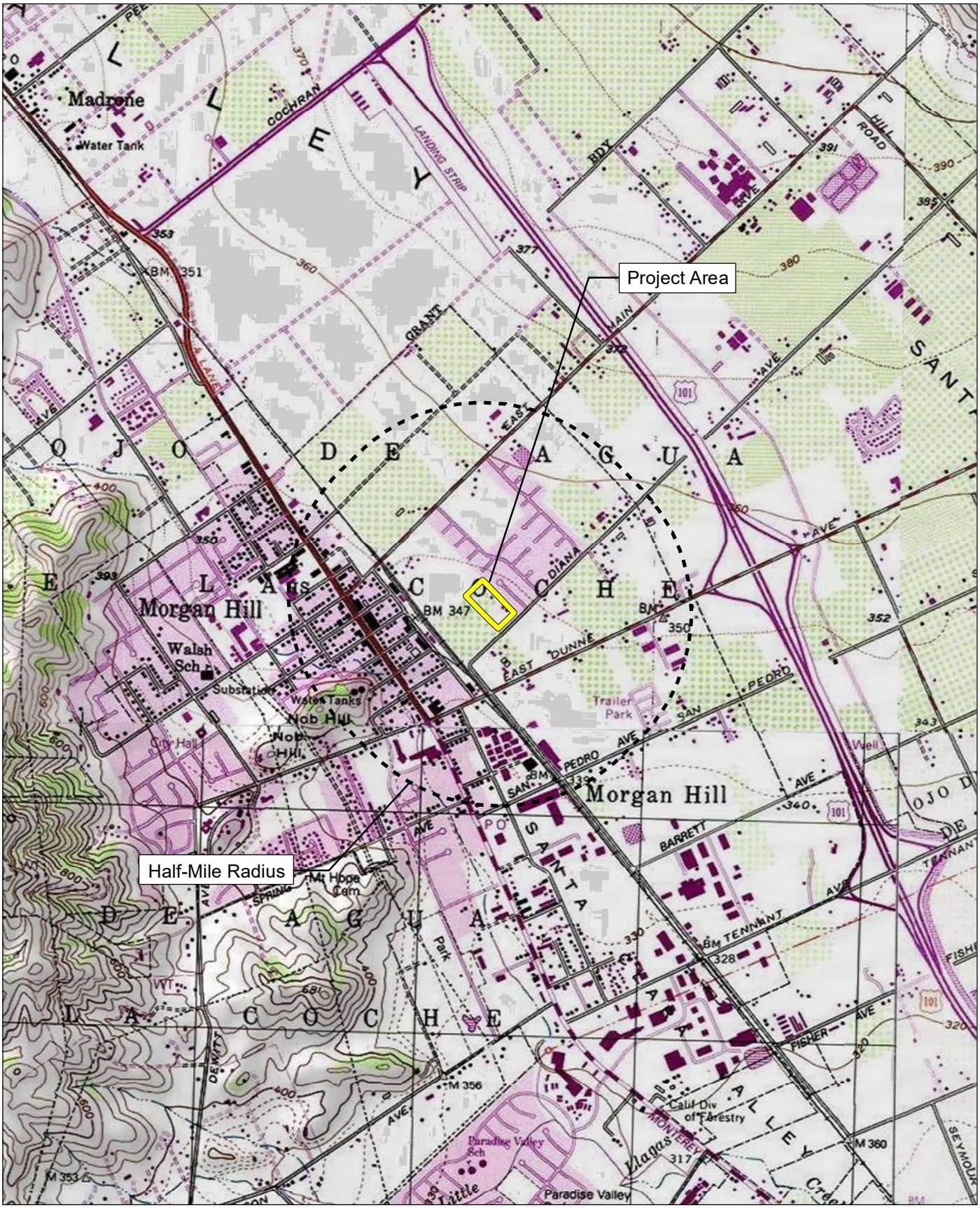

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Exhibit A
Record Search Map

FIRSTCARBONSOLUTIONS
FCS INTERNATIONAL, INC.

July 18, 2024

Muwekma Ohlone Tribe of the SF Bay Area
Charlene Nijmeh, Chairperson
1169 S. Main Street, Ste. 336
Manteca, CA, 95377

Subject: Diana MH Townhomes Project

Dear Chairperson Nijmeh:

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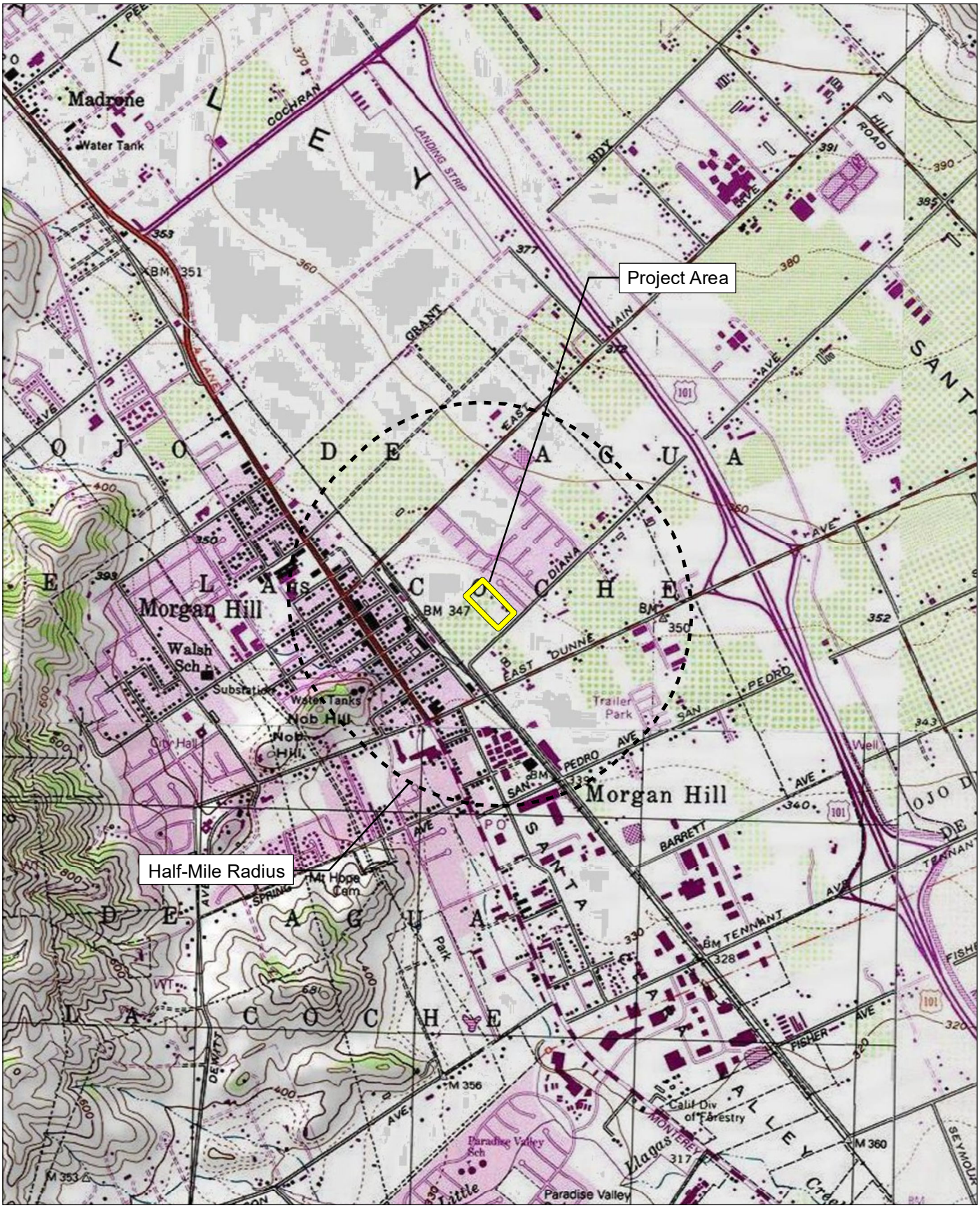

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FIRSTCARBONSOLUTIONS
FCS INTERNATIONAL, INC.

July 18, 2024

Indian Canyon Mutsun Band of Costanoan
Kanyon Sayers-Roods, MLD Contact
1615 Pearson Court
San Jose, CA, 95122

Subject: Diana MH Townhomes Project

Dear Kanyon Sayers-Roods:

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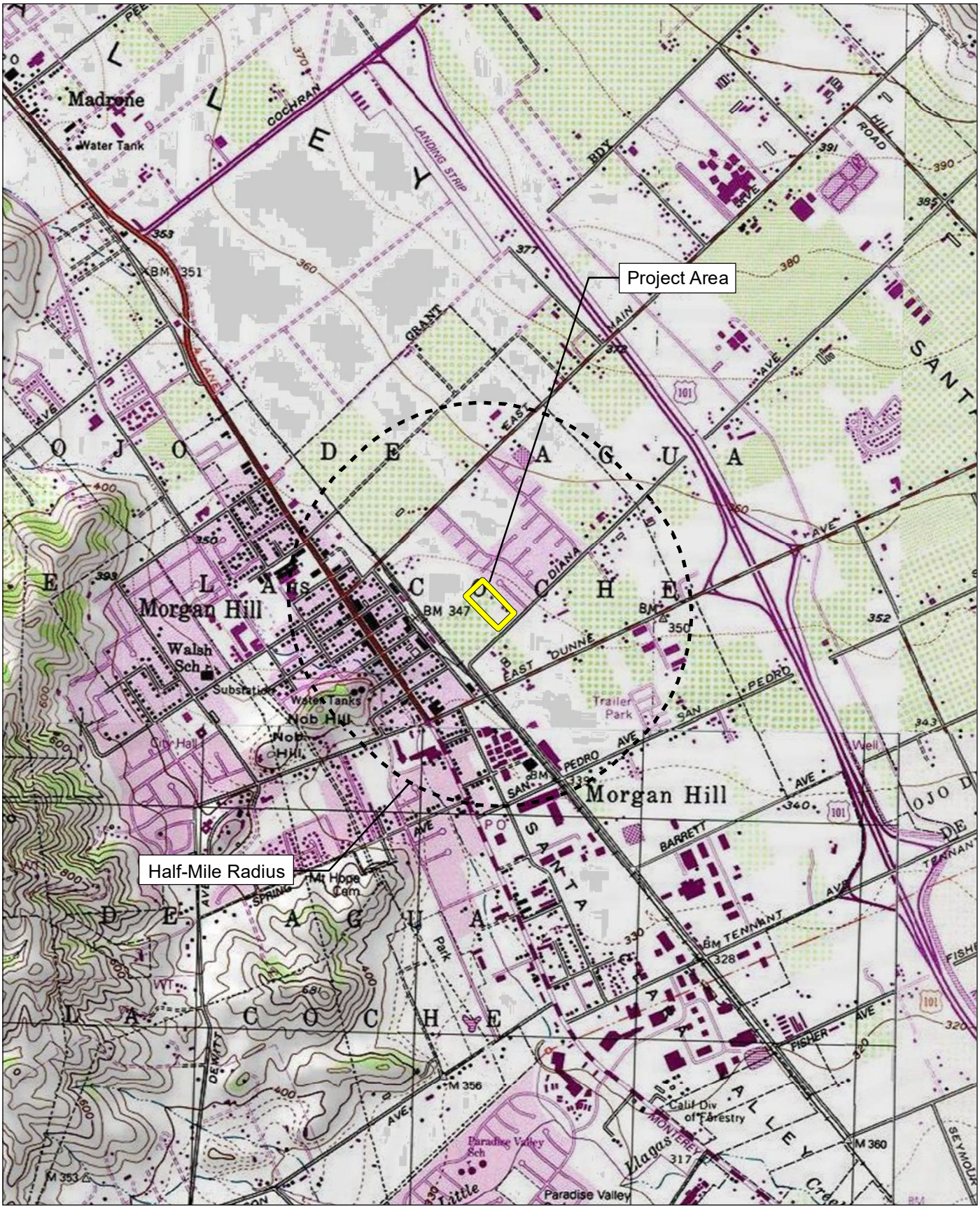

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FIRSTCARBONSOLUTIONS
FCS INTERNATIONAL, INC.

July 18, 2024

The Ohlone Indian Tribe
Desiree Vigil, THPO
259 Winwood Avenue
Pacifica, CA, 94044

Subject: Diana MH Townhomes Project

Dear Desiree Vigil:

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#A-537
San Bernardino, CA 92407

Sacramento Valley
2351 Sunset Boulevard
Suite 170-301
Rocklin, CA 95765

Utah
2901 Bluegrass Boulevard
Suite 200-62
Lehi, UT 84043

Colorado
5480 Valmont Road
Suite 200
Boulder, CO 80301

Connecticut
2 Corporate Drive
Suite 450
Shelton, CT 06484

New York
10 Monument Street
Deposit, NY 13754

56 Broome Corporate Parkway
Conklin, NY 13748

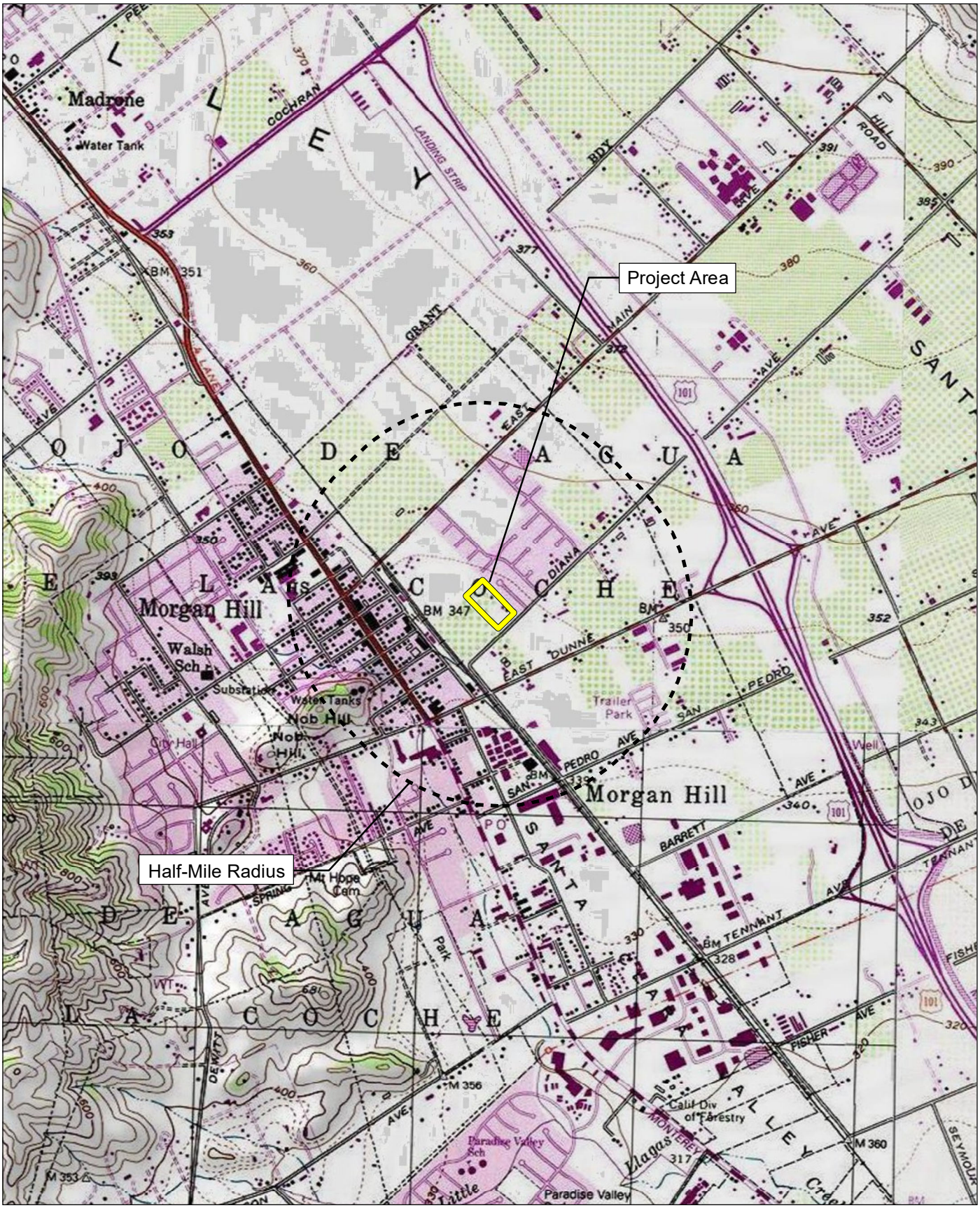
Sincerely,

Dana Douglas DePietro, PhD
Director of Cultural Resources
FirstCarbon Solutions
2999 Oak Road, Suite 250
Walnut Creek, CA 94597

Enclosed

Attachment A: Record Search Map

Attachment A:
Records Search Map



Source: USGS Morgan Hill & Mt. Madonna 7.5' Quadrangle / T09S,R03E,sec21,22,27,28

Project Site: USGS Morgan Hill 7.5' Quadrangle / T09S,R03E,sec21,28.

FIRSTCARBON SOLUTIONS™

Exhibit A
Record Search Map

FIRSTCARBONSOLUTIONS
FCS INTERNATIONAL, INC.

July 18, 2024

Wuksachi Indian Tribe/Eshom Valley Band
Kenneth Woodrow, Chairperson
1179 Rock Haven Ct.
Salinas, CA, 93906

Subject: Diana MH Townhomes Project

Dear Chairperson Woodrow:

FirstCarbon Solutions (FCS) is preparing an Phase I Cultural Resources Assessment for the Diana MH Townhomes Project in the City of Morgan Hill. As part of the environmental review process, we are conducting a cultural resources assessment.

The project site is located on 375 Diana Avenue, Morgan Hill, CA. Attached is a Record Search Map of the project site and a 0.5-mile radius.

As part of the cultural resources assessment, FCS conducted a Sacred Lands File (SLF) search and a California Historical Resource Information (CHRIS) search. The results of the SLF records search were positive. The CHRIS search found 12 historic resources within a 0.5-mile radius of the project site, none of which are in the project site itself. The CHRIS search found 38 reports within within a 0.5-mile radius of the project site, none of which are in the project site itself. The Native American Heritage Commission (NAHC) suggested you might be able to provide further information. If you have any additional information regarding potential historic or cultural resources in proximity or relation to the proposed project area, we would greatly appreciate your input.

Please note that this letter is a request for information pertaining to a cultural resources assessment and is not notification of a project under Senate Bill (SB) 18, Assembly Bill (AB) 52 or Section 106 of the National Historic Preservation Act.

Designated lead agencies under the California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA) are handling project notification and consultation requirements. Please feel free to contact me via email at ddepietro@fcs-intl.com. Thank you for your valuable assistance.

UNITED STATES

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T +1 714 508 4100
T 303 938 5500
F +1 714 508 4110
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Sincerely,

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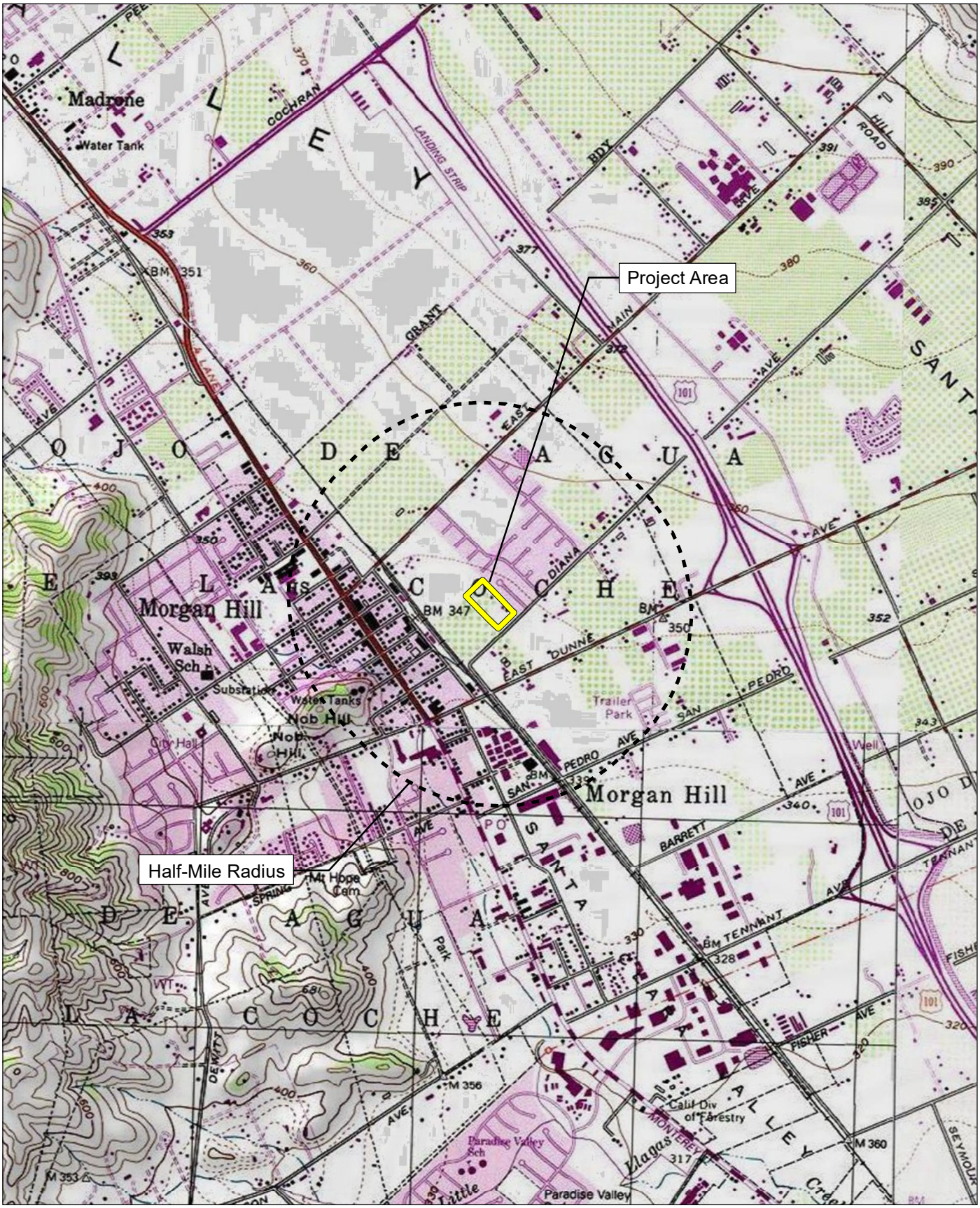
Enclosed

Attachment A: Record Search Map

Attachment A:
Records Search Map



Source: USGS Morgan Hill & Mt. Madonna 7.5' Quadrangle / T09S,R03E,sec21,22,27,28
Project Site: USGS Morgan Hill 7.5' Quadrangle / T09S,R03E,sec21,28.

FIRSTCARBON SOLUTIONS™

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Exhibit A
Record Search Map

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Appendix D:
Pedestrian Survey Photographs

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Photograph 1: Overview of the project site from the southern corner; facing north.

Photograph 2: Overview of the project site from the western corner; facing east.

Photograph 3: Overview of the project site from the northern corner; facing south.

Photograph 4: Overview of the project site from the eastern corner; facing west.

Photograph 5: Representative view of soil visibility and consistency (with bioturbation) across the site.

Photograph 6: Overview of the main residence, driveway, and landscaping elements; facing northwest.

Photograph 7: Detail view of the residence's southeast façade; facing northwest.

Photograph 8: Detail view of the residence's northwest and southwest façades; facing east.

Photograph 9: Detail view of the residence's northeast and northwest façades; facing south.

Photograph 10: Overview of above ground temporary storage buildings northeast of the residence; facing north.

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Appendix E:
California Department of Parks and Recreation Forms

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State of California ☐ The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary #
HRI #
Trinomial
NRHP Status Code

Other Listings
Review Code | Reviewer | Date

Page 1 **of** 6 ***Resource Name or #:** 375 Diana Avenue
P1. Other Identifier:

***P2. Location:** ☐ **Not for Publication** ☒ **Unrestricted**

***a. County** Santa Clara **and** (P2c, P2e, and P2b or P2d. Attach a Location Map as necessary.)

***b. USGS 7.5' Quad** Morgan Hill, California **Date** June 26, 2024 **T** 09S ; **R** 03E ; **of** **Sec** 21, 22, 27, 28 ; Mount Diablo **B.M.**

c. Address 375 Diana Avenue City Morgan Hill Zip 95037

d. UTM: (Give more than one for large and/or linear resources) Zone 10S , 620246 mE/ 4110137 mN

e. Other Locational Data: Assessor's Parcel Number: 726-12-001, 726-12-004. 33-feet above mean sea level

***P3a. Description:**

The subject property contains a single-family residence that, according to records obtained from the Santa Clara County Assessor's Office, was constructed in 1951. The residence's roughly rectangular massing is long and asymmetrical with porches situated along both the northwest and southeast facades. The building, which is in overall good condition, is accessed by single front and back doors adjacent to each porch, that serve as the home's primary entrances. The building has a concrete foundation, is clad in light grey stucco siding, and is topped with a low-pitched, cross-hipped roof with fairly large-sized eaves that wrap around the entire structure. A thick, rectangular, red-brick chimney is situated on the outside of the structure's southwest façade, where the roof's extended eaves have been built to enclose it. The roof is clad in red tile, and the rafters are fully enclosed. Windows on all four sides of the building vary considerably in size, shape, and placement, but are primarily aluminum-framed, rectangular-shaped, and range from fixed single-lite panes to double-hung sash-style window

***P3b. Resource Attributes:** HP02. Single Family Home

***P4.Resources Present:** ☒Building ☐Structure ☐Object ☐Site ☐District ☐Element of District ☐Other (Isolates, etc.)

P5a. Photograph or Drawing

P5b. Description of Photo: Overview of building; viewing northwest

***P6. Date Constructed/Age and Source:** ☒ Historic ☐ Prehistoric ☐ Both

***P7. Owner and Address:**
N/A

***P8. Recorded by:** Dana DePietro, Ph.D, 2999 Oak Road, Suite 250
Walnut Creek, California

***P9. Date Recorded:** July 25, 2024

***P10. Survey Type:** (Describe)
Reconnaissance survey

***P11. Report Citation:**
Adame, Natalie. 2024. Phase I Cultural Resources Assessment Diana Morgan Hill Townhomes Project for the City of Morgan Hill, Santa Clara County, California.

***Attachments:** ☐NONE ☒Location Map ☐Continuation Sheet ☒Building, Structure, and Object Record ☐Archaeological Record ☐District Record ☐Linear Feature Record ☐Milling Station Record ☐Rock Art Record ☐ Artifact Record ☐Photograph Record ☒ Other (List):

BUILDING, STRUCTURE, AND OBJECT RECORD

***Resource Name or #** (Assigned by recorder) 376 Diane Avenue ***NRHP Status Code**
Page 2 **of** 6

B1. Historic Name: 376 Diane Avenue
B2. Common Name: 376 Diane Avenue
B3. Original Use: Residential B4. Present Use: Residential
***B5. Architectural Style:** Rectangular-Massed
***B6. Construction History:** No original building permits or demolition permits associated with the subject building were available at the Santa Clara County Assessor's Office. Based on historic aerials photographs and newspaper articles, records dating to the original construction of the building all appear to date to the early to mid-1950's. Any alterations are unknown. (NETR 2024).

***B7. Moved?** ☒No ☐Yes ☐Unknown **Date:** N/A **Original Location:** N/A
***B8. Related Features:** N/A

B9a. Architect: Unknown b. Builder: Unknown
***B10. Significance: Theme** N/A **Area** Saratoga

Period of Significance N/A **Property Type** Residential **Applicable Criteria** N/A
(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)

B11. Additional Resource Attributes: HP2. Single-family property
***B12. References:**

- Phase I Cultural Resources Assessment "Diana Morgan Hill Townhomes Project". Authored by Natalie Adame. 2024.
- Historic Aerials. 2024. https://www.historicaerials.com/viewer. Accessed October 24, 2024
- Office of the Assessor, County of Santa Clara. 2024. https://www.sccassessor.org/index.php/all-situs-search?SFrom=all&SType=all&STab=address&addValue=&guid=2c47cfcc-4461-4b82-b73a-d20cf6dc8206. Accessed July 24, 2024.
- City of Morgan Hill Planning Department. 2024. https://www.morganhill.ca.gov/124/Applications-Permits-Fees. Accessed July 24, 2024.
- McAlester, Virginia Savage. 2015. A Field Guide to American Houses. Knopf Publishing Group.

B13. Remarks: N/A

(Sketch Map with north arrow required.)

***B14. Evaluator:** Dr. Dana DePietro, RPA
***Date of Evaluation:** July 25, 2024

(This space reserved for official comments.)

CRHR and Local Listing Eligibility

Criterion A: Event: The subject property is located in an area that, prior to and during the first half of the 1950s, was used almost exclusively for agricultural purposes. While the old growth oak trees and undiscernible activity appear to be taking place on site in the earliest historic aerial photographs dating to 1946, The first residence to appear in the location on historical topographic maps dates to 1956, five years after the existing building was constructed. The period of significance for the residential building is the early 1950s in the immediate post-war period. The property is part of an overall development and expansion of residential areas in and around Morgan Hill during the early 1950s to satisfy the enormous postwar demand for new housing. The postwar period saw a high rate of new household formation as these families had children, and the relatively small median family income drove the demand for new forms of affordable housing; mainly the postwar minimal and ranch-style house. The subject property is therefore part of that process of postwar expansion and growth, but does not meet Criterion A: Event, as they are examples of many similar, small-scale residential buildings built during this time in the greater Morgan Hill area.

Criterion 2: Person: The buildings' architectural history and chain of ownership were thoroughly researched at the San Mateo County Recorder's Office, building permits on file at the City of Morgan Hill planning department, and archival research including a search of the California Digital Newspaper Collection (CDNC). Unfortunately, no records dating to or prior to the 1950s were on file for the subject property at either the County Assessor's Office, or the City Planning department. Earliest available records show the buildings are associated with Hortense Gaitan and the Gaitan family. While Hortense had a distinguished 43-year career with the Morgan Hill Unified School District, the relative absence of any individuals associated with the buildings' use or function in published accounts of the History of Morgan Hill indicates that they did not achieve a level of historic importance for the property to be considered eligible under Criterion 2: Person.

Criterion 3: Architecture: the building, built by unknown architects, is a typical 1950's ranch-style home that incorporates Spanish Revival elements such as the red tile roof, domed windows, and stucco exterior. Both styles were commonplace during the early 1950's and the building appears to be a fairly standard, undistinguished example of both in terms of construction design and technique. The building is generally in fair condition, however some modifications to the windows, concrete pad, and to accommodate electrical charging have been made over the years to the original design. As such, the building does not appear eligible for listing on the CRHR under Criteria 3.

Criterion 4: Information Potential: is most often used to evaluate archaeological sites or buildings that employ unusual building techniques. There is no evidence that the building in question exhibits any unusual construction features, or have the ability to contribute significant information to the overall history of Morgan Hill.

Therefore, the residential structure located at 375 Diana Avenue does not appear to meet any of the criteria for historic and/or architectural significance required for listing on the CRHR or NRHP. The building also does not appear to possess sufficient artistic merit or historical association to meet any local standard for historical importance for listing on the City of Morgan Hill Historical Inventory. No analysis of integrity is required where the property fails to meet all four criteria, and the residential building should not be considered a significant historical resource under CEQA.

Overview of the residence's northwest & southwest façades; facing east

Overview of the residence's northeast & northwest façades; facing south

Overview of modern detached garage and above ground temporary storage buildings northeast of the residence; facing north.

State of California - The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

LOCATION MAP

Primary #
HRI#
Trinomial

Page 6 **of** 6 ***Resource Name or #** (Assigned by recorder) 375 Diana Avenue

***Map Name:** Morgan Hill, California ***Scale:** 1:24,000 ***Date of map:** 7/2024

Appendix F:
Cultural Resources Regulations and Evaluation Criteria

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CULTURAL RESOURCES REGULATIONS AND EVALUATION CRITERIA

Local, state, and federal government agencies have developed laws and regulations designed to protect significant cultural resources that may be affected by projects regulated, funded, or undertaken by the agency. Federal and State laws that govern the preservation of historic and archaeological resources of national, State, regional, and local significance include the National Environmental Policy Act (NEPA), the National Historic Preservation Act (NHPA), and CEQA. In addition, laws specific to work conducted on federal lands include the Archaeological Resources Protection Act (ARPA), the American Antiquities Act, and the Native American Graves Protection and Repatriation Act (NAGPRA).

The following federal or CEQA criteria were used to evaluate the significance of potential impacts on cultural resources for the proposed project. An impact would be considered significant if it would affect a resource eligible for listing in the National Register of Historic Places (NRHP) or the California Register of Historical Resources (CRHR) or if it is identified as a unique archaeological or Tribal Cultural Resource (TCR).

Federal-level Evaluations

Federal agencies are required to consider the effects of their actions on historic properties and afford the Advisory Council on Historic Preservation (ACHP) a reasonable opportunity to comment on such undertakings under Section 106 of the NHPA Section 106 (36 Code of Federal Regulations [CFR] 800). Additionally, federal agencies are responsible for initiating NHPA Section 106 review and completing the steps outlined in these regulations. They must determine whether NHPA Section 106 applies to a given project and, if so, initiate review in consultation with the State Historic Preservation Officer (SHPO) and/or Tribal Historic Preservation Officer (THPO). Federal agencies are also responsible for involving the public and other interested parties. Furthermore, NHPA Section 106 requires that any federal or federally assisted undertaking, or any undertaking requiring federal licensing or permitting, consider the effect of the action on historic properties listed in or eligible for listing in the NRHP. Under the Code of Federal Regulations (36 CFR Part 800.8), federal agencies are specifically encouraged to coordinate compliance with NHPA Section 106 and the NEPA process. The implementing regulations, “Protection of Historic Properties,” are found in 36 Code of Federal Regulations Part 800. Resource eligibility for listing on the NRHP is detailed in 36 Code of Federal Regulations Part 63, and the criteria for resource evaluation are found in 36 Code of Federal Regulations Part 60.4 (a-d).

The NHPA established the NRHP as the official federal list for cultural resources that are considered important for their historical significance at the local, State, or national level. To be determined eligible for listing in the NRHP, properties must meet specific criteria for historic significance and possess certain levels of integrity of form, location, and setting. The criteria for listing on the NRHP include—significance in American history, architecture, archaeology, engineering, and culture as present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association. In addition, a resource must meet one or all of these eligibility criteria:

a) Is associated with events that have made a significant contribution to the broad patterns of our history; or

b) Is associated with the lives of persons significant in our past; or

c) Embodies the distinctive characteristics of a type, period, or method of construction; represents the work of a master; possesses high artistic values, represents a significant and distinguishable entity whose components may lack individual distinction; or

d) Has yielded, or may be likely to yield, information important in prehistory or history.

Criterion D is usually reserved for archaeological resources. Eligible properties must meet at least one of the criteria and exhibit integrity, measured by the degree to which the resource retains its historical properties and conveys its historical character.

Criteria Considerations

Ordinarily cemeteries, birthplaces, graves of historical figures, properties owned by religious institutions or used for religious purposes, buildings that have been moved from their original locations, reconstructed historic buildings, properties primarily commemorative in nature, and properties that have achieved significance within the past 50 years shall not be considered eligible for the NRHP. However, such properties will qualify if they are integral parts of districts that do meet the criteria or if they fall within the following categories:

a) A religious property deriving primary significance from architectural or artistic distinction or historical importance.

b) A building or structure removed from its original location but which is primarily significant for architectural value, or which is the surviving structure most importantly associated with a historic person or event.

c) A birthplace or grave of a historical figure of outstanding importance if there is no appropriate site or building associated with his or her productive life.

d) A cemetery that derives its primary importance from graves of persons of transcendent importance, from age, from distinctive design features, or from association with historic events.

e) A reconstructed building when accurately executed in a suitable environment and presented in a dignified manner as part of a restoration master plan, and when no other building or structure with the same association has survived.

f) A property primarily commemorative in intent if design, age, tradition, or symbolic value has invested it with its own exceptional significance.

g) A property achieving significance within the past 50 years if it is of exceptional importance.

Thresholds of Significance

In consultation with the SHPO/THPO and other entities that attach religious and cultural significance to identified historic properties, the lead agency shall apply the criteria of adverse effect to historic

properties within the Area of Potential Effect (APE). The lead agency official shall consider the views of consulting parties and the public when considering adverse effects.

Federal Criteria of Adverse Effects

Under federal regulations, 36 Code of Federal Regulations Part 800.5, an adverse effect is found when an undertaking alters, directly or indirectly, any of the characteristics of a historic property that qualifies the property for inclusion in the NRHP in a manner that diminishes the integrity of the property's location, design, setting, materials, workmanship, feeling, or association. Consideration will be given to all qualifying characteristics of a historic property, including those that may have been identified subsequent to the original evaluation of the property's eligibility for listing in the NRHP. Adverse effects may include reasonably foreseeable effects caused by the undertaking that may occur later in time, be farther removed in distance, or be cumulative.

According to 36 Code of Federal Regulations Part 800.5, adverse effects on historic properties include, but are not limited to, those listed below:

- Physical destruction of or damage to all or part of the property.
- Alteration of a property, including restoration, rehabilitation, repair, maintenance, stabilization, hazardous material remediation, and provision of handicapped access, which is not consistent with the U.S. Secretary of the Interior's Standards for the Treatment of Historic Properties per 36 Code of Federal Regulations Part 68 and applicable guidelines.
- Removal of the property from its historic location.
- Change of the character of the property's use or of physical features within the property's setting that contribute to its historic significance.
- Introduction of visual, atmospheric, or audible elements that diminish the integrity of the property's significant historic features.
- Neglect of a property that causes its deterioration, except where such neglect and deterioration are recognized qualities of a property of religious and cultural significance to an Indian Tribe or Native Hawaiian organization.
- Transfer, lease, or sale of property out of federal ownership or control without adequate and legally enforceable restrictions or conditions to ensure long-term preservation of the property's historic significance.

If Adverse Effects are Found

If adverse effects are found, the agency official shall continue consultation as stipulated at 36 Code of Federal Regulations Part 800.6. The agency official shall consult with the SHPO/THPO and other consulting parties to develop alternatives to the undertaking that could avoid, minimize, or mitigate adverse effects to historic resources. According to 36 Code of Federal Regulations Part 800.14(d), if adverse effects cannot be avoided then standard treatments established by the ACHP may be used as a basis for Memorandum of Agreement (MOA).

According to 36 Code of Federal Regulations Part 800.11(e), the filing of an approved MOA, and appropriate documentation, concludes the NHPA Section 106 process. The MOA must be signed by all consulting parties and approved by the ACHP prior to construction activities. If no adverse effects are found and the SHPO/THPO or the ACHP do not object within 30 days of receipt, the agencies' responsibilities under NHPA Section 106 will be satisfied upon completion of report and documentation as stipulated in 36 Code of Federal Regulations Part 800.11. The information must be made available for public review upon request, excluding information covered by confidentiality provisions.

State-level Evaluation Processes

For the purposes of CEQA, cultural resources are broadly divided into the following four categories:

- **Historic Resources**: Historic resources typically refer to buildings, structures, and locations that maintain a connection or association with significant events, individuals, or architectural trends from California's past.
- **Archaeological Resources:** Archaeology is the study of artifacts and material culture with the aim of understanding human activities and cultures in the past. Archaeological resources may be associated with prehistoric indigenous cultures as well as historic periods.
- **Burial Sites and Cemeteries:** Burial sites and cemeteries are formal or informal locations where human remains have been interred.
- **Tribal Cultural Resources:** Tribal Cultural Resources include sites, features, places, or objects that are of cultural value to one or more California Native American Tribes.

More specifically, cultural resources may be understood as resources that have been formally recognized by a lead agency and/or are listed or determined eligible for listing on the CRHR (Public Resources Code [PRC] § 5024.1, Title 14 California Code of Regulations [CCR] § 4852). An archaeological site may be considered a historical resource if it is significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California per Public Resources Code Section 5020.1(j) or if it meets the criteria for listing on the CRHR per California Code of Regulations at Title 14 California Code of Regulations Section 4850.

The most recent amendments to the CEQA Guidelines direct lead agencies to first evaluate an archaeological site to determine whether it meets the criteria for listing in the CRHR. If an archaeological site is a historic resource, in that it is listed or eligible for listing in the CRHR, potential adverse impacts to it must be considered as stated in Public Resources Code Sections 21084.1 and 21083.2(l). If an archaeological site is considered not to be a historical resource but meets the definition of a "unique archaeological resource" as defined in Public Resources Code Section 21083.2, and it would be treated in accordance with the provisions of that section.

With reference to Public Resources Code Section 21083.2, each site found within a project area will be evaluated to determine whether it is a unique archaeological resource. A unique archaeological resource is described as an archaeological artifact, object, or site about which it can be clearly

demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets one or more of the following criteria:

1. Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information.
2. Has a special and particular quality such as being the oldest of its type or the best available example of its type.
3. Is directly associated with a scientifically recognized important prehistoric or historic event or person.

As used in this report, "non-unique archaeological resource" means an archaeological artifact, object, or site that does not meet the criteria for eligibility for listing on the CRHR, as noted in subdivision (g) of Public Resources Code Section 21083.2. A non-unique archaeological resource requires no further consideration other than simple recording of its components and features. Isolated artifacts are typically considered non-unique archaeological resources. Historic structures that have had their superstructures demolished or removed can be considered historic archaeological sites and are evaluated following the processes used for prehistoric sites. Finally, the California State Office of Historic Preservation (OHP) recognizes an age threshold of 45 years. Cultural resources built less than 45 years ago may qualify for consideration but only under the most extraordinary circumstances.

Title 14, California Code of Regulations, Chapter 3 Section 15064.5 is associated with determining the significance of impacts to archaeological and historical resources. Here, the term historical resource includes the following:

Title 14, California Code of Regulations, Chapter 3 Section 15064.5 is associated with determining the significance of impacts to archaeological and historical resources. Here, the term historical resource includes the following:

1. A resource listed in, or determined eligible by the State Historical Resources Commission, for listing in the CRHR (PRC § 5024.1; Title 14 CCR, § 4850 *et seq*.).
2. A resource included in a local register of historical resources, as defined in Public Resources Code Section 5020.1(k) or identified as significant in a historical resource survey meeting the Public Resources Code Section 5024.1(g) requirements, shall be presumed to be historically or culturally significant. Public agencies must treat any such resource as significant unless the preponderance of evidence demonstrates that it is not historically or culturally significant.
3. Any object, building, structure, site, area, place, record, or manuscript, which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered a historical resource, provided the lead agency's determination is supported by substantial evidence in light of the whole record. Generally, a resource shall be considered by the lead agency to be historically significant if the resource meets the

criteria for listing on the California Register of Historical Resources (PRC § 5024.1; Title 14 CCR § 4852) including the following:

A. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage.
B. Is associated with the lives of persons important in our past.
C. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values.
D. Has yielded, or may be likely to yield, information important in prehistory or history.

Typically, archaeological sites exhibiting significant features qualify for the CRHR under Criterion D because such features have information important to the prehistory of California. A lead agency may determine that a resource may be a historical resource as defined in Public Resources Code Sections 5020.1(j) or 5024.1 even if it is:

- Not listed in or determined to be eligible for listing in the CRHR.
- Not included in a local register of historical resources pursuant to Public Resources Code Section 5020.1(k).
- Identified in a historical resources survey per Public Resources Code Section 5024.1(g).

Thresholds of Significance

If a project will have a significant impact on a cultural resource, several steps must be taken to determine whether the cultural resource is a "unique archaeological resource" under CEQA. If analysis and/or testing determine that the resource is a unique archaeological resource and therefore subject to mitigation prior to development, a threshold of significance should be developed. The threshold of significance is a point where the qualities of significance are defined, and the resource is determined to be unique under CEQA. A significant impact is regarded as the physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of the resource will be reduced to a point that it no longer meets the significance criteria. Should analysis indicate that project development will destroy the unique elements of a resource; CEQA regulations require that the project implement appropriate and feasible mitigation measures. The preferred form of mitigation is to preserve the resource in place, in an undisturbed state. However, as that is not always possible or feasible, appropriate mitigation measures may include, but are not limited to:

1. Planning construction to avoid the resource.
2. Deeding conservation easements.
3. Capping the site prior to construction.

If a resource is determined to be a "non-unique archaeological resource," no further consideration of the resource by the lead agency is necessary.

Local Regulations

City of Morgan Hill 2035 General Plan

Cultural and Historic Resources

Goal HC-8 **Historic identity and cultural resources that are preserved for future generations**

Policy HC-8.1 Identify and Protect Resources. Identify and protect heritage resources from loss and destruction.

Policy HC-8.2 Historic Structures. Encourage the preservation and rehabilitation of the City's historic structures.

Policy HC-8.3 Demolition. Prior to approving demolition or alteration of historically significant buildings, evaluate alternatives, including structural preservation, relocation or other mitigation, and demonstrate that financing has been secured for replacement use.

Policy HC-8.4 Tribal Consultation. Consult with Native American Tribes that have ancestral ties to Morgan Hill regarding proposed new development projects and land use policy changes.

Policy HC-8.5 Mitigation. Require that if cultural resources, including Tribal, archaeological, or paleontological resources, are uncovered during grading or other on-site excavation activities, construction shall stop until appropriate mitigation is implemented.

Action HC-8.A Update Inventory. Review and update the inventory of historic resources.

Action HC-8.B Technical Assistance. Provide clear and easily accessible information to property owners and developers about design guidelines, financing options, assistance programs, and other technical issues involved in preserving and restoring historic buildings.

Tribal Cultural Resources and Tribal Consultation

Under CEQA, TCRs refer to sites, features, places, cultural landscapes, sacred places, and objects with cultural value to one or more California Native American Tribes. To be considered significant under CEQA, these resources must also be included or determined eligible for inclusion in the CRHR or a local register of historical resources or be determined significant pursuant to the criteria set forth in subdivision (c) of Section 5024.1 by the lead agency (PRC § 21074).

Cultural resource assessment reports will often include the results from an NAHC Sacred Lands File (SLF) search and outreach to Native American representatives identified as potentially having interest or information on the project area by the NAHC. The primary process for identifying and evaluating potential impacts to TCRs, however, is through government-to-government consultation between the CEQA lead agency and Native American Tribes pursuant to the following California statutes.

California Senate Bill 18

Senate Bill (SB) 18 states that prior to a local (city or county) government's adoption of any General Plan or Specific Plan, or amendment to General and Specific Plans, or a designation of open space land proposed on or after March 1, 2005, the city or county shall conduct consultations with California Native American Tribes for the purpose of preserving or mitigating impacts to Cultural Places. Consultations are for the purpose of preserving or mitigating impacts to places, features, and objects described in Sections 5097.9 and 5097.993 of the Public Resources Code that may be affected by the proposed adoption or amendment to a general or specific plan. According to the Government Code Section 65352.4, "consultation" is defined as:

> The meaningful and timely process of seeking, discussing, and carefully considering the views of others, in a manner that is cognizant of all parties' cultural values and, where feasible, seeking agreement. Consultation between government agencies and Native American Tribes shall be conducted in a way that is mutually respectful of each party's sovereignty. Consultation shall also recognize the Tribes' potential needs for confidentiality with respect to places that have traditional Tribal cultural significance.

SB 18 requires public notice to be sent to Tribes listed on the NAHC's SB 18 Tribal Consultation list within the geographical areas affected by the proposed changes. Tribes must respond to a local government notice within 90 days (unless a shorter time frame has been agreed upon by the Tribe), indicating whether or not they want to consult with the local government. Notice must be sent regardless of prior consultation, and it is suggested that local governments send written notice by certified mail with return receipt requested.

California Assembly Bill 52

Assembly Bill (AB) 52 was signed into law on September 25, 2014, and provides that any public or private "project with an effect that may cause a substantial adverse change in the significance of a TCRs is a project that may have a significant effect on the environment." TCRs include "sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American Tribe that are eligible for inclusion in the CRHR or included in a local register of historical resources." AB 52 formally added the category of Tribal Cultural Resources to CEQA and extends the consultation and confidentiality requirements to all projects rather than just projects subject to SB 18 as discussed above.

AB 52 requires a lead agency to notify and offer the opportunity for consultation to a California Native American Tribe that is traditionally and culturally affiliated with the geographic area of the proposed project if the Tribe has previously requested in writing to be informed by the lead agency of proposed projects in their geographic area. This notification must be sent prior to determining whether a negative declaration, mitigated negative declaration, or environmental impact report is required for a project. Tribes must respond to the notice within 45 days (unless a shorter time frame has been agreed upon by the Tribe), indicating whether or not they want to consult with the lead agency.

The bill makes the above provisions applicable to projects that have a notice of preparation or a notice of negative declaration filed or mitigated negative declaration on or after July 1, 2015. The parties must consult in good faith, and consultation is deemed concluded when either: (1) the parties agree to measures to mitigate or avoid a significant effect on a TCR (if such a significant effect exists); or (2) when a party concludes that mutual agreement cannot be reached. Mitigation measures agreed upon during consultation must be recommended for inclusion in the environmental document. AB 52 also identifies mitigation measures that may be considered to avoid significant impacts if there is no agreement on appropriate mitigation. Recommended measures include:

- Preservation in place.
- Protecting the cultural character and integrity of the resource.
- Protecting the traditional use of the resource.
- Protecting the confidentiality of the resource.
- Permanent conservation easements with culturally appropriate management criteria.

Appendix D

Geotechnical Feasibility Study

CORNERSTONE EARTH GROUP

TYPE OF SERVICES	Preliminary Geotechnical Investigation
PROJECT NAME	375 Diana Avenue Mixed-Use
LOCATION	375 Diana Avenue Morgan Hill, California
CLIENT	Valley Oak Partners, LLC
PROJECT NUMBER	384-21-3
DATE	January 9, 2025

CORNERSTONE EARTH GROUP

Type of Services	**Preliminary Geotechnical Investigation**
Project Name	**375 Diana Avenue Mixed-Use**
Location	**375 Diana Avenue** **Morgan Hill, California**
Client	**Valley Oak Partners, LLC**
Client Address	**734 The Alameda** **San Jose, California**
Project Number	**384-21-3**
Date	**January 9, 2025**

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CORNERSTONE EARTH GROUP

Type of Services	**Preliminary Geotechnical Investigation**
Project Name	**375 Diana Avenue Mixed-Use**
Location	**375 Diana Avenue** **Morgan Hill, California**

SECTION 1: INTRODUCTION

This preliminary geotechnical report was prepared for the sole use of Valley Oak Partners, LLC for the 375 Diana Avenue Mixed-Use project located in in Morgan Hill, California. The purpose of this study was to evaluate the existing subsurface conditions and develop an opinion regarding potential geotechnical concerns that could impact the proposed development. The preliminary geotechnical recommendations contained in this report are for your forward planning, cost estimating, and preliminary project design. The location of the site is shown on the Vicinity Map, Figure 1. For our use, we were provided with the following documents:

- A set of preliminary civil plans titled, "375 Diana Avenue," prepared by MH Engineering Co., dated July, 2024.
- A letter titled, "SR2024-0019/SD2024-0009/EA2024-0014: Diana – Valley Oak Partners," prepared by the City of Morgan Hill, dated October 8, 2024.

1.1 PROJECT DESCRIPTION

Based on our discussions with you and our review of the preliminary plans provided, we understand the project will include redeveloping the approximately 5¼-acre site for a new mixed-use development located at 375 Diana Avenue in Morgan Hill, California (APNs 726-12-001 and 726-12-004). From our review of the preliminary civil plans provided, the new development will include 16 buildings with 4 to 7 residential units each, for a total of 93 condominium units. The buildings will likely be of wood-frame construction. A fire lane is planned for the perimeter of the project site. Bioswales are planned for the south and west corners of the site. Appurtenant utilities, retaining walls, landscaping, and other improvements necessary for site development are also planned. Based on our review of the preliminary civil plans, we understand a 2-inch grind and overlay is currently planned for the section of Diana Avenue adjacent to the project site.

Structural loads are not currently known for the proposed structures; however, structural loads

are expected to be typical of similar type structures. Preliminary grading plans indicate grading will consist of cuts and fills on the order of 1 to 2 feet.

1.2 SCOPE OF SERVICES

Our scope of services was presented in our proposal dated October 31, 2024, and consisted of field and laboratory programs to evaluate physical and engineering properties of the subsurface soils, engineering analysis to prepare preliminary recommendations for site work and grading, building foundations, flatwork, retaining walls, and pavements, and preparation of this preliminary report. Brief descriptions of our exploration and laboratory programs are presented below.

1.3 EXPLORATION PROGRAM

Field exploration consisted of six borings drilled on November 18 and 20, 2024 with truck-mounted, hollow-stem auger drilling equipment. The borings were drilled to depths ranging from 20 feet to 45 feet. The borings were backfilled with cement grout in accordance with local requirements. The approximate locations of our exploratory borings are shown on the Site Plan, Figure 2. Details regarding our field program are included in Appendix A.

1.4 LABORATORY TESTING PROGRAM

In addition to visual classification of samples, the laboratory program focused on obtaining data for foundation design and seismic ground deformation estimates. Testing included moisture contents, dry densities, washed sieve analyses, and Plasticity Index tests. Details regarding our laboratory program are included in Appendix B.

1.5 ENVIRONMENTAL SERVICES

Environmental services were not requested for this project. If environmental concerns are determined to be present during future evaluations, the project environmental consultant should review our geotechnical recommendations for compatibility with the environmental concerns.

SECTION 2: REGIONAL SETTING

2.1 GEOLOGICAL SETTING

The site is located within the Santa Clara Valley, which is a broad alluvial plane between the Santa Cruz Mountains to the southwest and west, and the Diablo Range to the northeast. The San Andreas Fault system, including the Monte Vista-Shannon Fault, exists within the Santa Cruz Mountains and the Hayward and Calaveras Fault systems exist within the Diablo Range. Alluvial soil thicknesses in the area of the site range from about 100 to 300 feet (Rogers & Williams, 1974).

2.2 REGIONAL SEISMICITY

While seismologists cannot predict earthquake events, geologists from the U.S. Geological Survey have recently updated (in 2015) earlier estimates from their 2014 Uniform California Earthquake Rupture Forecast (Version 3; UCERF3) publication. The estimated probability of one or more magnitude 6.7 earthquakes (the size of the destructive 1994 Northridge earthquake) expected to occur somewhere in the San Francisco Bay Area has been revised (increased) to 72 percent for the period 2014 to 2043 (Aagaard et al., 2016). The faults in the region with the highest estimated probability of generating damaging earthquakes between 2014 and 2043 are the Hayward (33%), Calaveras (26%), and San Andreas Faults (22%). In this 30-year period, the probability of an earthquake of magnitude 6.7 or larger occurring is 22 percent along the San Andreas Fault and 33 percent for the Hayward Fault.

The faults considered capable of generating significant earthquakes are generally associated with the well-defined areas of crustal movement, which trend northwesterly. The table below presents the State-considered active faults within 25 kilometers of the site

Table 1: Approximate Fault Distances

Fault Name	Distance	
	(miles)	(kilometers)
Calaveras	3.5	5.6
Sargent	7.1	11.5
San Andreas (1906)	10.6	17.1
Hayward (Southeast Extension)	10.8	17.4
Monte Vista-Shannon	11.6	18.6
Zayante-Vergeles	13.4	21.6

A regional fault map is presented as Figure 3, illustrating the relative distances of the site to significant fault zones.

SECTION 3: SITE CONDITIONS

3.1 SITE BACKGROUND

We reviewed historic aerial imagery provided online by Historic Aerials (www.historicaerials.com). A summary of pertinent surface changes at and near the site is as follows:

- 1948: The project site appears to be occupied by orchards or agricultural fields. A house appears to be present in the approximate area of the current residence. Diana Avenue is present in its current location.

- 1953: The back northern corner of the site appears to have been graded. A detached structure appears behind the original residence.
- 1956: Additional grading appears to have occurred in the back corner.
- 1968: An additional structure appears to have been constructed behind the main residence.
- 1980: Orchards or agricultural fields appear to have been removed. Residential development to the east has been constructed.
- 1998: A second detached structure appears behind the original residence.
- 2014: Covered carport appears constructed attached to existing detached garage.
- 2016: Additional expansion of the garage and attached carport appears to have occurred. No pertinent changes were observed since this image.

3.1 SURFACE DESCRIPTION

The approximately 5¼-acre site is located at 375 Diana Avenue in Morgan Hill, California. The site is bounded by residential development to the north and east, Diana Avenue to the south, and Butterfield Boulevard to the west. The current Butterfield Flood Channel runs along the western edge of the project site.

The site is currently occupied by an existing single-story residence and open field. Several detached single-story structures and a covered metal carport were observed to the north of the main residence. Several mature trees were observed along the asphalt concrete driveway off Diana Avenue. The driveway appeared moderately to severely distressed with observed cracking and uplift. Based on visual observations, the existing pavements are in poor condition with significant cracking. The remainder of the site was undeveloped and appeared relatively level, except for a raised area along the northern edge of the site. Based on our review of the site history, we anticipate areas of the undeveloped field may consist of loose surficial soils due to past orchard or agricultural uses.

3.2 SUBSURFACE CONDITIONS

Below the ground surface, our explorations generally encountered native alluvial soils consisting of interbedded layers of clayey sands, well graded sands, fat clay with sand, and lean clays with varying amounts of sand. Below the ground surface, our exploratory boring EB-1 encountered hard fat clay with sand to a depth of about 3 feet. Below the fat clay or ground surface, our explorations generally encountered medium dense to dense clayey sand with gravel extending to depths ranging from 2½ to 4½ feet below existing grades. Below the clayey sand with gravel, our borings generally encountered interbedded layers of hard sandy lean clay and medium dense to very dense clayey sand with gravel down to a depth of 45 feet, the maximum depth explored. Our exploratory Borings EB-3, EB-5, and EB-6 also encountered a layer of medium

dense to very dense well graded sand and gravel with variable amounts of clay and sand between depths of about 2½ to 8 feet.

3.2.1 Plasticity/Expansion Potential

We performed one Plasticity Index (PI) test on a representative sample. Test results were used to evaluate expansion potential of surficial soils. The surficial PI tests resulted in a PI of 37, indicating high expansion potential to wetting and drying cycles.

3.2.2 In-Situ Moisture Contents

Laboratory testing indicated that the in-situ moisture contents within the upper 10 feet range from about 2 to 6 percent under the estimated laboratory optimum moisture.

3.3 GROUNDWATER

Groundwater was encountered in Borings EB-2 and EB-4 at depths of 29½ and 43 feet below existing grades, respectively. All measurements were taken at the time of drilling and may not represent the stabilized levels that can be higher than the initial levels encountered. Based on our review of data from other sites within the vicinity, we anticipate groundwater depth to vary seasonally from about 15 to 50 feet below the existing ground surface. In addition, historic high groundwater is mapped within the project vicinity by the California Geologic Survey (CGS, Morgan Hill 7.5-Minute Quadrangle, 2004) at a depth of approximately 20 feet.

Based on the above, we recommend a design groundwater depth of 20 feet. Fluctuations in groundwater levels occur due to many factors including seasonal fluctuation, underground drainage patterns, regional fluctuations, and other factors.

SECTION 4: GEOLOGIC HAZARDS

4.1 FAULT SURFACE RUPTURE

As discussed above several significant faults are located within 25 kilometers of the site. The site is not located within a State-designated Alquist Priolo Earthquake Fault Zone, or a Santa Clara County Fault Hazard Zone. As shown in Figure 3, no known surface expression of fault traces is thought to cross the site; therefore, fault surface rupture hazard is not a significant geologic hazard at the site.

4.2 ESTIMATED GROUND SHAKING

Moderate to severe (design-level) earthquakes can cause strong ground shaking, which is the case for most sites within the Bay Area. A peak ground acceleration $(PGA)_M$ was estimated for analysis using a value equal to F_{PGA} x PGA, as allowed in the 2022 edition of the California Building Code when an exception has been taken per ASCE 7-16, Section 11.4.8. For our preliminary analyses we used a PGA_M of 0.74g.

As mentioned, for our preliminary analyses we have assumed the exception for Site Class D will be taken per ASCE 7-16 Section 11.4.8. If the exception will not be taken, per ASCE 7-16, a Ground Motion Hazard Analysis per Section 21.2 of ASCE 7-16 should be performed during the design-level geotechnical investigation.

4.3 LIQUEFACTION POTENTIAL

The site is not located within a State-designated Liquefaction Hazard Zone (CGS, Morgan Hill Quadrangle, 2004) or a Santa Clara County Liquefaction Hazard Zone (Santa Clara County, 2003). However, we screened the site for liquefaction during our site exploration by retrieving samples from the site, performing visual classification on sampled materials, and performing various tests to further classify the soil properties.

During strong seismic shaking, cyclically induced stresses can cause increased pore pressures within the soil matrix that can result in liquefaction triggering, soil softening due to shear stress loss, potentially significant ground deformation due to settlement within sandy liquefiable layers as pore pressures dissipate, and/or flow failures in sloping ground or where open faces are present (lateral spreading) (NCEER 1998). Limited field and laboratory data is available regarding ground deformation due to settlement; however, in clean sand layers settlement on the order of 2 to 3 percent of the liquefied layer thickness can occur. Soils most susceptible to liquefaction are loose, non-cohesive soils that are saturated and are bedded with poor drainage, such as sand and silt layers bedded with a cohesive cap.

As discussed in the “Subsurface” section above, we primarily encountered stiff cohesive and medium dense to very dense granular soils. In addition, the medium dense granular soils encountered consisted of clayey sands with sufficient fines to reduce the potential for liquefaction. Based on the above, our screening of the site for liquefaction indicates a low potential for liquefaction. The potential for liquefaction should also be further evaluated as part of the design-level geotechnical investigation.

4.4 LATERAL SPREADING

Lateral spreading is horizontal/lateral ground movement of relatively flat-lying soil deposits towards a free face such as an excavation, channel, or open body of water; typically, lateral spreading is associated with liquefaction of one or more subsurface layers near the bottom of the exposed slope. As failure tends to propagate as block failures, it is difficult to analyze and estimate where the first tension crack will form.

An unlined drainage channel runs along the western edge of the project site (parallel to Butterfield Boulevard). The channel bottom is at approximately Elevation 342 to 343 feet based on Google Earth. Therefore, the channel bottom is approximately 7 to 8 feet deep relative to existing site grades along the channel edge. On a preliminary basis, in our opinion, based on the estimated channel depth, historic high groundwater depths, and low potential for liquefaction, the potential for lateral spreading to impact the project appears low.

4.5 SEISMIC SETTLEMENT/UNSATURATED SAND SHAKING

Loose unsaturated sandy soils can settle during strong seismic shaking. We evaluated the potential for seismic compaction of the sand based on the work by Tokimatsu and Seed (1987). Our preliminary analyses indicate that the proposed buildings could experience on the order of ½-inch to ¾-inch of movement after strong seismic shaking. The potential for unsaturated sand shaking should be further evaluated during the design-level geotechnical investigation.

4.6 PRELIMINARY SLOPE STABILITY

4.6.1 General

As discussed in the project description and surface conditions sections of this report, the proposed development is adjacent to the Butterfield Flood Channel with proposed bioretention facilities adjacent to this channel. As requested by the City of Morgan Hill in their October 8, 2024 letter, we performed a preliminary slope stability analysis to evaluate the static and seismic stability of the proposed bioretention facilities. We used the cross-sections provided in the Prelminary Plans by MH Engineering and the subsurface conditions encountered in Borings EB-5 and EB-6 in the location of the bioretention facilities to perform our preliminary analysis. Factors of safety computed via slope stability analysis are primarily dependent on the geometric model used and the strength parameters of the various components of the cross-section. A brief description of our slope stability method is presented below.

4.6.2 Stability Method of Analysis

To evaluate the stability of the proposed bioretention facilities adjacent to the channel, we performed static and seismic slope stability analyses for the adjacent creek sections near Borings EB-5 and EB-6. Boring EB-5 is located within the proposed SCM-1 and Boring EB-6 is located within the proposed SCM-2 and SCM-3. Results for both cases are discussed below and are presented in Appendix C.

The stability of a slope is influenced by many factors including but not limited to the geologic structure and composition, inclination, height of slope, groundwater, surcharges, and climatic factors such as rainfall and irrigation. In geotechnical engineering, “stability” is expressed as a ratio of resisting moments and forces divided by driving moments and forces termed the factor of safety (FS). Factors of safety can be calculated for static and seismic conditions. In performing the slope stability analyses, we followed the guidelines set forth by California Geologic Survey in Special Publication 117A (2008). Computer assisted slope stability analysis was performed using the computer program SLIDE Version 9.008, which uses circular and block modes of failure. The program consisted of inputting slope geometry, the different soil layers or geologic layers, unit weights, groundwater, and strength parameters. For our slope angles, soil and bedrock layers, soil and bedrock properties, assumptions were interpreted based on our review of our boring information, laboratory testing, site reconnaissance, site topography, and our experiences.

SLIDE uses a “pseudo-static” method of analysis, which models the effects of transient or pulsating earthquake loading on a potential slide mass by using an “equivalent” static horizontal acceleration acting on the mass of the potential slide. The ground motion parameter used in a pseudo-static analysis is referred to as the seismic coefficient “k”. CGS (2008) has published recommendations for the selection of the “k” value in a publication titled, “Guidelines for Evaluation and Mitigation of Seismic Hazards in California, Special Publication 117A.” The site is located adjacent to the San Andreas Fault and strong ground shaking can be expected during a seismic event near the site. In accordance with the CGS Guidelines, we have performed our pseudo-static analysis using simplified design procedures in accordance with Stewart and others (2003) to develop a “screen analysis procedure,” based on a pseudo-static approach that accounts for the anticipated seismicity at the site and allows for different levels of acceptable displacements. For this site, we determined a “k” value of 0.254g for our analysis. This was obtained from limiting displacements to a 15 cm threshold and a maximum horizontal acceleration at the site for a soft rock condition and a 475-year return period (10% probability of exceedance in 50 years) value of our peak horizontal ground acceleration value of 0.6505g, which was obtained from the USGS Unified Hazard Tool website (earthquake.usgs.gov/hazards/interactive).

4.6.3 Soil Properties

For our preliminary stability analysis, we utilized different soil properties based on the materials encountered in Borings EB-5 (SCM-1) and EB-6 (SCM-2 and SCM-3). The soil properties used in our preliminary slope stability analysis are shown in Table 5 below. A discussion of our rationale for selection of the soil properties is presented in the following paragraphs.

For the lean clay soils, we used an internal angle of friction of $\phi = 0°$ and a cohesion of C = 1000 psf. The selection of this internal angle of friction was based on engineering judgment considering the cohesive nature of the clayey soils. The selection of this cohesion value was based on the unconsolidated-undrained shear strengths obtained from pocket penetrometer testing and engineering judgement considering the cohesive nature of the clayey soils.

For the clayey sand and well graded gravel and sandy soils, we used internal angles of friction varying from $\phi = 32°$ to $\phi = 42°$ and C = 50 to 100 psf. The selection of these internal angles of friction were based on SPT “N” values obtained from our borings and correlations by Peck and Meyerhoff. The selection of cohesive values was based on engineering judgement considering the cohesive nature of the clayey sand soils.

Unit weights for the soil layers were determined from laboratory testing results. Average unit weights were taken to represent an approximate unit weight for each layer since the materials vary within each soil layer.

Table 3: Summary of Soil Strength Properties

Material Description	Total Unit Weight (pcf)	Cohesion (psf)	Friction Angle (degrees)
Clayey Sand (SC)	106 to 138	50 to 100	32 to 36
Well Graded Gravel with Clay and Sand (GW-GC)	118	50	42
Well Graded Sand with Clay and Gravel (SW-SC)	128	50	35
Lean Clay (CL)	128	1000	0

4.6.4 Groundwater

As discussed in the subsurface section above, groundwater was encountered in Borings EB-2 and EB-4 at depths of 29½ and 43 feet; however, we recommend a design groundwater depth of 20 feet. Therefore, we modeled the groundwater level at a depth of 20 feet below existing grades. In addition, we looked at temporarily higher groundwater levels for the 95 year and 100 year flood water levels provided on the preliminary plans to evaluate the potential impact of water due to the proximity of the bioretention facilities to the channel. Based on our review of the plans, we used groundwater elevations of about 350 feet for the 100 year flood case and about 343 feet for the 95 year flood case.

4.6.5 Surficial Loads

As discussed, we understand the proposed buildings will likely be of wood-frame construction and will likely be two to three stories tall. As structural loads have not yet been provided, we have estimated the buildings to have an approximate 500 pounds per square foot (psf) areal pressure at the base of building. For our stability model, we have assumed 500 psf areal pressure for the proposed buildings.

4.6.6 Static Analysis

Using the subsurface profile based on the materials encountered in Boring EB-5 for SCM-1 and Boring EB-6 for SCM-2 and -3, we performed static slope stability analysis using the computer program SLIDE. The objective of our preliminary analysis was to evaluate the potential failure of the existing slope and whether the slope would yield factors of safety greater than 1.5 under static conditions implying that the existing slope is relatively stable under static conditions from a global stability viewpoint. The Bishop Simplified method of analyses was used in our static slope stability analyses to evaluate the global stability of the slopes using potential circular type failure surfaces. In this method, the computer program was allowed to search for the circular failure surface corresponding to the lowest factor of safety for the slope.

The results of our static analysis for the global stability case of the existing channel near SCM-1 and SCM-2/-3 indicated factors of safety of 2.396 and 2.733, respectively, which are greater than 1.5, implying stability under static conditions. In addition, we introduced a piezometric line

at an elevation of approximately 350 feet to model a fully saturated slope under the 100 year flood condition which indicated factors of safety of 2.103 and 1.602, respectively, which are greater than 1.5, implying stability under static conditions. Copies of the stability outputs, illustrating the subsurface and surface geometry, and low factor-of-safety surfaces, are attached in Appendix C.

4.6.7 Seismic Analysis

We performed seismic slope stability analysis using a "pseudo-static method analysis" for the existing creek banks near SCM-1 and SCM-2/-3. As previously discussed, a factor of safety greater than 1.0 would imply relative stability from a global stability viewpoint and limited deformation under seismic conditions. The results from our SLIDE model analysis show the factors of safety with respect to the global stability of the existing slopes near SCM-1 and SCM-2/-3 are 1.490 and 1.518, respectively, implying relative stability. In addition, we introduced a piezometric line at an elevation of approximately 350 feet to model a fully saturated slope under the 100 year flood condition which indicated factors of safety of 1.187 and 0.898, respectively. As noted, the factor of safety for SCM-2/-3 indicated potential slope instability or localized deformation during a significant seismic event and significant flood. However, when a piezometric line at elevation 343 feet under the 95 year flood condition indicated a factor of safety of 1.186 for SCM-2/-3, implying relative stability. On a preliminary basis, and in our opinion, the chance of both a 100 year flood and significant seismic event occurring simultaneously is appears low. However, we recommend this be further evaluated during the design-level geotechnical investigation, including additional laboratory testing to confirm soil properties. Copies of the preliminary seismic stability analysis outputs are attached in Appendix C.

4.7 TSUNAMI/SEICHE

The terms tsunami or seiche are described as ocean waves or similar waves usually created by undersea fault movement or by a coastal or submerged landslide. Tsunamis may be generated at great distance from shore (far field events) or nearby (near field events). Waves are formed, as the displaced water moves to regain equilibrium, and radiates across the open water, similar to ripples from a rock being thrown into a pond. When the waveform reaches the coastline, it quickly raises the water level, with water velocities as high as 15 to 20 knots. The water mass, as well as vessels, vehicles, or other objects in its path create tremendous forces as they impact coastal structures.

Tsunamis have affected the coastline along the Pacific Northwest during historic times. The Fort Point tide gauge in San Francisco recorded approximately 21 tsunamis between 1854 and 1964. The 1964 Alaska earthquake generated a recorded wave height of 7.4 feet and drowned eleven people in Crescent City, California. For the case of a far-field event, the Bay area would have hours of warning; for a near field event, there may be only a few minutes of warning, if any.

A tsunami or seiche originating in the Pacific Ocean would lose much of its energy passing through San Francisco Bay. Based on the mapping of tsunami inundation potential for the San

Francisco Bay Area by CGS (conservation.ca.gov/cgs/tsunami/maps), areas most likely to be inundated are marshlands, tidal flats, and former bay margin lands that are now artificially filled, but are still at or below sea level, and are generally within 1½ miles of the shoreline. The site is approximately 30 miles inland from the San Francisco Bay shoreline and is approximately 350 to 354 feet above mean sea level (Google Earth, WGS84). In addition, the site is mapped by the State of California as being outside a tsunami hazard area (CGS, 2021). Therefore, the potential for inundation due to tsunami or seiche is considered low.

4.8 FLOODING

Based on our internet search of the Federal Emergency Management Agency (FEMA) flood map public database, the site is located within Zone X, described as "Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths less than 1 foot or with drainage areas less than 1 square miles; and areas protected by levees from 1% annual chance flood." We recommend the project civil engineer be retained to confirm this information and verify the base flood elevation, if appropriate.

The Department of Water Resources (DWR), Division of Safety of Dams (DSOD) compiled a database of Dam Failure Inundation Hazard Maps (DSOD, 2015). The generalized hazard maps were prepared by dam owners as required by the State Office of Emergency Services; they are intended for planning purposes only. Based on our review of these maps, the site is located within a dam failure inundation area for the Leroy Anderson Dam.

SECTION 5: CONCLUSIONS

5.1 SUMMARY

From a geotechnical viewpoint, the project is feasible provided the concerns listed below are addressed in the project design. The preliminary recommendations that follow are intended for conceptual planning and project design. A design-level geotechnical investigation should be performed once site development plans are finalized. The design-level findings will be used to confirm the preliminary recommendations and develop detailed recommendations for design and construction. Descriptions of each concern with brief outlines of our recommendations follow the listed concerns.

- Strong ground shaking
- Presence of highly expansive soils
- Redevelopment considerations and undocumented fill
- Potential for slope instability

5.1.1 Strong Ground Shaking

Strong ground shaking is expected at this site, as with most sites in the Bay Area, during a major earthquake in the area. To mitigate the effects of strong ground shaking, all planned

structures should be designed in accordance with the recommendations in a final design-level geotechnical report, and the most recent California Building Code.

5.1.2 Presence of Highly Expansive Soils

Highly expansive surficial soils were encountered at the project site. Expansive soils can undergo significant volume change with changes in moisture content. They shrink and harden when dried and expand and soften when wetted. To reduce the potential for damage to the planned structures, slabs-on-grade should have sufficient reinforcement and be supported on a layer of non-expansive fill; footings should extend below the zone of seasonal moisture fluctuation. In addition, it is important to limit moisture changes in the surficial soils by using positive drainage away from buildings as well as limiting landscaping watering.

5.1.3 Redevelopment Considerations and Undocumented Fill

As discussed, the site is currently occupied by existing buildings and appurtenant flatwork, site fixtures, and landscaping. We understand that the existing improvements will be demolished for the construction of the proposed development. Potential issues that are often associated with redeveloping sites include demolition of existing improvements, abandonment of existing utilities, and undocumented fills. While undocumented fills were not encountered in our explorations, we anticipate undocumented fill associated with the prior site development is present at the site. On a preliminary basis and for your forward planning, we recommend all undocumented fills be removed and replaced as compacted engineered fill within building areas and to a lateral distance of at least 5 feet beyond the building footprint or to a lateral distance equal to fill depth below the perimeter footing, whichever is greater. The presence of undocumented fill should be further evaluated during the design-level geotechnical investigation.

5.1.4 Potential for Slope Instability

As previously discussed, the Butterfield Flood Channel is located adjacent to the western edge of the project site. Based on our preliminary slope stability analysis, the project will be stable under static conditions at the locations of the proposed bioretention facilities SCM-1 and SCM-2/-3 located adjacent to the channel. However, our preliminary analysis indicates that further slope stability analysis and/or mitigation may be required under both seismic and 100 year flood conditions. Additional recommendations are provided in the “Preliminary Slope Stability Analysis” section of this report.

5.2 DESIGN-LEVEL GEOTECHNICAL INVESTIGATION

The preliminary recommendations contained in this preliminary report were based on limited site development information and limited exploration. As site conditions may vary significantly between the small-diameter borings performed during this investigation, we also recommend that we be retained to 1) perform a design-level geotechnical investigation, once detailed site development plans are available; 2) to review the geotechnical aspects of the project structural, civil, and landscape plans and specifications, allowing sufficient time to provide the design team

with any comments prior to issuing the plans for construction; and 3) be present to provide geotechnical observation and testing during earthwork and foundation construction.

SECTION 6: EARTHWORK

6.1 ANTICIPATED EARTHWORK MEASURES

On a preliminary basis, we recommend that any existing foundations, debris, slabs, and/or abandoned underground utilities be removed entirely and the resulting excavations backfilled with engineered fill. Additionally, any native soils disturbed during demolition of existing improvements should also be removed and replaced as engineered fill. We anticipate undocumented fill associated with prior site development may be present at the site. The depth and lateral extent of undocumented fills should be further evaluated during the design-level investigation.

Based on review of the samples collected from our borings, it appears that the fill may be reused as general fill and should be placed in lifts and compacted in accordance with the compaction notes below. Imported fill material for use as general fill should have a Plasticity Index of 20 or less and have sufficient fines to prevent sloughing or caving during construction. All fills and scarified surface soils in areas to receive fill, slabs-on-grade, subgrade, and trench backfill, should be compacted to 90 percent relative compaction as determined by ASTM Test Designative D-1557 (latest edition), and be at least 1 percent above optimum moisture. Expansive soils should be compacted between 87 and 92 percent relative compaction as determined by ASTM Test Designation D-1557 (latest edition), and be at least 3 percent above optimum moisture. Aggregate materials should be compacted to at least 95 percent in pavement areas, and 90 percent in flatwork areas.

Surface water runoff should not be allowed to pond adjacent to building foundations, slabs-on-grade, or pavements. Hardscape surfaces should slope at least 2 percent towards suitable discharge facilities; landscape areas should slope at least 3 percent away from buildings. Biotreatment basins should be kept at least 10 feet away from buildings, and—where possible—at least 3 feet from pavements and flatwork. Since the near-surface soils are highly expansive, we recommend greatly reducing the amount of surface water infiltrating these soils near foundations and exterior slabs-on-grade.

SECTION 7: 2019 CBC SEISMIC DESIGN CRITERIA

7.1 SEISMIC DESIGN CRITERIA

We understand that the project structural design will be based on the 2022 California Building Code (CBC), which provides criteria for the seismic design of buildings in Chapter 16. The “Seismic Coefficients” used to design buildings are established based on a series of tables and figures addressing different site factors, including the soil profile in the upper 100 feet below grade and mapped spectral acceleration parameters based on distance to the controlling seismic source/fault system.

Our explorations generally encountered interbedded clay and sand deposits to a depth of 45 feet, the maximum depth explored. Based on our borings and review of local geology, the site is underlain by deep alluvial soils with typical SPT "N" values between 15 and 50 blows per foot. Therefore, on a preliminary basis, we have classified the site as Soil Classification D. Because we used site specific data from our explorations and laboratory testing, the site class should be considered as "determined" for the purposes of estimating the seismic design parameters from the code outlined below. The mapped spectral acceleration parameters S_s and S_1 were calculated using the web-based program ATC Hazards by Locations, located at https://hazards.atcouncil.org/, based on the site coordinates presented below and the site classification. ***Recommended values in Table 4 may only be used for design if in the judgement of the project structural engineer an exception can be taken per ASCE 7-16 Section 11.4.8., provided the value of the parameter S_{M1} determined by Eq. (11.4-2) is increased by 50% for all applications of S_{M1}.*** The table below lists the various factors used to determine the seismic coefficients and other parameters. We recommend the site classification be confirmed during the design-level geotechnical investigation.

Table 4: CBC Site Categorization and Site Coefficients

Classification/Coefficient	Design Value
Site Class	D
Site Latitude	37.129922°
Site Longitude	-121.646854°
0.2-second Period Mapped Spectral Acceleration[1], S_S	1.622g
1-second Period Mapped Spectral Acceleration[1], S_1	0.6g
Short-Period Site Coefficient – Fa	1.0
Long-Period Site Coefficient – Fv	[1]Null
0.2-second Period, Maximum Considered Earthquake Spectral Response Acceleration Adjusted for Site Effects - S_{MS}	1.622g
1-second Period, Maximum Considered Earthquake Spectral Response Acceleration Adjusted for Site Effects – S_{M1}	[1]Null
0.2-second Period, Design Earthquake Spectral Response Acceleration – S_{DS}	1.081g
1-second Period, Design Earthquake Spectral Response Acceleration – S_{D1}	[1]Null
Site Amplification Factor at PGA – F_{PGA}	1.1
Site Modified Peak Ground Acceleration – PGA_M	0.744g

1 – Per ASCE 7-16 Section 11.4.8

SECTION 8: FOUNDATIONS

8.1 SUMMARY OF RECOMMENDATIONS

On a preliminary basis, the proposed structures may be supported on shallow foundations provided the recommendations in the "Anticipated Earthwork" section and the sections below are followed.

8.2 SHALLOW FOUNDATIONS

8.2.1 Spread Footings

On a preliminary basis, the planned structures may be supported on spread footings, which should bear on natural, undisturbed soil or engineered fill, and extend at least 24 inches below the lowest adjacent grade. Lowest adjacent grade is defined as the deeper of the following: 1) bottom of the adjacent interior slab-on-grade, or 2) finished exterior grade, excluding landscaping topsoil. The deeper footing embedment is due to the presence of moderately to highly expansive soils and is intended to embed the footing below the zone of significant seasonal moisture fluctuation, reducing the potential for differential movement.

On a preliminary basis, footings should be designed for allowable bearing pressures of 2,000 psf for dead loads, 3,000 psf for combined dead plus live loads, and 4,000 psf for all loads including wind and seismic. These pressures are based on factors of safety of 3.0, 2.0, and 1.5 applied to the ultimate bearing pressure for dead, dead plus live, and all loads, respectively. These pressures are net values; the weight of the footing may be neglected for the portion of the footing extending below grade (typically, the full footing depth). Top and bottom mats of reinforcing steel should be included in continuous footings to help span irregularities and differential settlement.

8.2.2 Post-Tensioned Mat Foundations

As an alternative to conventional spread footings, on a preliminary basis, the planned at-grade residential structures may be supported on post-tensioned (PT) concrete mat foundations designed in accordance with the procedures developed by the Post-Tensioning Institute (latest edition) and the 2022 California Building Code.

To reduce potential differential movement, on a preliminary basis, mats should be designed for maximum average bearing pressure of 500 psf for dead plus live loads; at column or wall loading, the maximum localized allowable bearing pressure should be limited to about 2,500 psf. When evaluating wind and seismic conditions, allowable bearing pressures may be increased by one-third. Additional reinforcing steel should be required to help span irregularities and differential settlement.

On a preliminary basis, we estimate differential settlements of approximately ½-inch to ¾ inch across a typical mat foundation. Final settlement and foundation deflection criteria should be determined during the design-level geotechnical investigation.

SECTION 9: CONCRETE SLABS AND PEDESTRIAN PAVEMENTS

9.1 INTERIOR SLABS-ON-GRADE

Due to the moderate to high expansion potential of the surficial soils, on a preliminary basis and for your forward planning and cost estimating purposes, we recommend that conventional slabs-on-grade used in conjunction with shallow footings be supported on at least 24 inches of non-

expansive fill (NEF) to reduce the potential for slab damage due to soil heave. If moisture-sensitive floor coverings are planned, the recommendations in the "Interior Slabs Moisture Protection Considerations" section below may be incorporated in the project design if desired. The plasticity of the surficial soils and additional earthwork recommendations for the preparation of subgrade and NEF should be further evaluated and discussed in the design-level investigation.

The structural engineer should determine the appropriate slab reinforcement for the loading requirements and considering the expansion potential of the underlying soils. For unreinforced concrete slabs, ACI 302.1R recommends limiting control joint spacing to 24 to 36 times the slab thickness in each direction, or a maximum of 18 feet.

9.2 INTERIOR SLABS MOISTURE PROTECTION CONSIDERATIONS

The following general guidelines for concrete slab-on-grade construction where floor coverings are planned are presented for the consideration by the developer, design team, and contractor. These guidelines are based on information obtained from a variety of sources, including the American Concrete Institute (ACI) and are intended to reduce the potential for moisture-related problems causing floor covering failures, and may be supplemented as necessary based on project-specific requirements. The application of these guidelines or not will not affect the geotechnical aspects of the slab-on-grade performance.

- Place a minimum 15-mil vapor retarder conforming to ASTM E 1745, Class C requirements or better directly below the concrete slab; the vapor retarder should extend to the slab edges and be sealed at all seams and penetrations in accordance with manufacturer's recommendations and ASTM E 1643 requirements. A 4-inch-thick capillary break, consisting of crushed rock should be placed below the vapor retarder and consolidated in place with vibratory equipment. The mineral aggregate shall be of such size that the percentage composition by dry weight as determined by laboratory sieves will conform to the following gradation:

Sieve Size	Percentage Passing Sieve
1"	100
¾"	90 – 100
No. 4	0 – 10
No. 200	0 – 5

  The capillary break rock may be considered as the upper 4 inches of the non-expansive fill previously recommended.

- The concrete water:cement ratio should be 0.45 or less. Mid-range plasticizers may be used to increase concrete workability and facilitate pumping and placement.

- Water should not be added after initial batching unless the slump is less than specified and/or the resulting water:cement ratio will not exceed 0.45.

- Polishing the concrete surface with metal trowels is not recommended.
- Where floor coverings are planned, all concrete surfaces should be properly cured.
- Water vapor emission levels and concrete pH should be determined in accordance with ASTM F1869-98 and F710-98 requirements and evaluated against the floor covering manufacturer's requirements prior to installation.

9.3 EXTERIOR FLATWORK

On a preliminary basis and for your forward planning, exterior concrete flatwork subject to pedestrian and/or occasional light pick up loading should be at least 4 inches thick and supported on at least 12 inches of Class 2 aggregate base overlying prepared subgrade.

SECTION 10: VEHICULAR PAVEMENTS

10.1 ASPHALT CONCRETE

The following asphalt concrete pavement recommendations tabulated below are based on the Procedure 608 of the Caltrans Highway Design Manual, estimated traffic indices for various pavement-loading conditions, and on an assumed design R-value of 5. The design R-value was chosen based on engineering judgement considering the variable and expansive soil conditions. Additionally, due to the presence of moderate/highly expansive soils, we have also included an option for lime-treated subgrade soils using an estimated design R-value of 50. If it is desired to chemical-treat, we recommend the upper 12 inches of subgrade soil be treated. Additional testing will need to be performed to determine the appropriate lime/cement percentage to be mixed with the subgrade soil.

Table 5: Preliminary Asphalt Concrete Pavement Recommendations

Design Traffic Index (TI)	Asphalt Concrete (inches)	Class 2 Aggregate Base[1] (inches)	Total Pavement Section Thickness (inches)
4.0	2.5	7.5	10.0
4.5	2.5	9.5	12.0
5.0	3.0	10.0	13.0
5.5	3.0	12.0	15.0
6.0	3.5	13.0	16.5
6.5	4.0	13.5	17.5

[1]Caltrans Class 2 aggregate base; minimum R-value of 78; subgrade R-value of 5

Table 6: Asphalt Concrete Pavement Recommendations, Lime Treated Subgrade

Design Traffic Index (TI)	Asphalt Concrete (inches)	Class 2 Aggregate Base[1] (inches)	Total Pavement Section Thickness (inches)
4.0	2.5	4.0	6.5
4.5	2.5	4.0	6.5
5.0	3.0	4.0	7.0
5.5	3.0	4.0	7.0
6.0	3.5	4.0	7.5
6.5	4.0	4.0	8.0

[1]Caltrans Class 2 aggregate base; minimum R-value of 78; minimum subgrade R-value of 50

SECTION 11: LIMITATIONS

This preliminary report, an instrument of professional service, has been prepared for the sole use of Valley Oak Partners, LLC specifically to support the design of the 375 Diana Avenue Mixed-Use project in Morgan Hill, California. The opinions, conclusions, and recommendations presented in this report have been formulated in accordance with accepted geotechnical engineering practices that exist in Northern California at the time this report was prepared. No warranty, expressed or implied, is made or should be inferred.

Preliminary recommendations in this report are based upon the soil and groundwater conditions encountered during our subsurface exploration. If variations or unsuitable conditions are encountered during construction, Cornerstone must be contacted to provide supplemental recommendations, as needed.

Valley Oak Partners, LLC may have provided Cornerstone with plans, reports and other documents prepared by others. Valley Oak Partners, LLC understands that Cornerstone reviewed and relied on the information presented in these documents and cannot be responsible for their accuracy.

Cornerstone prepared this preliminary report with the understanding that it is the responsibility of the owner or their representatives to see that the recommendations contained in this preliminary report are presented to other members of the design team and incorporated into the project plans and specifications, and that appropriate actions are taken to implement the preliminary geotechnical recommendations during construction.

Preliminary conclusions and recommendations presented in this report are valid as of the present time for the development as currently planned. Changes in the condition of the property or adjacent properties may occur with the passage of time, whether by natural processes or the acts of other persons. In addition, changes in applicable or appropriate standards may occur through legislation or the broadening of knowledge. Therefore, the preliminary conclusions and

recommendations presented in this report may be invalidated, wholly or in part, by changes beyond Cornerstone's control. This preliminary report should be reviewed by Cornerstone after a period of three (3) years has elapsed from the date of this report. In addition, if the current project design is changed, then Cornerstone must review the proposed changes and provide supplemental recommendations, as needed.

An electronic transmission of this preliminary report may also have been issued. While Cornerstone has taken precautions to produce a complete and secure electronic transmission, please check the electronic transmission against the hard copy version for conformity.

Preliminary recommendations provided in this report are based on the assumption that Cornerstone will be retained to provide observation and testing services during construction to confirm that conditions are similar to that assumed for design, and to form an opinion as to whether the work has been performed in accordance with the project plans and specifications. If we are not retained for these services, Cornerstone cannot assume any responsibility for any potential claims that may arise during or after construction as a result of misuse or misinterpretation of Cornerstone's report by others. Furthermore, Cornerstone will cease to be the Geotechnical-Engineer-of-Record if we are not retained for these services.

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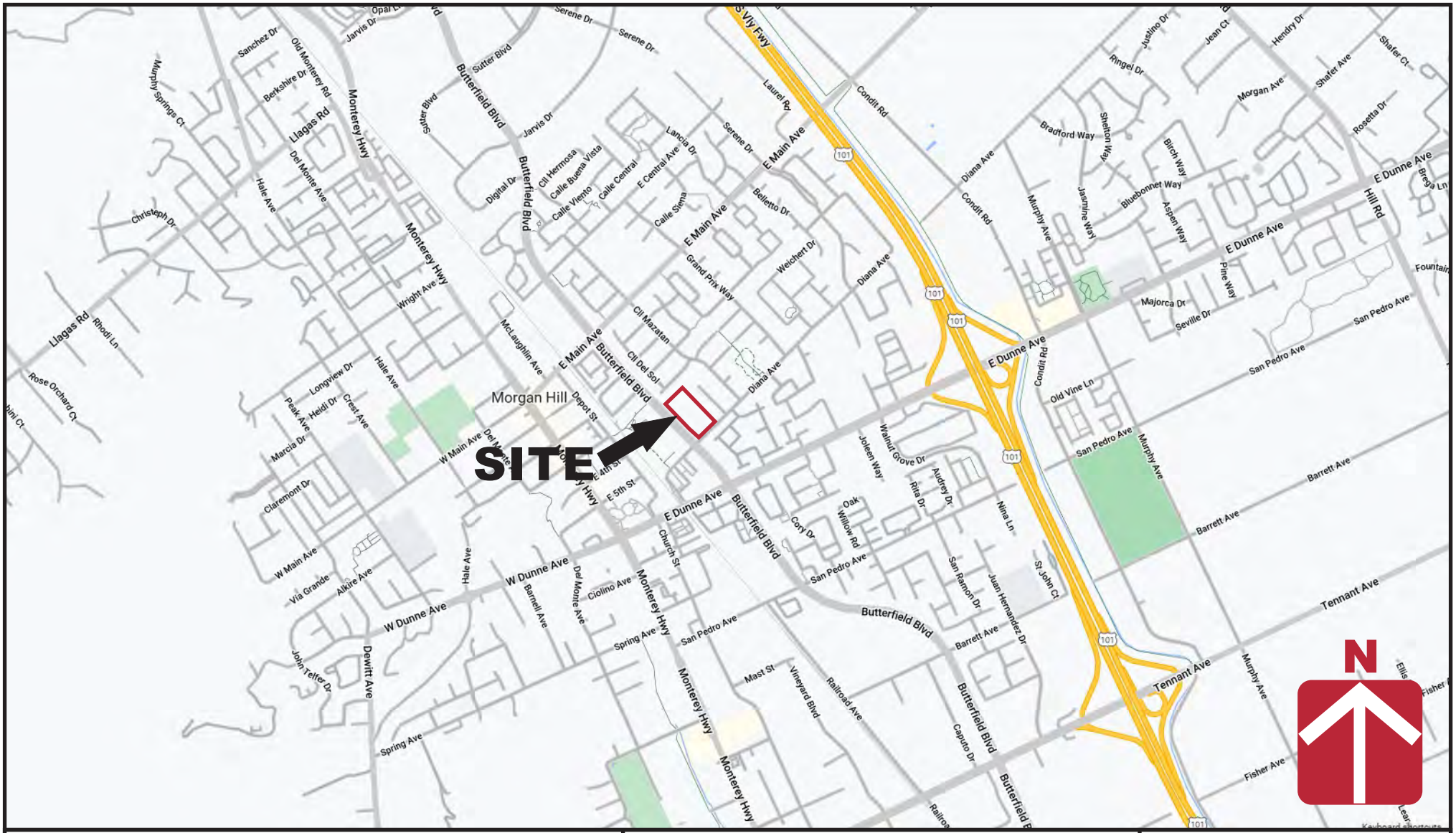

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Vicinity Map

375 Diana Avenue Residential
Morgan Hill, CA

Project Number	384-21-3
Figure Number	Figure 1
Date	December 2024
Drawn By	RRN

Site Plan

375 Diana Avenue Residential
Morgan Hill, CA

Project Number	384-21-3
Figure Number	Figure 2
Date	December 2024
Drawn By	RRN

CORNERSTONE EARTH GROUP

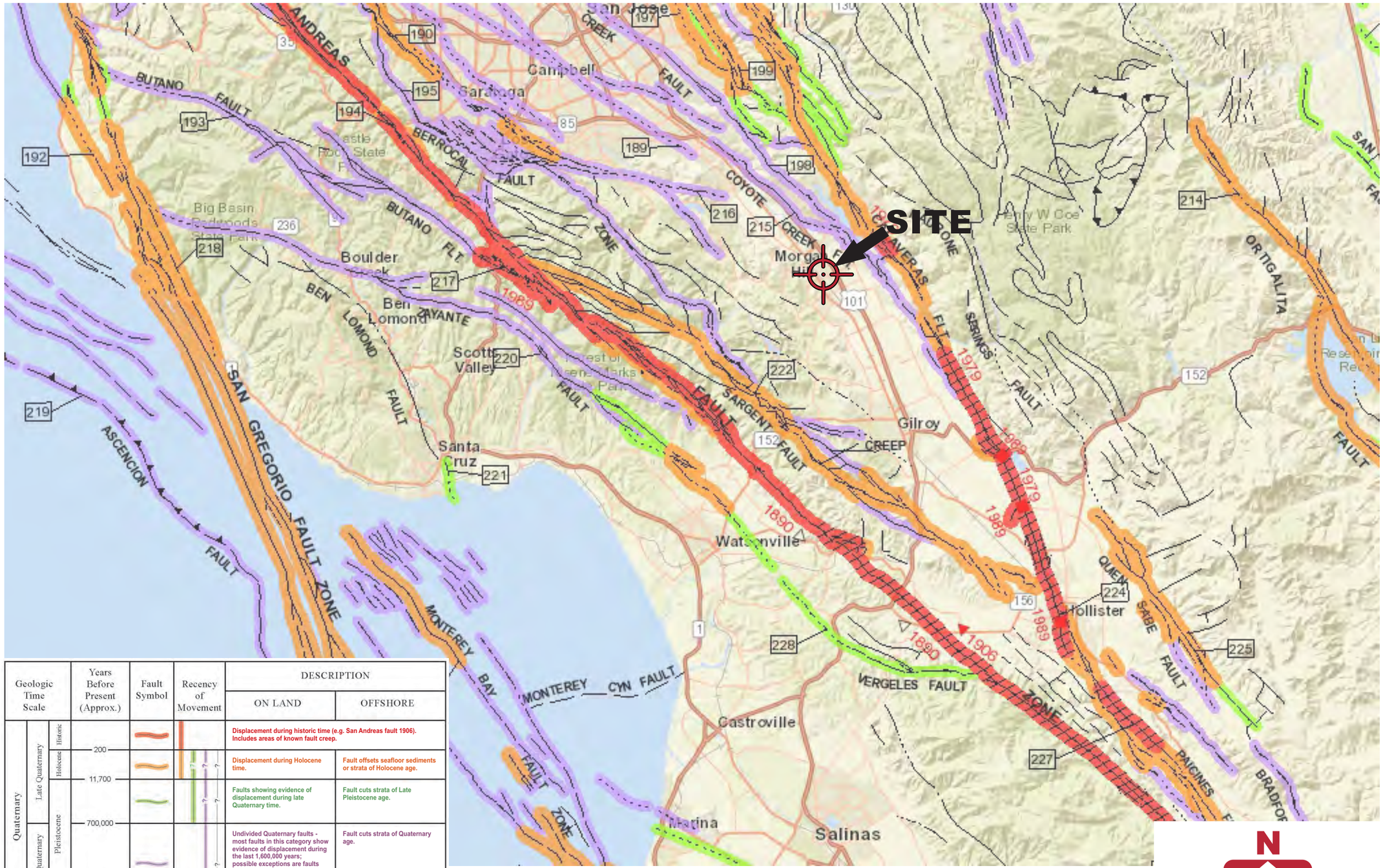
Legend

- Approximate location of exploratory boring (EB)
- Approximate location of core (C)

0 60 120

APPROXIMATE SCALE (FEET)

Base by Google Earth, dated 06/29/2023
Overlay by MH Engineering Co., Preliminary Storm Water Management Plan - C5, dated July 2024



Geologic Time Scale			Years Before Present (Approx.)	Fault Symbol	Recency of Movement	DESCRIPTION: ON LAND	DESCRIPTION: OFFSHORE
Quaternary	Late Quaternary	Historic	200			Displacement during historic time (e.g. San Andreas fault 1906). Includes areas of known fault creep.	
		Holocene	11,700		? ? ?	Displacement during Holocene time.	Fault offsets seafloor sediments or strata of Holocene age.
		Pleistocene	700,000		? ?	Faults showing evidence of displacement during late Quaternary time.	Fault cuts strata of Late Pleistocene age.
	Early Quaternary		1,600,000		?	Undivided Quaternary faults - most faults in this category show evidence of displacement during the last 1,600,000 years; possible exceptions are faults which displace rocks of undifferentiated Pilo-Pleistocene age.	Fault cuts strata of Quaternary age.
Pre-Quaternary			4.5 billion (Age of Earth)			Faults without recognized Quaternary displacement or showing evidence of no displacement during Quaternary time. Not necessarily inactive.	Fault cuts strata of Pliocene or older age.

Base by California Geological Survey - 2010 Fault Activity Map of California (Jennings and Bryant, 2010)

Project Number: 384-21-3

Figure Number: Figure 3

Date: December 2024

Drawn By: RRN

Regional Fault Map

375 Diana Avenue Residential
Morgan Hill, CA

CORNERSTONE EARTH GROUP

APPENDIX A: FIELD INVESTIGATION

The field investigation consisted of a surface reconnaissance and a subsurface exploration program using truck-mounted, hollow-stem auger drilling equipment. Six 8-inch-diameter exploratory borings were drilled on November 18, 2024 to depths of 20 to 45 feet. The approximate locations of exploratory borings are shown on the Site Plan, Figure 2. The soils encountered were continuously logged in the field by our representative and described in accordance with the Unified Soil Classification System (ASTM D2488). Boring logs, as well as a key to the classification of the soil and bedrock, are included as part of this appendix.

Boring locations were approximated using existing site boundaries, a hand-held GPS unit, and other site features as references. Boring elevations were based on elevations provided by Google Earth (WGS84). The locations and elevations of the borings should be considered accurate only to the degree implied by the method used.

Representative soil samples were obtained from the borings at selected depths. All samples were returned to our laboratory for evaluation and appropriate testing. The standard penetration resistance blow counts were obtained by dropping a 140-pound hammer through a 30-inch free fall. The 2-inch O.D. split-spoon sampler was driven 18 inches and the number of blows was recorded for each 6 inches of penetration (ASTM D1586). 2.5-inch I.D. samples were obtained using a Modified California Sampler driven into the soil with the 140-pound hammer previously described. Unless otherwise indicated, the blows per foot recorded on the boring log represent the accumulated number of blows required to drive the last 12 inches. The various samplers are denoted at the appropriate depth on the boring logs.

Field tests included an evaluation of the unconfined compressive strength of the soil samples using a pocket penetrometer device. The results of these tests are presented on the individual boring logs at the appropriate sample depths.

Attached boring logs and related information depict subsurface conditions at the locations indicated and on the date designated on the logs. Subsurface conditions at other locations may differ from conditions occurring at these boring locations. The passage of time may result in altered subsurface conditions due to environmental changes. In addition, any stratification lines on the logs represent the approximate boundary between soil types and the transition may be gradual.

UNIFIED SOIL CLASSIFICATION (ASTM D-2487-98)

MATERIAL TYPES	CRITERIA FOR ASSIGNING SOIL GROUP NAMES			GROUP SYMBOL	SOIL GROUP NAMES & LEGEND
COARSE-GRAINED SOILS >50% RETAINED ON NO. 200 SIEVE	GRAVELS >50% OF COARSE FRACTION RETAINED ON NO 4. SIEVE	CLEAN GRAVELS <5% FINES	Cu>4 AND 1<Cc<3	GW	WELL-GRADED GRAVEL
			Cu>4 AND 1>Cc>3	GP	POORLY-GRADED GRAVEL
		GRAVELS WITH FINES >12% FINES	FINES CLASSIFY AS ML OR CL	GM	SILTY GRAVEL
			FINES CLASSIFY AS CL OR CH	GC	CLAYEY GRAVEL
	SANDS >50% OF COARSE FRACTION PASSES ON NO 4. SIEVE	CLEAN SANDS <5% FINES	Cu>6 AND 1<Cc<3	SW	WELL-GRADED SAND
			Cu>6 AND 1>Cc>3	SP	POORLY-GRADED SAND
		SANDS AND FINES >12% FINES	FINES CLASSIFY AS ML OR CL	SM	SILTY SAND
			FINES CLASSIFY AS CL OR CH	SC	CLAYEY SAND
FINE-GRAINED SOILS >50% PASSES NO. 200 SIEVE	SILTS AND CLAYS LIQUID LIMIT<50	INORGANIC	PI>7 AND PLOTS>"A" LINE	CL	LEAN CLAY
			PI>4 AND PLOTS<"A" LINE	ML	SILT
		ORGANIC	LL (oven dried)/LL (not dried)<0.75	OL	ORGANIC CLAY OR SILT
	SILTS AND CLAYS LIQUID LIMIT>50	INORGANIC	PI PLOTS >"A" LINE	CH	FAT CLAY
			PI PLOTS <"A" LINE	MH	ELASTIC SILT
		ORGANIC	LL (oven dried)/LL (not dried)<0.75	OH	ORGANIC CLAY OR SILT
HIGHLY ORGANIC SOILS		PRIMARILY ORGANIC MATTER, DARK IN COLOR, AND ORGANIC ODOR		PT	PEAT

OTHER MATERIAL SYMBOLS

- Poorly-Graded Sand with Clay
- Clayey Sand
- Sandy Silt
- Artificial/Undocumented Fill
- Poorly-Graded Gravelly Sand
- Topsoil
- Well-Graded Gravel with Clay
- Well-Graded Gravel with Silt
- Sand
- Silt
- Well Graded Gravelly Sand
- Gravelly Silt
- Asphalt
- Boulders and Cobble

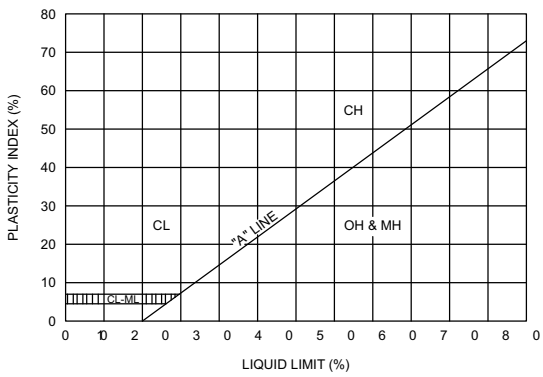
SAMPLER TYPES

- SPT
- Modified California (2.5" I.D.)
- Rock Core
- Shelby Tube
- No Recovery
- Grab Sample

ADDITIONAL TESTS

CA	-	CHEMICAL ANALYSIS (CORROSIVITY)	PI	-	PLASTICITY INDEX
CD	-	CONSOLIDATED DRAINED TRIAXIAL	SW	-	SWELL TEST
CN	-	CONSOLIDATION	TC	-	CYCLIC TRIAXIAL
CU	-	CONSOLIDATED UNDRAINED TRIAXIAL	TV	-	TORVANE SHEAR
DS	-	DIRECT SHEAR	UC	-	UNCONFINED COMPRESSION
PP	-	POCKET PENETROMETER (TSF)	(1.5)	-	(WITH SHEAR STRENGTH IN KSF)
(3.0)	-	(WITH SHEAR STRENGTH IN KSF)			
RV	-	R-VALUE	UU	-	UNCONSOLIDATED UNDRAINED TRIAXIAL
SA	-	SIEVE ANALYSIS: % PASSING #200 SIEVE			
	-	WATER LEVEL			

PLASTICITY CHART



PENETRATION RESISTANCE
(RECORDED AS BLOWS / FOOT)

SAND & GRAVEL		SILT & CLAY		
RELATIVE DENSITY	BLOWS/FOOT*	CONSISTENCY	BLOWS/FOOT*	STRENGTH** (KSF)
VERY LOOSE	0 - 4	VERY SOFT	0 - 2	0 - 0.25
LOOSE	4 - 10	SOFT	2 - 4	0.25 - 0.5
MEDIUM DENSE	10 - 30	MEDIUM STIFF	4 - 8	0.5 - 1.0
DENSE	30 - 50	STIFF	8 - 15	1.0 - 2.0
VERY DENSE	OVER 50	VERY STIFF	15 - 30	2.0 - 4.0
		HARD	OVER 30	OVER 4.0

* NUMBER OF BLOWS OF 140 LB HAMMER FALLING 30 INCHES TO DRIVE A 2 INCH O.D. (1-3/8 INCH I.D.) SPLIT-BARREL SAMPLER THE LAST 12 INCHES OF AN 18-INCH DRIVE (ASTM-1586 STANDARD PENETRATION TEST).

** UNDRAINED SHEAR STRENGTH IN KIPS/SQ. FT. AS DETERMINED BY LABORATORY TESTING OR APPROXIMATED BY THE STANDARD PENETRATION TEST, POCKET PENETROMETER, TORVANE, OR VISUAL OBSERVATION.

CORNERSTONE EARTH GROUP

LEGEND TO SOIL DESCRIPTIONS

Figure Number A-1

BORING NUMBER EB-1

CORNERSTONE EARTH GROUP

PROJECT NAME Diana Avenue Mixed Use
PROJECT NUMBER 384-21-3
PROJECT LOCATION Morgan Hill, CA

DATE STARTED 11/18/24 **DATE COMPLETED** 11/18/24
GROUND ELEVATION 353 FT +/- **BORING DEPTH** 25 ft.
DRILLING CONTRACTOR Exploration Geoservices **LATITUDE** 37.130741° **LONGITUDE** -121.647318°
DRILLING METHOD Mobile B-53, 8 inch Hollow-Stem Auger **GROUND WATER LEVELS:**
LOGGED BY PT ▽ **AT TIME OF DRILLING** Not Encountered
NOTES ▼ **AT END OF DRILLING** Not Encountered

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ELEVATION (ft)	DEPTH (ft)	DESCRIPTION	N-Value (uncorrected) blows per foot	SAMPLES TYPE AND NUMBER	DRY UNIT WEIGHT PCF	NATURAL MOISTURE CONTENT	PLASTICITY INDEX, %	PERCENT PASSING No. 200 SIEVE	UNDRAINED SHEAR STRENGTH, ksf
353.0	0	**Fat Clay with Sand (CH)** hard, moist, dark brown, fine to medium sand, high plasticity Liquid Limit = 60, Plastic Limit = 23	39	1A MC 1B	94 110	17 6	37		>4.5 ○
351.0		**Clayey Sand with Gravel (SC)** dense, moist, light reddish brown, fine to medium sand, fine to coarse subangular to subrounded gravel	61	MC-2B	116	12			
348.5	5	**Sandy Lean Clay (CL)** hard, moist, reddish brown, fine to medium sand, low plasticity	50/6"	MC-3B	120	13			>4.5 ○
346.5		**Well Graded Sand with Clay and Gravel (SW-SC)** medium dense, moist, brown, fine to coarse sand, fine to coarse subangular to subrounded gravel, possible cobbles	32	MC-4B	112	9		11	
	10	becomes dense	38	SPT-5		7			
340.0		**Lean Clay with Sand (CL)** hard, moist, brown, fine sand, moderate plasticity	49	MC-6B	117	14			>4.5 ○
	15								
336.0		**Clayey Sand with Gravel (SC)** medium dense, moist, brown, fine to coarse sand, fine to coarse subangular to subrounded gravel	20	MC-7B	108	11			
	20								
		becomes very dense	54	SPT-8		11			
328.0	25	Bottom of Boring at 25.0 feet.							

UNDRAINED SHEAR STRENGTH, ksf
○ HAND PENETROMETER
△ TORVANE
● UNCONFINED COMPRESSION
▲ UNCONSOLIDATED-UNDRAINED TRIAXIAL
1.0 2.0 3.0 4.0

CORNERSTONE EARTH GROUP2 - CORNERSTONE 0812.GDT - 12/11/24 09:57 - P:\DRAFTING\GINT FILES\384-21-3 DIANA AVENUE.GPJ

BORING NUMBER EB-2

CORNERSTONE EARTH GROUP

PROJECT NAME Diana Avenue Mixed Use
PROJECT NUMBER 384-21-3
PROJECT LOCATION Morgan Hill, CA

DATE STARTED 11/18/24 **DATE COMPLETED** 11/18/24
GROUND ELEVATION 351 FT +/- **BORING DEPTH** 45 ft.
DRILLING CONTRACTOR Exploration Geoservices
LATITUDE 37.130312° **LONGITUDE** -121.647331°
DRILLING METHOD Mobile B-53, 8 inch Hollow-Stem Auger
GROUND WATER LEVELS:
LOGGED BY PT
AT TIME OF DRILLING 29.5 ft.
NOTES
AT END OF DRILLING 29.5 ft.

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ELEVATION (ft)	DEPTH (ft)	DESCRIPTION	N-Value (uncorrected) blows per foot	SAMPLES TYPE AND NUMBER	DRY UNIT WEIGHT PCF	NATURAL MOISTURE CONTENT	PLASTICITY INDEX, %	PERCENT PASSING No. 200 SIEVE	UNDRAINED SHEAR STRENGTH, ksf
351.0	0	**Clayey Sand (SC)** medium dense, dry, light reddish brown, fine to medium sand, some fine to coarse subangular to subrounded gravel	46	MC-1B	103	4			
348.5		**Sandy Lean Clay (CL)** hard, moist, reddish brown, fine to medium sand, low plasticity	47	MC-2B	118	12			>4.5 ○
345.5	5	**Clayey Sand with Gravel (SC)** very dense, moist, reddish brown, fine to medium sand, fine to coarse subangular to subrounded gravel, possible cobbles	50/6"	MC					
		becomes medium dense	42	MC-4B	117	10		13	
338.5	10	**Lean Clay with Sand (CL)** hard, moist, brown, fine sand, moderate plasticity	79	MC-5B	113	16			>4.5 ○
333.0	15	**Clayey Sand with Gravel (SC)** medium dense, moist, brown, fine to coarse sand, fine to coarse subangular to subrounded gravel	48	MC					
	20	becomes very dense, possible cobbles	50/3"	MC-7A	113	10			
325.0	25								

Continued Next Page

UNDRAINED SHEAR STRENGTH, ksf
○ HAND PENETROMETER
△ TORVANE
● UNCONFINED COMPRESSION
▲ UNCONSOLIDATED-UNDRAINED TRIAXIAL
1.0 2.0 3.0 4.0

CORNERSTONE EARTH GROUP2 - CORNERSTONE 0812.GDT - 12/11/24 09:57 - P:\DRAFTING\GINT FILES\384-21-3 DIANA AVENUE.GPJ

BORING NUMBER EB-2

CORNERSTONE EARTH GROUP

PROJECT NAME Diana Avenue Mixed Use

PROJECT NUMBER 384-21-3

PROJECT LOCATION Morgan Hill, CA

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ELEVATION (ft)	DEPTH (ft)	DESCRIPTION	N-Value (uncorrected) blows per foot	SAMPLES TYPE AND NUMBER	DRY UNIT WEIGHT PCF	NATURAL MOISTURE CONTENT	PLASTICITY INDEX, %	PERCENT PASSING No. 200 SIEVE	UNDRAINED SHEAR STRENGTH, ksf
325.0									
323.5		**Lean Clay with Sand (CL)** hard, moist, brown, fine sand, moderate plasticity	40	SPT-8		17			>4.5
	30	becomes stiff	24	MC-9B	104	24			
	35								
312.3		**Clayey Sand with Gravel (SC)** very dense, moist, brown, fine to coarse sand, fine to coarse subangular to subrounded gravel	50/6"	SPT					
	40								
			59	SPT-11		14			
306.0	45	Bottom of Boring at 45.0 feet.							
	50								
	55								

UNDRAINED SHEAR STRENGTH, ksf
○ HAND PENETROMETER
△ TORVANE
● UNCONFINED COMPRESSION
▲ UNCONSOLIDATED-UNDRAINED TRIAXIAL
1.0 2.0 3.0 4.0

CORNERSTONE EARTH GROUP2 - CORNERSTONE 0812.GDT - 12/11/24 09:57 - P:\DRAFTING\GINT FILES\384-21-3 DIANA AVENUE.GPJ

BORING NUMBER EB-3

CORNERSTONE EARTH GROUP

PROJECT NAME Diana Avenue Mixed Use
PROJECT NUMBER 384-21-3
PROJECT LOCATION Morgan Hill, CA

DATE STARTED 11/18/24 **DATE COMPLETED** 11/18/24
GROUND ELEVATION 351 FT +/- **BORING DEPTH** 24.7 ft.
DRILLING CONTRACTOR Exploration Geoservices **LATITUDE** 37.129735° **LONGITUDE** -121.646600°
DRILLING METHOD Mobile B-53, 8 inch Hollow-Stem Auger **GROUND WATER LEVELS:**
LOGGED BY PT **AT TIME OF DRILLING** Not Encountered
NOTES **AT END OF DRILLING** Not Encountered

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ELEVATION (ft)	DEPTH (ft)	DESCRIPTION	N-Value (uncorrected) blows per foot	SAMPLES TYPE AND NUMBER	DRY UNIT WEIGHT PCF	NATURAL MOISTURE CONTENT	PLASTICITY INDEX, %	PERCENT PASSING No. 200 SIEVE	UNDRAINED SHEAR STRENGTH, ksf
351.0	0	**Clayey Sand (SC)** medium dense, dry, light reddish brown, fine to medium sand, some fine to coarse subangular to subrounded gravel	20	MC-1B	96	5			
348.5		**Well Graded Gravel with Clay and Sand (GW-GC)** medium dense, moist, brown, fine to coarse subangular to subrounded gravel, fine to coarse sand, possible cobbles	47	MC-2B	114	5		8	
	5		44	MC-3B	122	7			
344.0		**Clayey Sand with Gravel (SC)** medium dense, moist, reddish brown, fine to coarse sand, fine to coarse subangular to subrounded gravel, possible cobbles	41	MC-4B	117	9			
	10		25	SPT-5		14			>4.5
339.5		**Lean Clay with Sand (CL)** hard, moist, brown, fine sand, moderate plasticity							
337.5		**Clayey Sand with Gravel (SC)** medium dense, moist, brown, fine to coarse sand, fine to coarse subangular to subrounded gravel, possible cobbles	54	MC-6B	120	11			
	15								
334.0		**Lean Clay with Sand (CL)** very stiff, moist, brown, fine sand, moderate plasticity	64	MC-7B	103	20			
	20								
328.0		**Clayey Sand with Gravel (SC)** very dense, moist, brown, fine to coarse sand, fine to coarse subangular to subrounded gravel	50 2"	MC					
326.3	25	Bottom of Boring at 24.7 feet.							

UNDRAINED SHEAR STRENGTH, ksf
○ HAND PENETROMETER
△ TORVANE
● UNCONFINED COMPRESSION
▲ UNCONSOLIDATED-UNDRAINED TRIAXIAL
1.0 2.0 3.0 4.0

CORNERSTONE EARTH GROUP2 - CORNERSTONE 0812.GDT - 12/11/24 09:57 - P:\DRAFTING\GINT FILES\384-21-3 DIANA AVENUE.GPJ

BORING NUMBER EB-4

CORNERSTONE EARTH GROUP

PROJECT NAME Diana Avenue Mixed Use
PROJECT NUMBER 384-21-3
PROJECT LOCATION Morgan Hill, CA

DATE STARTED 11/20/24 **DATE COMPLETED** 11/20/24
GROUND ELEVATION 354 FT +/- **BORING DEPTH** 45 ft.
DRILLING CONTRACTOR Exploration Geoservices **LATITUDE** 37.129680° **LONGITUDE** -121.645811°
DRILLING METHOD Mobile B-53B, 8 inch Hollow-Stem Auger **GROUND WATER LEVELS:**
LOGGED BY PT ▽ **AT TIME OF DRILLING** 43 ft.
NOTES ▼ **AT END OF DRILLING** 43 ft.

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ELEVATION (ft)	DEPTH (ft)	DESCRIPTION	N-Value (uncorrected) blows per foot	SAMPLES TYPE AND NUMBER	DRY UNIT WEIGHT PCF	NATURAL MOISTURE CONTENT	PLASTICITY INDEX, %	PERCENT PASSING No. 200 SIEVE
354.0	0	**Clayey Sand (SC)** medium dense, dry, reddish brown, fine to medium sand, some fine to coarse subangular to subrounded gravel	22	MC-1B	101	6		
351.0		**Clayey Sand with Gravel (SC)** medium dense, moist, reddish brown to brown, fine to coarse sand, fine to coarse subangular to subrounded gravel, possible cobbles	26	MC-2B	100	6		
	5		25	MC-3B	109	7		
			27	SPT				
		becomes dense	57	MC-5B	112	6		
	10							
		becomes very dense	50/4"	MC-6B	111	7		
	15							
		becomes medium dense	27	MC-7B	110	12		14
	20							
			42	MC-8B	118	12		
	25							
		becomes dense	33	SPT				
327.5								

Continued Next Page

UNDRAINED SHEAR STRENGTH, ksf
○ HAND PENETROMETER
△ TORVANE
● UNCONFINED COMPRESSION
▲ UNCONSOLIDATED-UNDRAINED TRIAXIAL
1.0 2.0 3.0 4.0

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BORING NUMBER EB-4

CORNERSTONE EARTH GROUP

PROJECT NAME Diana Avenue Mixed Use

PROJECT NUMBER 384-21-3

PROJECT LOCATION Morgan Hill, CA

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ELEVATION (ft)	DEPTH (ft)	DESCRIPTION	N-Value (uncorrected) blows per foot	SAMPLES TYPE AND NUMBER	DRY UNIT WEIGHT PCF	NATURAL MOISTURE CONTENT	PLASTICITY INDEX, %	PERCENT PASSING No. 200 SIEVE
327.5		**Clayey Sand with Gravel (SC)** very dense, moist, brown, fine to coarse sand, fine to coarse subangular to subrounded gravel, possible cobbles	50/6"	MC				
	30							
320.0		**Lean Clay with Sand (CL)** stiff, moist, brown, fine sand, moderate plasticity	13	SPT-11		23		
	35							
			22	MC-12B	109	19		
	40							
311.5		**Clayey Sand with Gravel (SC)** very dense, moist, brown, fine to coarse sand, fine to coarse subangular to subrounded gravel, possible cobbles	53	SPT-13		18		
309.0	45	Bottom of Boring at 45.0 feet.						
	50							
	55							

UNDRAINED SHEAR STRENGTH, ksf

- ○ HAND PENETROMETER
- △ TORVANE
- ● UNCONFINED COMPRESSION
- ▲ UNCONSOLIDATED-UNDRAINED TRIAXIAL

1.0 2.0 3.0 4.0

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BORING NUMBER EB-5

CORNERSTONE EARTH GROUP

PROJECT NAME Diana Avenue Mixed Use
PROJECT NUMBER 384-21-3
PROJECT LOCATION Morgan Hill, CA

DATE STARTED 11/18/24 **DATE COMPLETED** 11/18/24
GROUND ELEVATION 351 FT +/- **BORING DEPTH** 20 ft.
DRILLING CONTRACTOR Exploration Geoservices **LATITUDE** 37.130279° **LONGITUDE** -121.647953°
DRILLING METHOD Mobile B-53, 8 inch Hollow-Stem Auger **GROUND WATER LEVELS:**
LOGGED BY PT **AT TIME OF DRILLING** Not Encountered
NOTES **AT END OF DRILLING** Not Encountered

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ELEVATION (ft)	DEPTH (ft)	DESCRIPTION	N-Value (uncorrected) blows per foot	SAMPLES TYPE AND NUMBER	DRY UNIT WEIGHT PCF	NATURAL MOISTURE CONTENT	PLASTICITY INDEX, %	PERCENT PASSING No. 200 SIEVE
351.0	0	**Clayey Sand (SC)** medium dense, dry, reddish brown, fine to medium sand, some fine to coarse subangular to subrounded gravel	36	MC-1B	102	4		
348.0		**Well Graded Gravel with Clay and Sand (GW-GC)** very dense, moist, brown, fine to coarse subangular to subrounded gravel, fine to coarse sand, possible cobbles	50 6"	MC-2B	110	5		
	5		50 6"	MC-3B	111	8		
344.5		**Clayey Sand with Gravel (SC)** very dense, moist, reddish brown to brown, fine to coarse sand, fine to coarse subangular to subrounded gravel	63	SPT				
342.5		**Clayey Sand (SC)** medium dense, moist, brown, fine to coarse sand, fine subangular to subrounded gravel	30	MC-5B	111	11		
341.0	10	**Clayey Sand with Gravel (SC)** medium dense, moist, brown, fine to coarse sand, fine to coarse subangular to subrounded gravel	54	MC-6B	125	10		13
338.0		**Lean Clay with Sand (CL)** very stiff, moist, reddish brown, fine sand, moderate plasticity	53	MC-7B	110	16		
	15							
333.0		**Clayey Sand with Gravel (SC)** medium dense, moist, brown, fine to coarse sand, fine to coarse subangular to subrounded gravel	51	MC				
331.0	20	Bottom of Boring at 20.0 feet.						
	25							

UNDRAINED SHEAR STRENGTH, ksf
○ HAND PENETROMETER
△ TORVANE
● UNCONFINED COMPRESSION
▲ UNCONSOLIDATED-UNDRAINED TRIAXIAL
1.0 2.0 3.0 4.0

CORNERSTONE EARTH GROUP2 - CORNERSTONE 0812.GDT - 12/11/24 09:57 - P:\DRAFTING\GINT FILES\384-21-3 DIANA AVENUE.GPJ

BORING NUMBER EB-6

CORNERSTONE EARTH GROUP

PROJECT NAME Diana Avenue Mixed Use
PROJECT NUMBER 384-21-3
PROJECT LOCATION Morgan Hill, CA

DATE STARTED 11/20/24 **DATE COMPLETED** 11/20/24
GROUND ELEVATION 352 FT +/- **BORING DEPTH** 31.5 ft.
DRILLING CONTRACTOR Exploration Geoservices **LATITUDE** 37.129119° **LONGITUDE** -121.646544°
DRILLING METHOD Mobile B-53, 8 inch Hollow-Stem Auger **GROUND WATER LEVELS:**
LOGGED BY PT **AT TIME OF DRILLING** Not Encountered
NOTES **AT END OF DRILLING** Not Encountered

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ELEVATION (ft)	DEPTH (ft)	DESCRIPTION	N-Value (uncorrected) blows per foot	SAMPLES TYPE AND NUMBER	DRY UNIT WEIGHT PCF	NATURAL MOISTURE CONTENT	PLASTICITY INDEX, %	PERCENT PASSING No. 200 SIEVE
352.0	0	**Clayey Sand (SC)** medium dense, moist, reddish brown, fine to medium sand, some fine to coarse subangular to subrounded gravel	30	MC-1B	103	7		
349.0		**Well Graded Sand with Clay and Gravel (SW-SC)** medium dense, moist, brown, fine to coarse sand, fine to coarse subangular to subrounded gravel, possible cobbles	29	MC-2B	117	9		9
	5	becomes dense	59	MC-3B	116	10		
			30	SPT				
344.0		**Clayey Sand with Gravel (SC)** medium dense, moist, reddish brown to brown, fine to coarse sand, fine to coarse subangular to subrounded gravel, possible cobbles	39	MC-5B	118	9		14
	10		40	MC-6B	118	14		
			42	MC-7B	118	13		34
	15							
			38	MC-8B	119	12		
	20	becomes dense	32	SPT				
		becomes medium dense	36	MC-10B	114	15		34
	25		22	SPT				
325.5		*Continued Next Page*						

UNDRAINED SHEAR STRENGTH, ksf
○ HAND PENETROMETER
△ TORVANE
● UNCONFINED COMPRESSION
▲ UNCONSOLIDATED-UNDRAINED TRIAXIAL
1.0 2.0 3.0 4.0

CORNERSTONE EARTH GROUP2 - CORNERSTONE 0812.GDT - 12/11/24 09:57 - P:\DRAFTING\GINT FILES\384-21-3 DIANA AVENUE.GPJ

CORNERSTONE EARTH GROUP

PROJECT NAME Diana Avenue Mixed Use
PROJECT NUMBER 384-21-3
PROJECT LOCATION Morgan Hill, CA

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ELEVATION (ft)	DEPTH (ft)	SYMBOL	DESCRIPTION	N-Value (uncorrected) blows per foot	SAMPLES TYPE AND NUMBER	DRY UNIT WEIGHT PCF	NATURAL MOISTURE CONTENT	PLASTICITY INDEX, %	PERCENT PASSING No. 200 SIEVE
325.5			**Clayey Sand with Gravel (SC)** very dense, moist, brown, fine to coarse sand, fine to coarse subangular to subrounded gravel, possible cobbles	50/6"	MC-12	114	10		
	30		becomes dense	66	NR				
320.5			Bottom of Boring at 31.5 feet.						
	35								
	40								
	45								
	50								
	55								

UNDRAINED SHEAR STRENGTH, ksf
○ HAND PENETROMETER
△ TORVANE
● UNCONFINED COMPRESSION
▲ UNCONSOLIDATED-UNDRAINED TRIAXIAL
1.0 2.0 3.0 4.0

CORNERSTONE EARTH GROUP2 - CORNERSTONE 0812.GDT - 12/11/24 09:57 - P:\DRAFTING\GINT FILES\384-21-3 DIANA AVENUE.GPJ

APPENDIX B: LABORATORY TEST PROGRAM

The laboratory testing program was performed to evaluate the physical and mechanical properties of the soils retrieved from the site to aid in verifying soil classification.

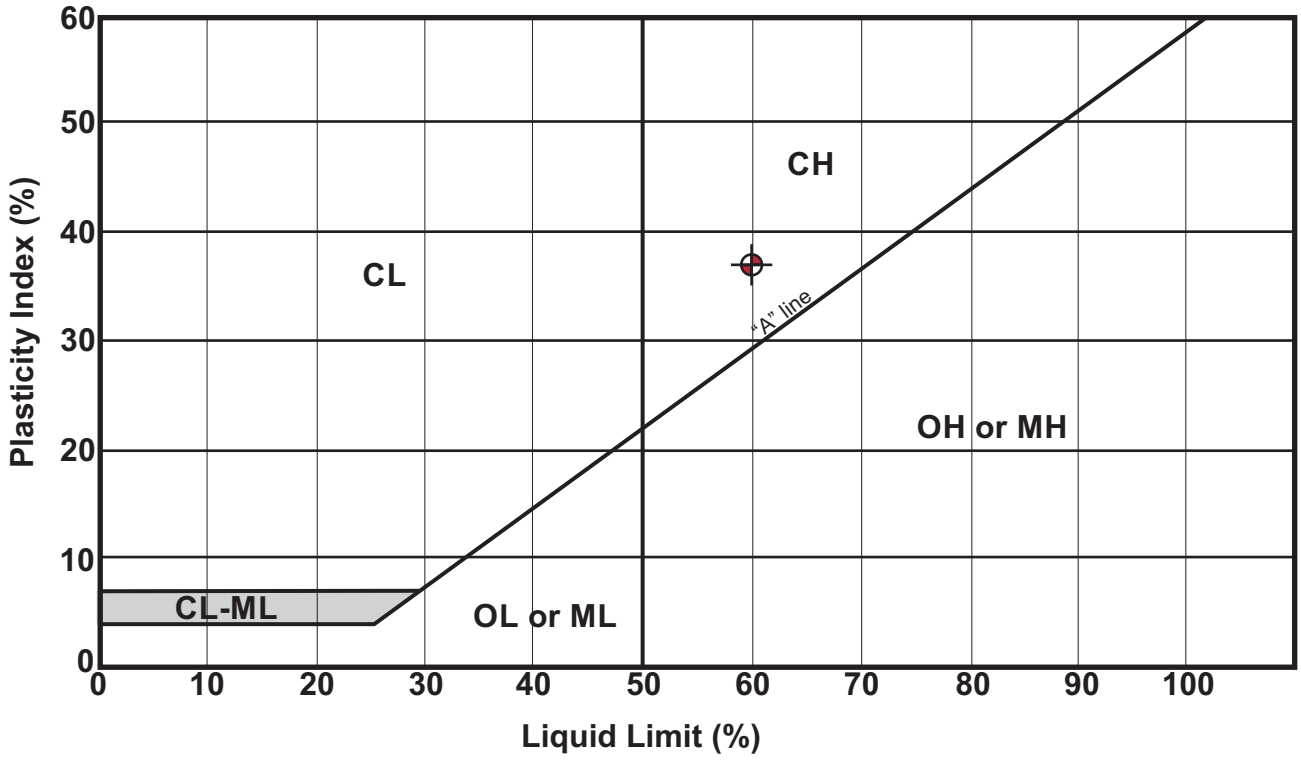
Moisture Content: The natural water content was determined (ASTM D2216) on 49 samples of the materials recovered from the borings. These water contents are recorded on the boring logs at the appropriate sample depths.

Dry Densities: In place dry density determinations (ASTM D2937) were performed on 42 samples to measure the unit weight of the subsurface soils. Results of these tests are shown on the boring logs at the appropriate sample depths.

Washed Sieve Analyses: The percent soil fraction passing the No. 200 sieve (ASTM D1140) was determined on nine samples of the subsurface soils to aid in the classification of these soils. Results of these tests are shown on the boring logs at the appropriate sample depths.

Plasticity Index: One Plasticity Index determination (ASTM D4318) was performed on a sample of the subsurface soil to measure the range of water contents over which this material exhibits plasticity. The Plasticity Index was used to classify the soil in accordance with the Unified Soil Classification System and to evaluate the soil expansion potential. Results of this test are shown on the boring log at the appropriate sample depth.

Plasticity Index (ASTM D4318) Testing Summary



Symbol	Boring No.	Depth (ft)	Natural Water Content (%)	Liquid Limit (%)	Plastic Limit (%)	Plasticity Index	Passing No. 200 (%)	Group Name (USCS - ASTM D2487)
⊕	EB-1	1.0	17	60	23	37	—	Fat Clay with Sand (CH)

Sample prepared in accordance with ASTM D421

CORNERSTONE EARTH GROUP

Plasticity Index Testing Summary

Diana Avenue Mixed Use
Morgan Hill, CA

Project Number: 384-21-3

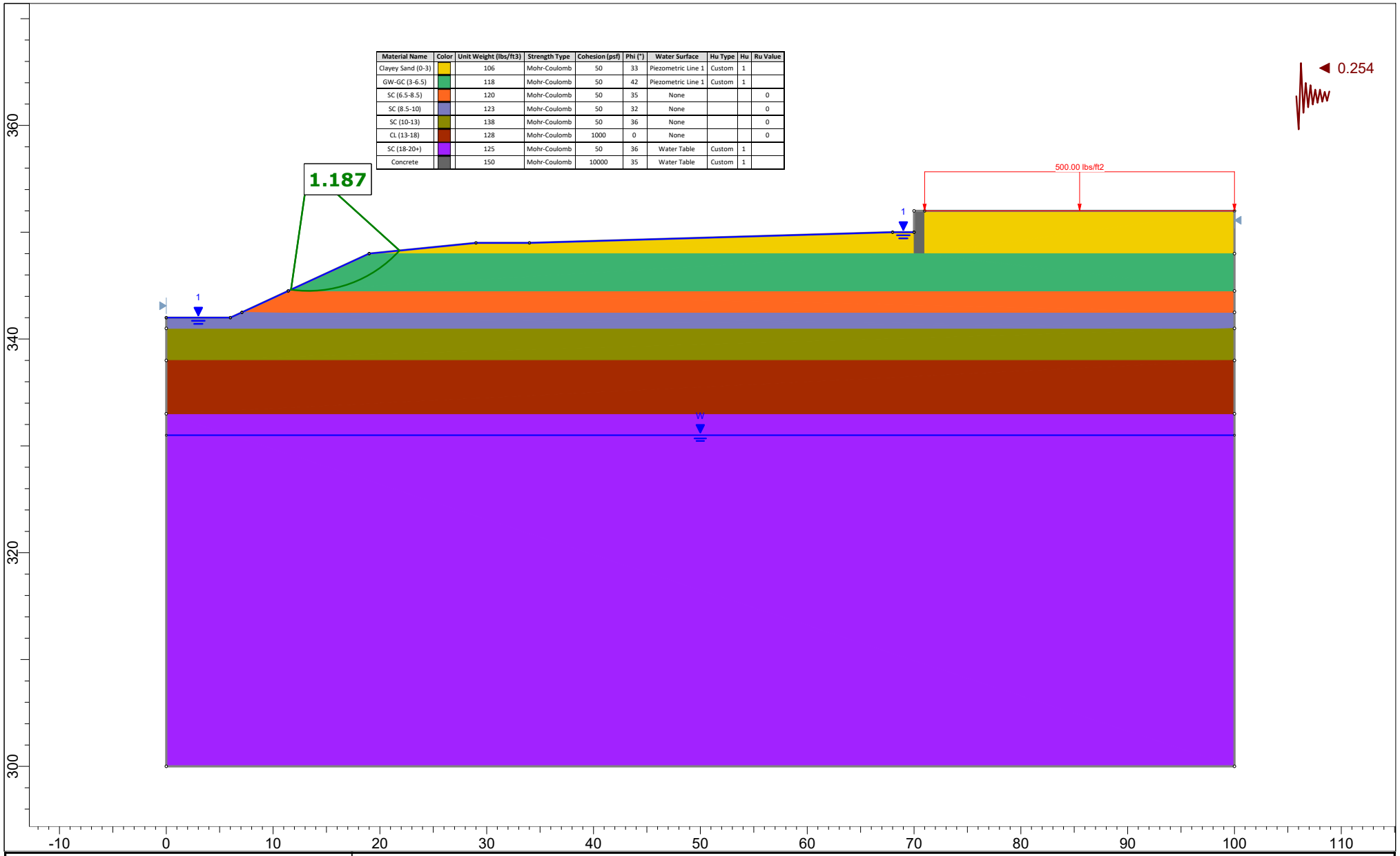
Figure Number: Figure B1

Date: December 2024

Drawn By: FLL

APPENDIX C: PRELIMINARY SLOPE STABILITY ANALYSIS

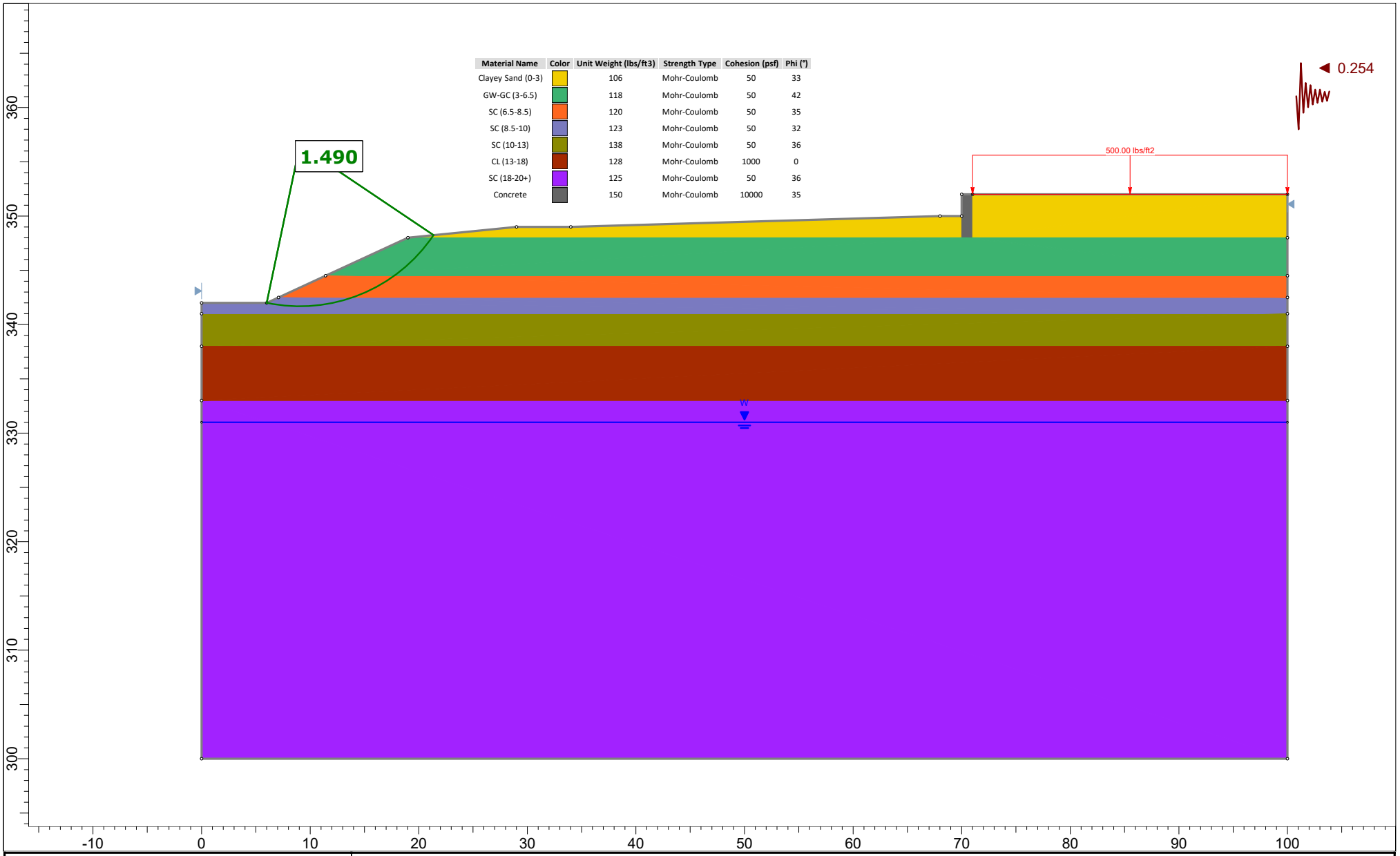
Material Name	Color	Unit Weight (lbs/ft3)	Strength Type	Cohesion (psf)	Phi (°)	Water Surface	Hu Type	Hu	Ru Value
Clayey Sand (0-3)		106	Mohr-Coulomb	50	33	Piezometric Line 1	Custom	1	
GW-GC (3-6.5)		118	Mohr-Coulomb	50	42	Piezometric Line 1	Custom	1	
SC (6.5-8.5)		120	Mohr-Coulomb	50	35	None			0
SC (8.5-10)		123	Mohr-Coulomb	50	32	None			0
SC (10-13)		138	Mohr-Coulomb	50	36	None			0
CL (13-18)		128	Mohr-Coulomb	1000	0	None			0
SC (18-20+)		125	Mohr-Coulomb	50	36	Water Table	Custom	1	
Concrete		150	Mohr-Coulomb	10000	35	Water Table	Custom	1	



rocscience

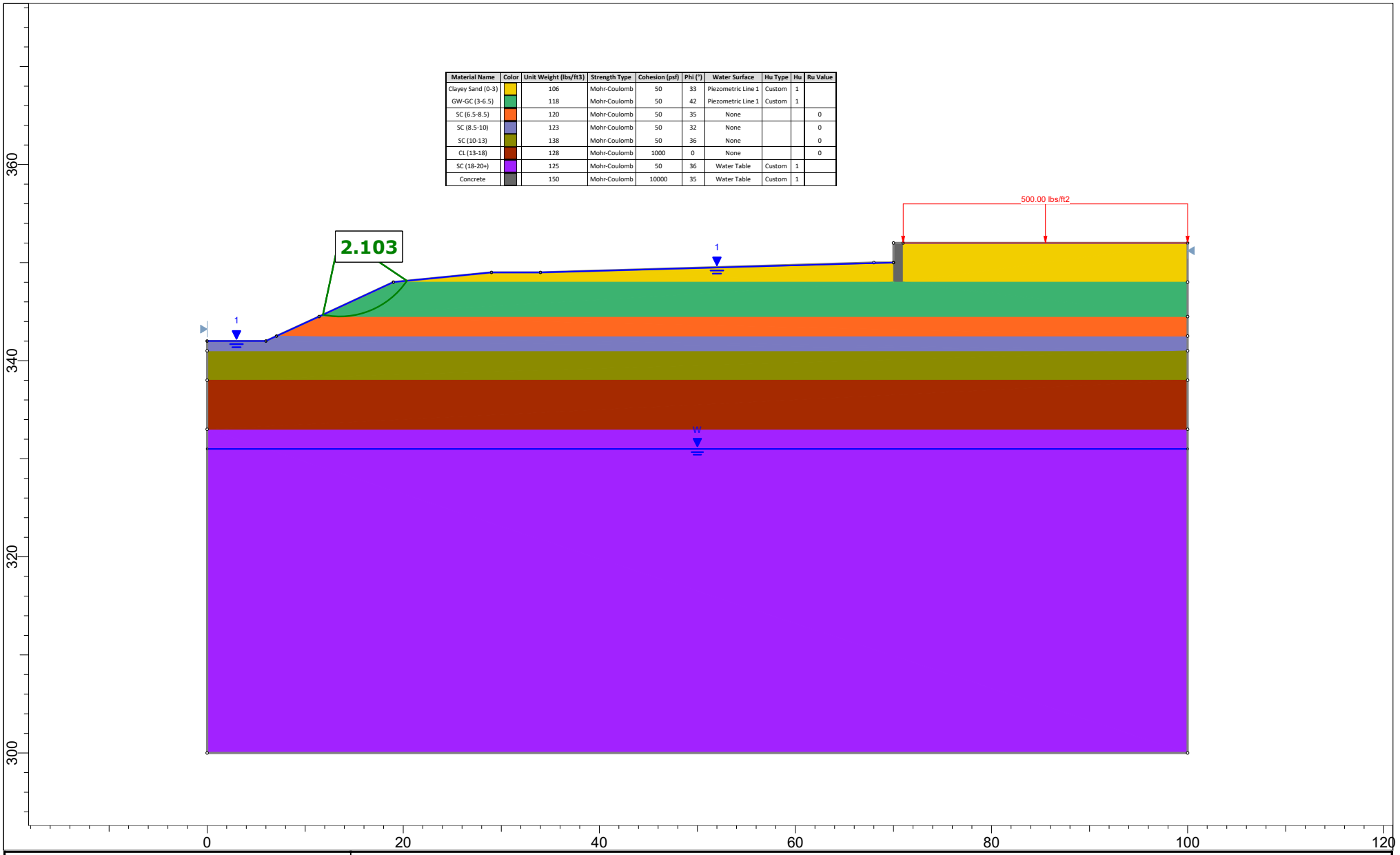
SLIDEINTERPRET 9.037

Project	Diana Avenue Residential Development		
Group	Bioretention SCM-1 (Boring EB-5)	*Scenario*	Seismic Analysis - 100 Year Flood
Drawn By	JDS/MFR	*Company*	Cornerstone Earth Group
Date	January 2025	*File Name*	EB-5 slope stability.slmd

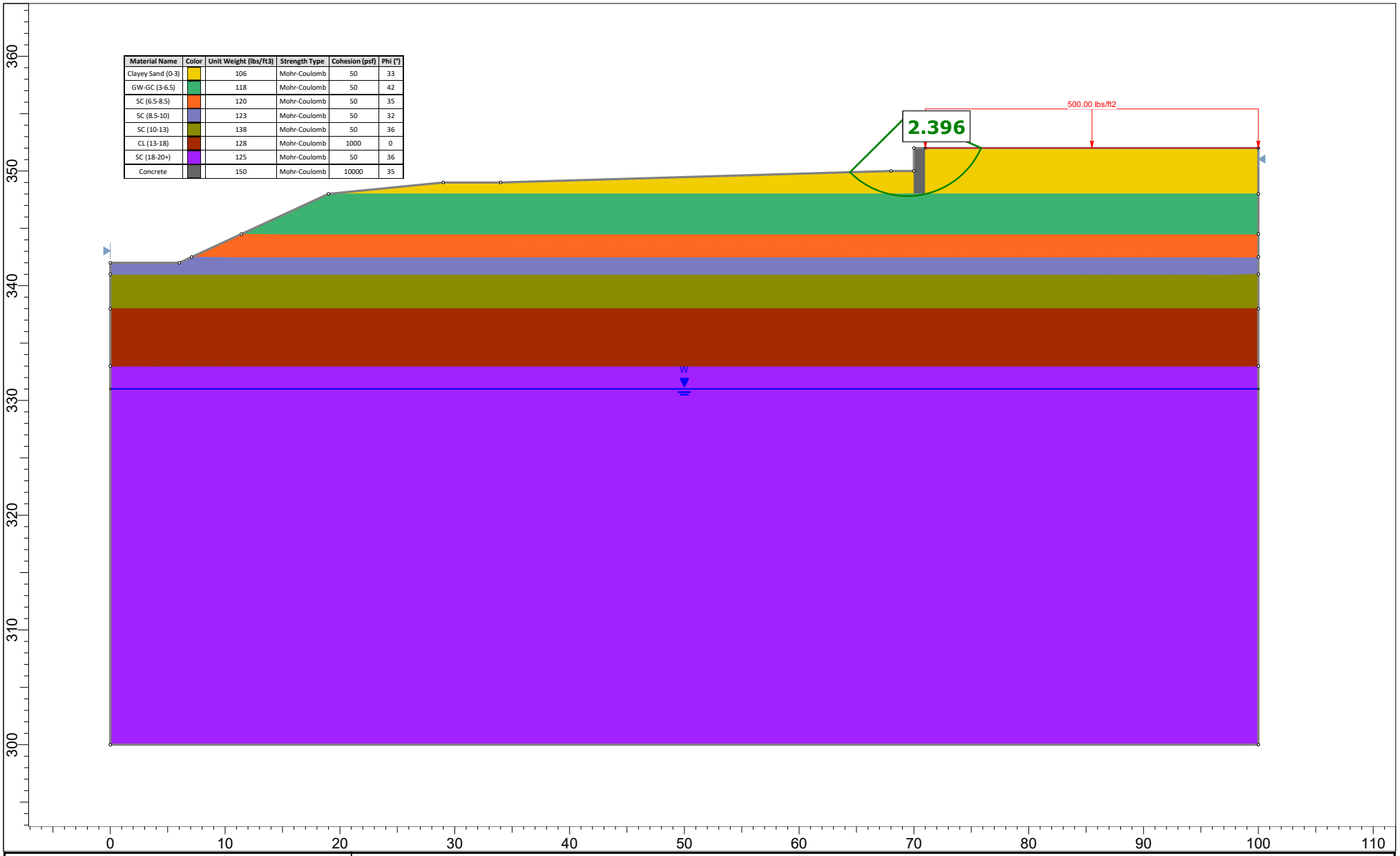


rocscience	*Project*	Diana Avenue Residential Development	
	Group	Bioretention SCM-1 (Boring EB-5)	*Scenario* Seismic Analysis without flood
	Drawn By	JDS/MFR	*Company* Cornerstone Earth Group
SLIDEINTERPRET 9.037	*Date*	January 2025	*File Name* EB-5 slope stability.slmd

Material Name	Color	Unit Weight (lbs/ft3)	Strength Type	Cohesion (psf)	Phi (°)	Water Surface	Hu Type	Hu	Ru Value
Clayey Sand (0-3)		106	Mohr-Coulomb	50	33	Piezometric Line 1	Custom	1	
GW-GC (3-6.5)		118	Mohr-Coulomb	50	42	Piezometric Line 1	Custom	1	
SC (6.5-8.5)		120	Mohr-Coulomb	50	35	None			0
SC (8.5-10)		123	Mohr-Coulomb	50	32	None			0
SC (10-13)		138	Mohr-Coulomb	50	36	None			0
CL (13-18)		128	Mohr-Coulomb	1000	0	None			0
SC (18-20+)		125	Mohr-Coulomb	50	36	Water Table	Custom	1	
Concrete		150	Mohr-Coulomb	10000	35	Water Table	Custom	1	



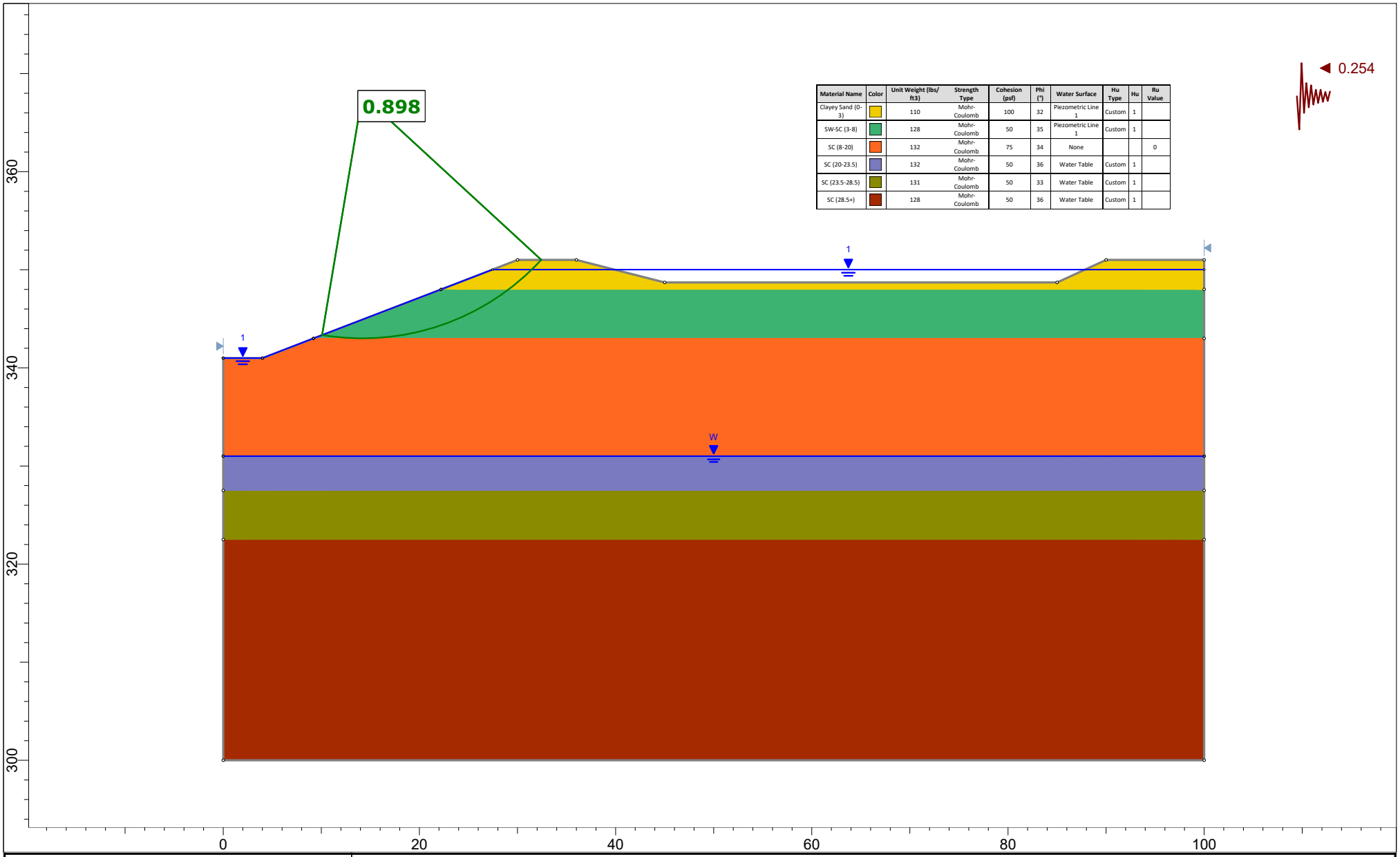
rocscience	*Project* Diana Avenue Residential Development		
	Group Bioretention SCM-1 (Boring EB-5)	*Scenario* Static Analysis - 100 Year Flood	
	Drawn By JDS/MFR	*Company* Cornerstone Earth Group	
SLIDEINTERPRET 9.037	*Date* January 2025	*File Name* EB-5 slope stability.slmd	



rocscience

SLIDEINTERPRET 9.037

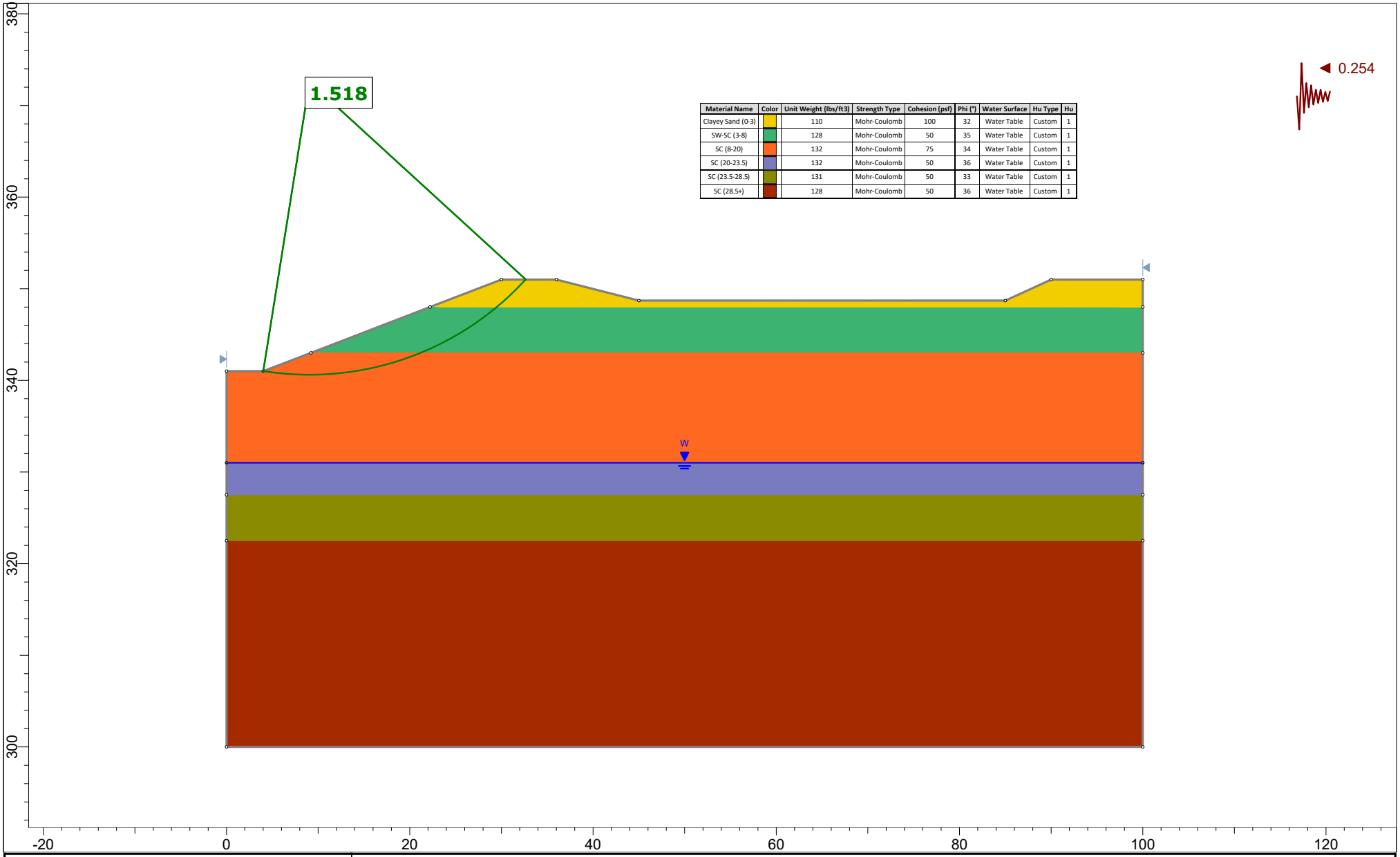
Project	Diana Avenue Residential Development		
Group	Bioretention SCM-1 (Boring EB-5)	*Scenario*	Static Analysis - Without Flood
Drawn By	JDS/MFR	*Company*	Cornerstone Earth Group
Date	January 2025	*File Name*	EB-5 slope stability.slmd



rocscience

SLIDEINTERPRET 9.037

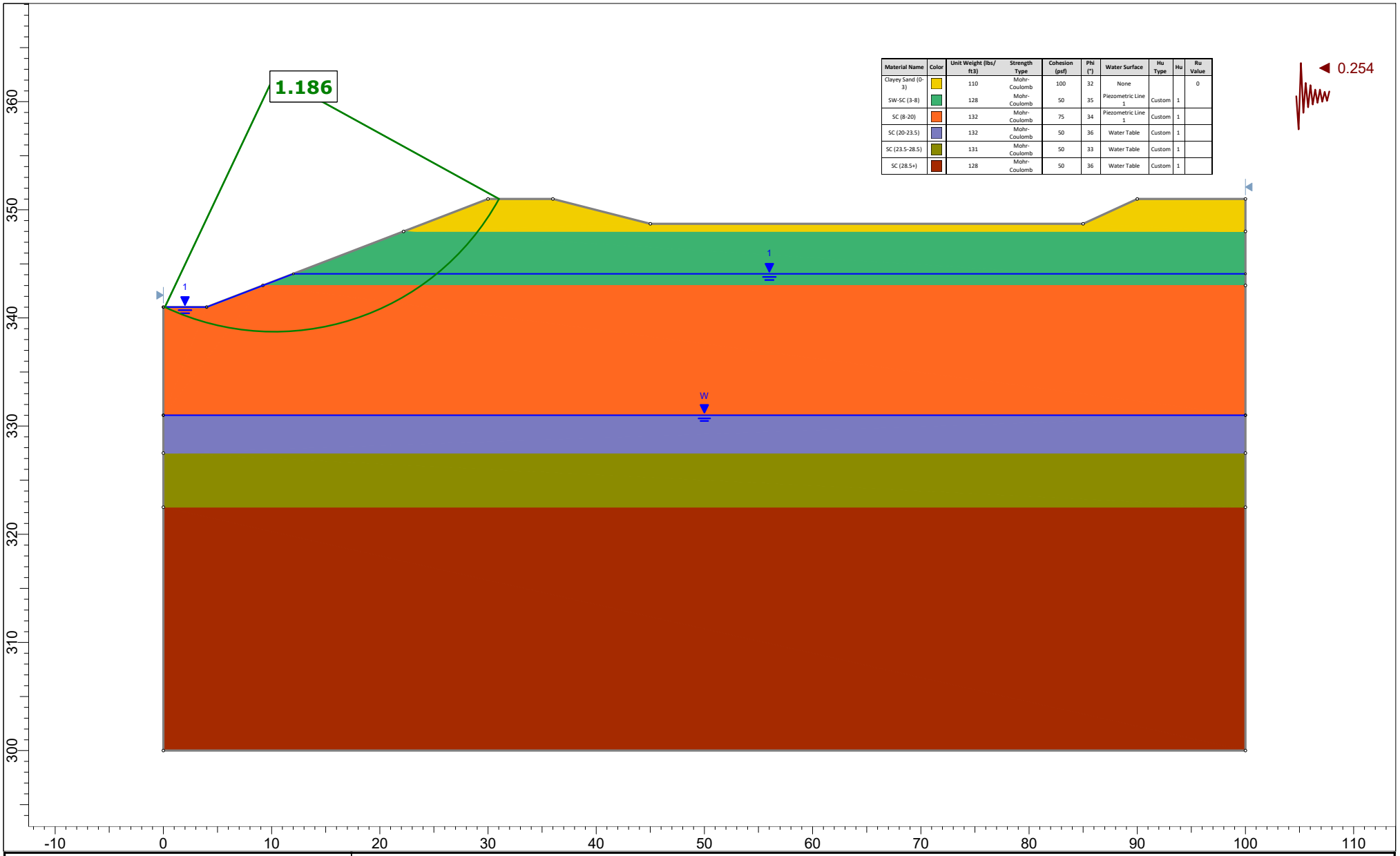
Project	Diana Avenue Residential Development		
Group	Bioretention SCM-2/3 (Boring EB-6)	*Scenario*	Seismic Analysis - 100 Year Flood
Drawn By	JDS/MFR	*Company*	Cornerstone Earth Group
Date	January 2025	*File Name*	EB-6 slope stability.slmd



rocscience

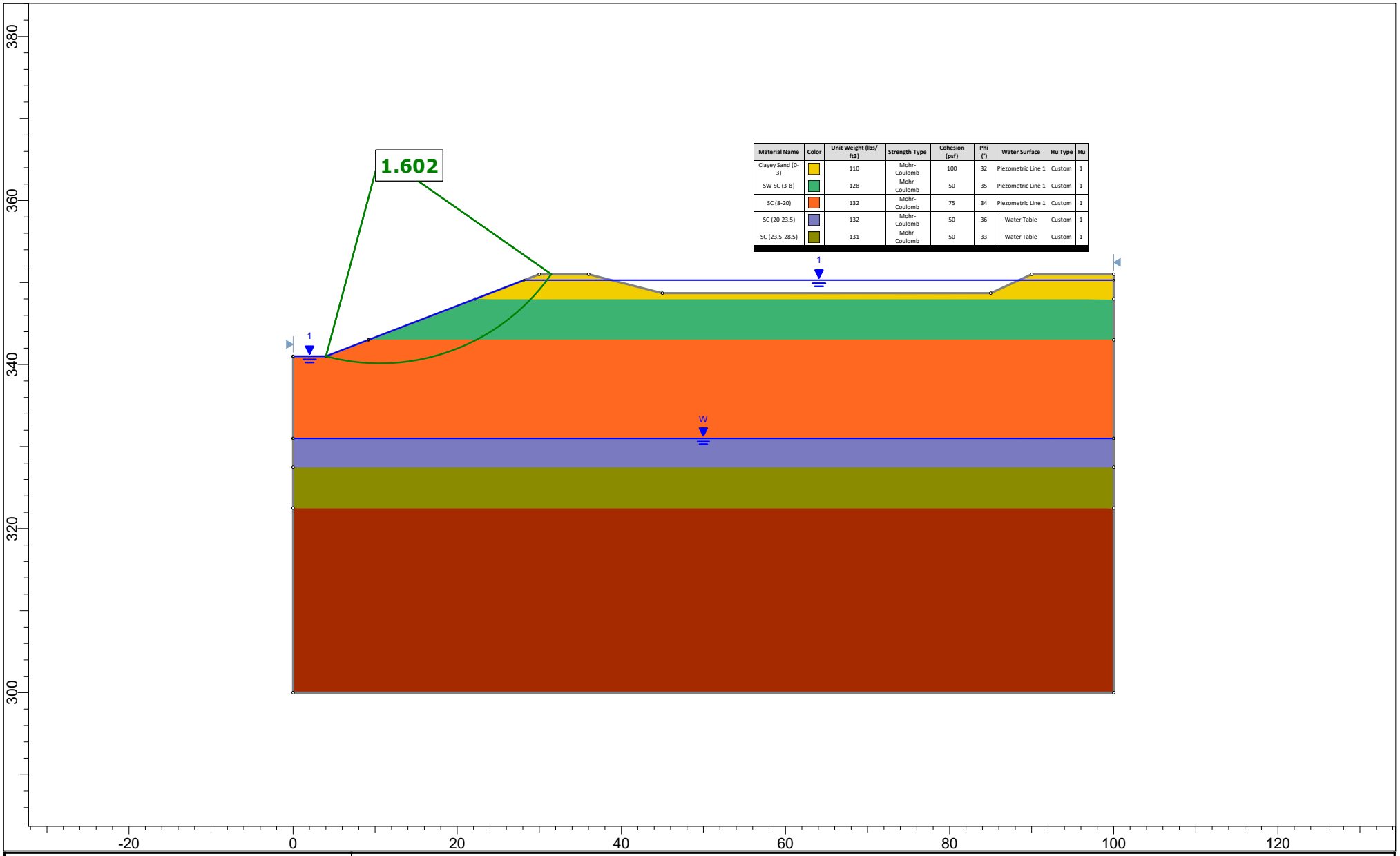
SLIDEINTERPRET 9.037

Project	Diana Avenue Residential Development		
Group	Bioretention SCM-2/3 (Boring EB-6)	*Scenario*	Seismic Analysis - Without Flood
Drawn By	JDS/MFR	*Company*	Cornerstone Earth Group
Date	January 2025	*File Name*	EB-6 slope stability.slmd



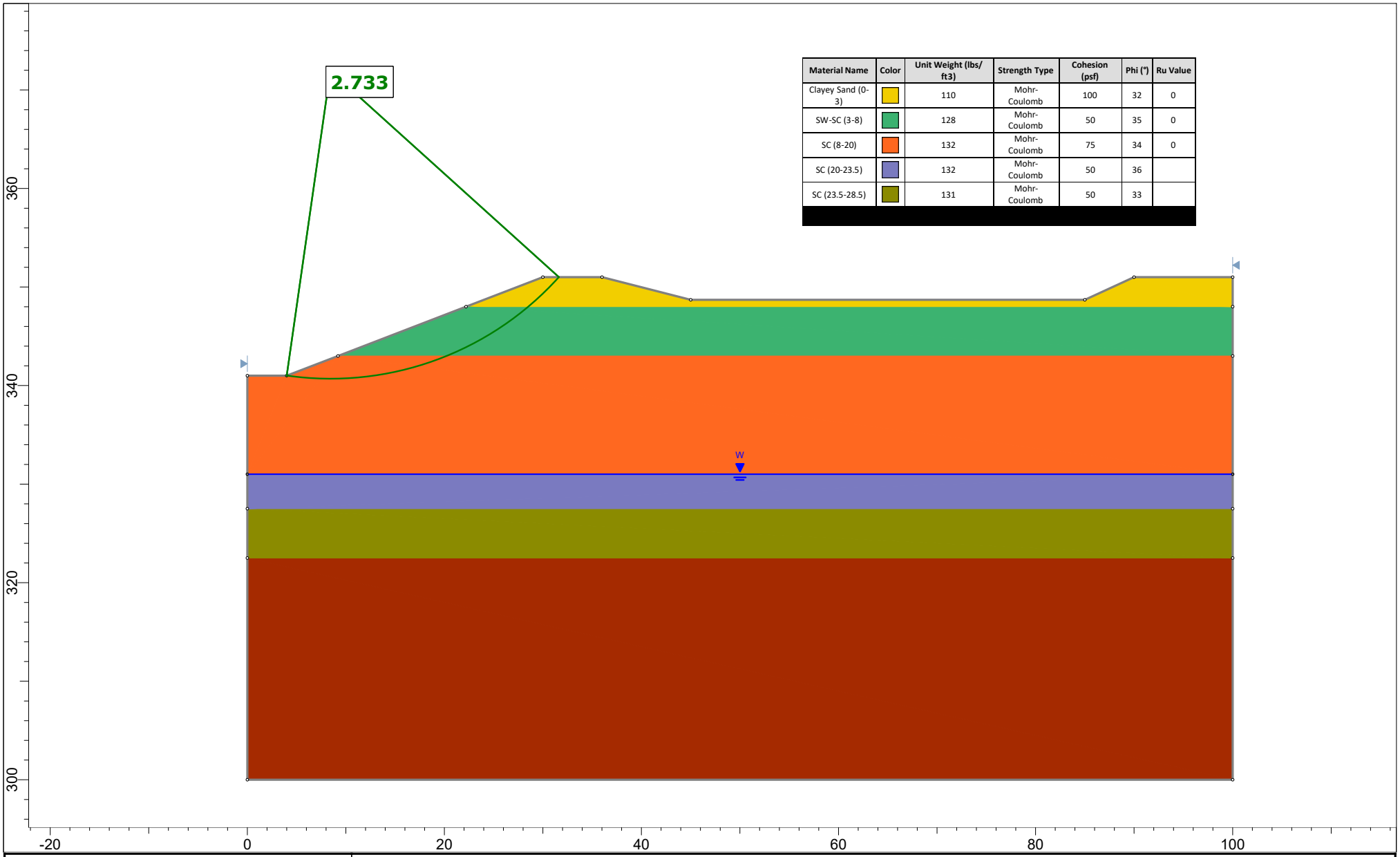
rocscience	Project: Diana Avenue Residential Development		
	Group: Bioretention SCM-2/3 (Boring EB-6)	Scenario: Seismic Analysis - 95 Year Flood	
	Drawn By: JDS/MFR	Company: Cornerstone Earth Group	
	Date: January 2025	File Name: EB-6 slope stability.slmd	

SLIDEINTERPRET 9.037



rocscience	*Project*	Diana Avenue Residential Development	
	Group	Bioretention SCM-2/3 (Boring EB-6)	*Scenario* Static Analysis - 100 Year Flood
	Drawn By	JDS/MFR	*Company* Cornerstone Earth Group
	Date	January 2025	*File Name* EB-6 slope stability.slmd

SLIDEINTERPRET 9.037



Material Name	Color	Unit Weight (lbs/ft3)	Strength Type	Cohesion (psf)	Phi (°)	Ru Value
Clayey Sand (0-3)		110	Mohr-Coulomb	100	32	0
SW-SC (3-8)		128	Mohr-Coulomb	50	35	0
SC (8-20)		132	Mohr-Coulomb	75	34	0
SC (20-23.5)		132	Mohr-Coulomb	50	36	
SC (23.5-28.5)		131	Mohr-Coulomb	50	33	

rocscience

SLIDEINTERPRET 9.037

Project	Diana Avenue Residential Development		
Group	Bioretention SCM-2/3 (Boring EB-6)	*Scenario*	Static Analysis - Without Flood
Drawn By	JDS/MFR	*Company*	Cornerstone Earth Group
Date	January 2025	*File Name*	EB-6 slope stability.slmd

Appendix E

Phase I Environmental Site Assessment

375 DIANA AVENUE
MORGAN HILL, CALIFORNIA

MODIFIED PHASE I ENVIRONMENTAL SITE ASSESSMENT

DRAFT

SUBMITTED TO
Mr. Jeff Aguilar
Valley Oak Partners, LLC
734 The Alameda
San Jose, CA 95126

PREPARED BY
ENGEO Incorporated

January 19, 2024

PROJECT NO.
24665.000.001

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ENGEO
Expect Excellence

Project No.
24665.000.001

January 19, 2024

Mr. Jeff Aguilar
Valley Oak Partners, LLC
734 The Alameda
San Jose, CA 95126

Subject: 375 Diana Avenue
Morgan Hill, California

MODIFIED PHASE I ENVIRONMENTAL SITE ASSESSMENT

Dear Mr. Aguilar:

ENGEO is pleased to present our modified phase I environmental site assessment of the subject property (Property) located in Morgan Hill, California. The attached report includes a description of the site assessment activities, along with ENGEO's findings, opinions, and conclusions regarding the Property.

ENGEO has the specific qualifications based on education, training, and experience to assess the nature, history, and setting of the Property, and has developed and performed all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312 and the American Society for Testing and Materials (ASTM) Practice E1527-21. We declare that, to the best of our professional knowledge and belief, the responsible charge for this study meets the definition of Environmental Professional as defined in Section 312.10 of 40 CFR Part 312 and ASTM E1527-21.

We are pleased to be of service to you on this project. If you have any questions concerning the contents of our report, please contact us.

Sincerely,

ENGEO Incorporated

Rian Montagh

Shawn Munger, CHG

rm/sm/ar

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APPENDIX I – Qualifications of Environmental Professional

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EXECUTIVE SUMMARY

ENGEO conducted a modified phase I environmental site assessment for the subject property located at 375 Diana Avenue in Morgan Hill, California (Property). The Property is approximately 5.3 acres in area and is identified by Assessor's Parcel Numbers (APNs) 726-12-001 and 726-12-004.

The Property consists of empty grassland with residential structures, garages, and sheds clustered on the southern half of the Property. Review of historical records indicates that the Property was used for orchards from at least 1939 to the 1970s.

This assessment included a review of local, state, tribal, and federal environmental record sources, standard historical sources, aerial photographs, fire insurance maps, and physical setting sources. A reconnaissance of the Property was completed to review site use and current conditions to check for the storage, use, production, or disposal of hazardous or potentially hazardous materials and to conduct written/oral interviews with persons knowledgeable about current and past site use.

The site reconnaissance and records review did not find documentation or physical evidence of soil, soil gas, or groundwater impairments associated with the use or past use of the Property. A review of regulatory databases maintained by county, State, tribal, and Federal agencies found no documentation of hazardous materials violations or discharge on the Property and did not identify contaminated facilities within the appropriate ASTM search distances that would reasonably be expected to impact the Property.

Review of historical records indicates that the Property had been used as agricultural land since at least 1939. Since the Property was historically used for agricultural activities, an agrichemical assessment of the surface soil was conducted to evaluate the potential for residual concentrations of organochlorine pesticides (OCPs), arsenic, and lead. In general conformance with Cal-EPA Department of Toxic Substances Control guidance, a total of 12 soil samples (AG-1 through AG-12) were recovered across the Property, which were analyzed for OCPs, lead, and arsenic. In addition, 7 samples (SS-1 through SS-7) were collected from the perimeters of the two oldest structures on the Property, which were constructed by the 1960s. These samples were also analyzed for OCPs, lead, and arsenic. The results indicate that metals were not an environmental concern for residential land use. OCPs were detected with one screening level exceedance.

Based on the findings of this assessment, no Recognized Environmental Conditions (RECs), no historical RECs, and no controlled RECs were identified for the Property.

Based on the review of regulatory databases and site reconnaissance, we present information on features of potential environmental concern or considered de minimis conditions that were either contained in the databases or observed on the Property. These features were not considered to be RECs. We briefly discuss each feature below.

- Sample SS-4, collected from the eastern side of the main residential structure, reported a chlordane concentration exceeding the San Francisco Bay Regional Water Quality Control Board (SFBRWQCB) environmental screening level (ESL) but below the Department of Toxic Substances (DTSC) residential screening level (SL) and Environmental Protection Agency (EPA) residential regional screening level (RSL).

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We have performed a modified phase I environmental site assessment in general conformance with the scope and limitations of ASTM E1527-21 and the standards and practices of the All Appropriate Inquiry – Final Rule (40 Code of Federal Regulations Part 312). Any exceptions to, or deletions from this practice are described in Section 8.1 of the report.

It is our opinion that the findings of this study are based on a sufficient level of information obtained during our contracted scope of services to render a conclusion as to whether additional appropriate investigation is required to identify the presence or likely presence of a REC. The following data gap was identified.

- The buildings were locked and inaccessible during the site reconnaissance.

The data gap identified during this process does not affect the conclusions as to the presence or lack of presence of RECs at the Property.

This assessment has revealed no evidence of RECs in connection with the Property. We recommend the following.

- Although the chlordane exceedance at Sample SS-4 only exceeded the SFBRWQCB ESL and did not exceed the DTSC residential SL or the EPA residential RSL, to be conservative, we recommend future excavation and disposal of the impacted soil. Additional sampling could be conducted at the location of SS-4 to further define the extent of impact. The excavated soil should be stockpiled and sampled before disposal.

Please note, the findings from this report are valid until December 8, 2024, and updates of portions of the assessment may be necessary after June 8, 2024.

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1.0 INTRODUCTION

1.1 PURPOSE OF MODIFIED PHASE I ENVIRONMENTAL SITE ASSESSMENT

This assessment was performed at the request of Valley Oak Partners, LLC for the purpose of environmental due diligence during property acquisition. The objective of this modified phase I environmental site assessment is to identify Recognized Environmental Conditions (RECs) associated with the Property. As defined in the ASTM Standard Practice E1527-21, an REC is "(1) the presence of hazardous substances or petroleum products in, on, or at the subject property due to a release to the environment; (2) the likely presence of hazardous substances or petroleum products in, on, or at the subject property due to a release or likely release to the environment; or (3) the presence of hazardous substances or petroleum products in, on, or at the subject property under conditions that pose a material threat of a future release to the environment."

1.2 DETAILED SCOPE OF SERVICES

The scope of services performed included the following:

- A review of publicly available and practicably reviewable standard local, state, tribal, and federal environmental record sources.
- A review of publicly available and practicably reviewable standard historical sources, aerial photographs, fire insurance maps, and physical setting sources.
- A reconnaissance of the Property to review site use and current conditions. The reconnaissance was conducted to check for the storage, use, production, or disposal of hazardous or potentially hazardous materials.
- Written/oral interviews with owners/occupants and public sector officials.
- An agrichemical impact assessment of soil at the Property.
- Preparation of this report with our findings, opinions, and conclusions.

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1.3 SITE LOCATION AND DESCRIPTION

The Property is located at 375 Diana Avenue, Morgan Hill (Figures 1 and 2). The approximately 5.3-acre Property is identified as APNs 726-12-001 and 726-12-004 (Figure 3) and is currently occupied by empty grassland and residential structures, garages, and sheds.

1.4 CURRENT USE OF PROPERTY AND ADJOINING PROPERTIES

The Property is zoned as Residential Attached Medium Density. Based on a review of current records and our site reconnaissance, the adjoining site uses are summarized below.

TABLE 1.4-1: Adjoining Site Uses

DIRECTION	SITE USE
North	Residential
South	Butterfield Boulevard, Diana Avenue, residential, and commercial
East	Diana Avenue and residential
West	Butterfield Boulevard and commercial

1.5 SITE AND VICINITY CHARACTERISTICS

According to published topographic maps, site grades at the Property range from approximately Elevation 350 feet (NAVD83) in the southwest to approximately Elevation 354 feet to the northeast. Review of the Geologic Map of the Morgan Hill Quadrangle, Santa Clara County, California Geologic Map (Dibblee, 2005) found that the Property is underlain by surficial sediments (Qa) consisting of alluvial gravel, sand, and clay of valleys.

Geocheck – Physical Setting Source Summary of the Environmental Data Resources, Inc. (EDR) report (Appendix A) indicated no Federal United States Geological Survey (USGS) and 196 State wells located within 1 mile of the Property. Well Number T0608519223 - MW-24B is mapped approximately 0.35 miles south-southwest of the Property and 13 groundwater level measurements are reported for this well. The measurements ranged from 19.07 to 99 feet below ground surface.

We reviewed the Department of Water Resources Online Water Data Library for depth to water in the vicinity of the Property. The website identified three wells within 1 mile of the Property.

We reviewed EnviroStor, a website maintained by the State of California Department of Toxic Substances Control, and GeoTracker, a website maintained by the State of California Water Resources Control Board, for nearby facilities with records that include depth-to-groundwater measurements. The following information was obtained regarding local groundwater conditions.

TABLE 1.5-1: Local Groundwater Conditions

PROXIMITY TO PROPERTY	REPORTED DEPTH TO GROUNDWATER	REPORTED GROUNDWATER FLOW DIRECTION
1,400 feet east-southeast	20 to 30 feet	West
1,600 feet west-northwest	28 to 30 feet	Not reported
1,700 feet west-northwest	21 to 32 feet	Not reported

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The site-specific depth to groundwater and direction of groundwater flow were not determined as part of this assessment. Fluctuations in groundwater levels may occur seasonally and over a period of years due to variations in precipitation, temperature, irrigation, and other factors.

We reviewed the Department of Conservation, Geologic Energy Management (CalGEM), website and map database to determine if any historic oil or gas wells were located within the Property. No oil or gas wells were mapped within 1 mile of the Property.

We reviewed the National Pipeline Mapping System (NPMS) public viewer website for information about petroleum, natural gas, or hazardous liquid storage, processing, or transmission facilities in the vicinity of the Property. No facilities and one pipeline were mapped within ¼ mile of the Property. The pipeline is adjacent southeast of the Property on Diana Avenue. It actively carries natural gas and is operated by Pacific Gas & Electric Co. No incidents are mapped near the Property.

1.6 INDOOR AIR QUALITY

An evaluation of indoor air quality, mold, or radon was not included as part of the contracted scope of services. The California Department of Public Health has conducted studies of radon risks throughout the state, sorted by zip code. Results of the studies indicate that 35 tests were conducted within the Property zip code, with two tests exceeding the current EPA action level of 4 picocuries per liter (pCi/L)[1].

In accordance with ASTM E2600-15 (Tier 1) (*Standard Guide for Vapor Encroachment Screening on Property Involved in Real Estate Transactions*); there is one potential petroleum hydrocarbon sources for vapor intrusion within ⅒ mile of the Property and one volatile organic compound (VOCs) sources within ⅓ mile of the Property. See Section 2.3 for more details.

2.0 RECORDS REVIEW

2.1 PROPERTY RECORDS

2.1.1 Title Report/Ownership

The Title Report lists recorded land title detail, ownership fees, leases, land contracts, easements, liens, deficiencies, and other encumbrances attached to or recorded against a subject property. Laws and regulations pertaining to land trusts vary from state to state and the detail of information presented in a Title Report can vary greatly by jurisdiction. As a result, ENGEO utilizes a Title Report, when provided to us, as a supplement to other historical record sources. ENGEO assumes that any environmental lien, activity use limitations (AUL), and/or institutional controls for the Property are noted in the Preliminary Title Report.

A Preliminary Title Report for the Property, prepared by Chicago Title Company and dated December 8, 2023, was provided for our review. The Property title is vested in *Hortense Gaitan, Trustee of the Gaitan 2021 Living Trust dated February 18, 2021*.

No references to environmental liens, deed restrictions, or other potential environmental issues were noted. This report is included in Appendix B.

2.1.2 Environmental Liens and Activity Use Limitations

The Preliminary Title Report did not reference environmental liens, deed restrictions, or other potential environmental issues. In addition, a questionnaire completed by the Client or authorized representative indicated that they are not aware of any environmental cleanup liens recorded against the Property.

We reviewed two engineering control (EC) and institutional control (IC) registries: EnviroStor, a website maintained by the State of California Department of Toxic Substances Control, and GeoTracker, a website maintained by the State of California Water Resources Control Board, for environmental liens or AULs associated with the Property. No records of environmental liens or AULs were noted.

[1] California Department of Public Health – Radon Program– (https://www.cdph.ca.gov/Programs/CEH/DRSEM/CDPH%20Document%20Library/EMB/Radon/Radon%20Test%20Results.pdf).

2.2 HISTORICAL RECORD SOURCES

The purpose of the historical record review is to develop a history of the previous uses or occupancies of the Property and surrounding areas to identify those uses or occupancies that are likely to have led to recognized environmental conditions on the Property.

2.2.1 Historical Topographic Maps/Aerial Photographs/Sanborn Maps

Historical USGS topographic maps and aerial photographs were reviewed to determine if discernible changes pertaining to the Property had been recorded. EDR provided the following maps and photographs, presented in Appendices C and D. A Sanborn fire insurance map search did not identify maps for the Property; the search report is presented in Appendix E.

TABLE 2.2.1-1: Historical Review Summary

HISTORICAL MAP/PHOTOGRAPH	YEARS
Topographic Maps	1917, 1939, 1955, 1968, 1973, 1980, 1993, 1996, 2012, 2015, 2018, 2021
Aerial Photographs	1939, 1940, 1948, 1950, 1956, 1963, 1968, 1970, 1974, 1982, 1998, 2006, 2009, 2012, 2016, 2020
Sanborn Maps	N/A

Topographic maps from 1917 indicate that Diana Avenue and the surrounding area was developed with roads and structures. The 1939 maps and aerials depict orchards on the Property. By 1955, a structure had been built in the northeastern portion of the Property, and by 1963, a shed west of the main structure had been built. By 1968, a second shed northwest of the main structure had been constructed. By 1974, this second shed seems to have been demolished and the orchards appear to be less active. A 1998 aerial shows a third large structure located near the main structure, and the neighboring sites are residential, except to the southwest. By 2016, a fourth large building appears in the aerials adjacent to the existing structures.

2.2.2 City Directory

City Directories, published since the 18th century for major towns and cities, list the name of the resident or business associated with each address. A city directory search conducted by EDR is located in Appendix F.

TABLE 2.2.2-1: City Directory

YEAR	LISTINGS
2014	GAITAN, ANTONIO G
2010	GAITAN, ANTONIO G
2005	GAITAN, ANTONIO T
2000	GAITAN, ANTONIO

Other listings in the vicinity of the Property are mostly associated with residential uses.

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2.3 ENVIRONMENTAL RECORD SOURCES

EDR performed a search of federal, tribal, state, and local databases regarding the Property and nearby properties. Details regarding the databases searched by EDR are provided in Appendix A. A list of the facilities documented by EDR within the approximate minimum search distance of the Property is provided below.

2.3.1 Environmental Records

2.3.1.1 Property

The Property is not listed on Environmental Record source databases.

2.3.1.2 Other Properties

The following databases include facilities listed within the appropriate ASTM search distances of the Property on Environmental Records sources.

TABLE 2.3.1.2-1: Environmental Database Listings for Nearby Properties

FACILITY	STREET	DATABASES
INFINEON TECHNOLOGIES AMERICAS, MADRONE LANDFILL, QUEST MICROWAVE INC		PFAS ECHO
VERIZON WIRELESS NOB HILL	100 E 3RD ST	CUPA LISTINGS, CERS
RAAF LLC	120 MAST ST	HAZNET, ENVIROSTOR, HWTS
ASSOCIATED CONCRETE	130 E. MAIN AVENUE	HIST UST, LUST, CORTESE, CERS, CUPA LISTINGS, CA FID UST, SWEEPS UST, UST
REDTREE PROPERTIES	140 SAN PEDRO AVE	CUPA LISTINGS, HAZNET, LUST, HIST LUST, CORTESE, HIST CORTESE, NPDES, CIWQS, CERS, HWTS
HENDRIX PROPERTY	150 DUNNE	HIST CORTESE
UNAXIS MATERIALS, INC./CONTRAVES, INC.	16035 VINEYARD BOULEVARD	CUPA LISTINGS, ENVIROSTOR, CERS, CERS HAZ WASTE
EDWARD J BECKER DDS DENTAL GRP	16130 MEDICAL CENTER DR 110	CUPA LISTINGS
BAS PRECISION SHEET METAL, INC.	16170 JAQUELINE CT	ENVIROSTOR
ASCO AIR CONDITIONING	16250 RAILROAD AVE.	CUPA LISTINGS, ENVIROSTOR
EMTEC ENGINEERING	16840 JOLEEN WY	CPS-SLIC, CUPA LISTINGS, DEED, EMI, HAZNET, NPDES, CERS, CERS HAZ WASTE, HWTS

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FACILITY	STREET	DATABASES
VILLA CIOLINO	16873 MONTEREY ROAD	LUST, CORTESE, CERS
D AND A SPRAY	16890 CHURCH ST BLDG 12	RCRA-SQG, FINDS, ECHO, HIST CORTESE
DON LOVE EXXON	16990 MONTEREY RD	LUST, HIST LUST, CORTESE, CERS
MORGAN HILL DISCOUNT CLEANERS	16990 MONTEREY ST STE 130	DRYCLEANERS, LUST, HIST CORTESE
BP FACILITY #11224	16995 MONTEREY RD	LUST, HIST LUST, CUPA LISTINGS, CORTESE, HIST CORTESE, CERS
UNOCAL #6169	17015 MONTEREY ST	CUPA LISTINGS, EMI, LUST, HIST LUST, CORTESE, CERS
MH LUMBERYARD 49, LLC, THE LUMBER YARD, HALE LUMBER CO	17020 DEPOT STREET	RCRA NONGEN / NLR, CA FID UST, CUPA LISTINGS, SWEEPS UST, NPDES, CIWQS, HWTS, HIST UST
DON LOVE'S AUTO SERVICE, LOVE/AUTO SERVICE	17090 MONTEREY ST	HIST UST, CA FID UST, SWEEPS UST, LUST, HIST LUST, CORTESE, HIST CORTESE, CERS
EMF MOTORSPORTS, MONTEREY AUTO SERVICE OF MORGAN HILL,INC, MONTEREY AUTO SVC OF MORGAN HILL	17165 DEPOT ST	RCRA NONGEN / NLR, CUPA LISTINGS, HAZNET, HWTS, CUPA LISTINGS
MARK AND SUZANNE MERZ	17235 CALLE MAZATAN	RCRA NONGEN / NLR
COUNTY OF SANTA CLARA FAF MORGAN HILL JUSTICE CENTER	17275 BUTTERFIELD BL	CUPA LISTINGS
SIMPLE BEVERAGES	17290 MONTEREY ST.	LUST, CORTESE, CERS
THAO VU	17305 CALLE MAZATAN	RCRA NONGEN / NLR
VACANT LOT	17305 MONTEREY HWY	LUST, CORTESE, HIST CORTESE, CERS
CITY OF MORGAN HILL	17454 DEPOT STREET	RCRA NONGEN / NLR
MILLHOUSE MALL	17485 MONTEREY RD	LUST, HIST LUST, CORTESE, HIST CORTESE, CERS
ISAACSON GRAIN CO INC, ISAACSON GRAIN CO., ISAACSON GRAIN CO. INC., ISAACSON GRAIN COMPANY	17500 DEPOT ST	CUPA LISTINGS, UST, CA FID UST, HIST UST, SWEEPS UST, LUST, HIST LUST, CORTESE, HIST CORTESE, CERS
ARRIVEE SALES GROUP INC DBA BIKE THERAPY, BIKE THERAPY	17540 DEPOT ST	RCRA NONGEN / NLR, CUPA LISTINGS, CERS HAZ WASTE, HWTS
GUNTER BROTHERS, GUNTER BROS FEED STORE INC, GUNTER BROTHER'S FEEDS	17620 MONTEREY HWY	LUST, HIST LUST, HAZNET, CORTESE, HWTS, HIST UST, CORTESE, HIST CORTESE, ENF, CERS

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FACILITY	STREET	DATABASES
CASTLE A.L. INC	190 MAST	ENVIROSTOR, HIST CORTESE
IA 091313 TERRACINA APARTMENTS	230 E DUNNE AV	CUPA LISTINGS
MORGAN HILL COURTHOUSE, 43-N1, JCC	301 DIANA AVENUE	CUPA LISTINGS, HWTS, RCRA NONGEN / NLR
FRANK V. PAYNE	310 DIANA AVE	CA FID UST, SWEEPS UST, HIST UST
SAFEWAY 1455 11	340 E DUNNE AVE	RCRA-SQG, FINDS, ECHO
HOWARD WEICHERT	420 E DUNNE AVE	CA FID UST, SWEEPS UST, HIST UST
TED KYONO	505 E DUNNE	CA FID UST, SWEEPS UST, HIST UST
TRI-PALLETT, INC. (OMNIYIG)	60 EAST CENTRAL AVE	HIST CORTESE, ENF, CIWQS, CERS, WDR, LUST, HIST LUST, CORTESE
ESPERANZA SUBDIVISION	665 DIANA AVENUE	CPS-SLIC, CA FID UST, HAZNET, SWEEPS UST, NPDES, CIWQS, CERS, HWTS
MASON ELECTRIC (RHINO GYM), RHINO GYM	70 E 4TH ST	LUST, HIST LUST, CORTESE, CERS, HIST CORTESE
EAST DUNNE SHELL #140	810 E DUNNE AV	CUPA LISTINGS, LUST, CERS
SHELL	810 E DUNNE AVE	HIST LUST, CORTESE
CHEVRON	825 DUNNE	CHMIRS, HIST CORTESE
CHEVRON STATION #92060	825 E DUNNE AV	HIST UST, CUPA LISTINGS, LUST, CHMIRS, CERS, CERS TANKS, CERS HAZ WASTE
CHEVRON #9-2060	825 E DUNNE AVE	LUST, HIST LUST, CORTESE, CERS
BARRETT AVENUE ELEMENTARY	895 BARRETT AVENUE	SCH, ENVIROSTOR
SUNSWEET DRYERS	91 4TH ST E	LUST
SUNSWEET DRYERS	91 E THIRD ST	HIST UST
SUNSWEET	91 EAST 4TH STREET	ENVIROSTOR
CIENEGA TRUST PROPERTY, RALPH CIENEGA	95 E CENTRAL AVE	LUST, HIST LUST, CORTESE, CA FID UST, HIST UST, LUST, SWEEPS UST, CERS
CITY VENTURES	95 EAST 3RD ST	RCRA-SQG
RYAN PROPERTIES	E. MAIN AVE. & EAST LANE	ENVIROSTOR
JOLEEN WAY GROUNDWATER REMEDIATION	S. END OF JOLEEN WAY	ENVIROSTOR

The Frank V. Payne EDR site is listed as a historic underground storage tank (UST) site. Although less than 0.1 miles away from the Property, it is not expected to pose a threat as no leaks were detected and the tank use is listed as empty.

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Morgan Hill Discount Cleaners is an active dry cleaner about 0.3 miles southwest of the Property. No cleanup actions or violations are documented for the facility. Records indicate that the site used to be a gas station with USTs. The UST cleanup obtained case closure in 1994. This site would not pose a risk to the subject Property.

Sunsweet Dryers was a fruit-drying company about 0.2 miles southwest of the Property. Gasoline was detected in soil from a leaking UST (LUST) and a hydraulic fluid release. In 1986, groundwater was non-detect for contaminants of concern. In addition, after excavation of the tank area and pump area, detections ranged from non-detect to 1,160 parts per million (ppm) for contaminants of concern. This site would not pose a risk to the subject Property.

Mason Electric (Rhino Gym), approximately 0.2 mile southwest of the Property, had a UST on site that was filled with slurry and left in place. The LUST case was closed in 1996 due to no contaminants of concern detected in groundwater, even though the soil remained impacted. This site would not pose a risk to the subject Property.

Associated Concrete is located about 0.2 miles northwest of the Property. It is listed as a LUST case, which was opened in 2010 and closed in 2013. At the time of closure, 1,800 ppm of total petroleum hydrocarbons as diesel (TPH-d) remained in soil and 16,000 parts per billion (ppb) of TPH-d remained in groundwater. The groundwater contamination did not appear to be migrating, as step-out groundwater samples taken from around the UST location did not contain TPH-d. In 2014, during redevelopment of the site, further excavation occurred to address the stained soil observed during construction. A confirmation sample in the sidewall of the excavation contained 1.8 ppm of TPH-d. This site would not pose a risk to the subject Property.

Based on the distances to the identified database sites, regional topographic gradient, and the EDR findings, it is unlikely that the above-stated database sites pose an environmental risk to the Property. One of the two properties that are on the “Orphan Summary” list appears to be located beyond the ASTM recommended radius search criteria. The other is Vineyard Business Park, which is identified on GeoTracker as an open cleanup case about 0.8 miles south of the Property. It is not expected to impact the Property.

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2.4 REGULATORY AGENCY FILES AND RECORDS

The following agencies were contacted pertaining to possible past development and/or activity at the Property.

TABLE 2.4-1: Regulatory Agency Records

NAME OF AGENCY	RECORDS REVIEWED
City of Morgan Hill	We contacted the City of Morgan Hill on December 8, 2023, regarding environmental records for the Property. The Building and Planning Departments indicated they have no files pertaining to the Property.
Cal Fire	We contacted Cal Fire on December 8, 2023, regarding environmental records for the Property. Cal Fire indicated they have no files pertaining to the Property
Santa Clara County Department of Environmental Health	We contacted the Santa Clara County Department of Environmental Health on December 8, 2023, regarding environmental records for the Property. The Santa Clara County Department of Environmental Health indicated they have no files pertaining to the Property.

NAME OF AGENCY	RECORDS REVIEWED
Santa Clara County Fire Department	We contacted the Santa Clara County Fire Department on December 8, 2023, regarding environmental records for the Property. The Santa Clara County Fire Department indicated that Morgan Hill is not in their jurisdiction.
Santa Clara County Assessor's Office	We reviewed online parcel maps provided by the Santa Clara County Assessor's Office. The property boundary and APNs provided in the EDR radius map report are consistent with the online parcel maps.
Santa Clara County Valley Water Well Information Map	We viewed the Valley Water Well Information Map for wells mapped on the Property. No wells were mapped on the Property.
California State Water Resources Control Board	We reviewed GeoTracker, the website maintained by the State Water Resources Control Board, for files pertaining to the Property. No listings were found for the Property.
Department of Toxic Substances Control (DTSC)	We reviewed EnviroStor, the website maintained by DTSC, for files pertaining to the Property. No listings were found for the Property.

3.0 SITE RECONNAISSANCE

3.1 METHODOLOGY

We conducted a reconnaissance of the Property on December 26, 2023. The reconnaissance was performed by Rian Montagh, a Staff Engineer of ENGEO. The Property was viewed for hazardous materials storage, superficial staining or discoloration, debris, stressed vegetation, or other conditions that may be indicative of potential sources of soil or groundwater contamination. The Property was also checked for evidence of fill/ventilation pipes, ground subsidence, or other evidence of existing or preexisting underground storage tanks. Photographs taken during the site reconnaissance are presented in Figures 4A through 4C.

The interiors of the residential structures were not viewed during our site reconnaissance.

3.2 GENERAL SITE SETTING

The Property consists of a grouping of residential structures including a house, garages, and storage sheds. The Property was accessible from a gate on Diana Avenue to the southeast. Domestic water service appears to be provided and Tesla solar storage batteries were observed on the house. The adjoining site uses were Diana Avenue, Butterfield Boulevard, and residential areas.

3.3 EXTERIOR OBSERVATIONS

The following table summarizes our observations during the reconnaissance.

TABLE 3.3-1: Exterior Site Observations

FEATURE TYPE	OBSERVATIONS
Structures	A grouping of structures in the southern portion of the Property were observed during the site reconnaissance. They included residential, storage, and garage structures.

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FEATURE TYPE	OBSERVATIONS
Hazardous Substances and Petroleum Products in Connection with Identified Uses	Gasoline and propane containers were observed within the Property during the site reconnaissance. They appeared to be in good condition and likely used for lawn mowers and heating lamps.
Storage Tanks (underground and above-ground)	No above-ground storage tanks or evidence of existing underground storage tanks were observed during the site reconnaissance.
Roads	Diana Avenue borders the Property in the southeast and Butterfield Boulevard borders the Property in the southwest.
Strong, Pungent, or Noxious Odors and Their Sources	No odors indicative of hazardous materials or petroleum material impacts were noted at the time of the reconnaissance.
Standing Surface Water and Pools or Sumps Containing Liquids Likely to be Hazardous Substances or Petroleum Products	No pools of potentially hazardous liquid were observed within the Property at the time of our reconnaissance.
Drums, Totes, and Intermediate Bulk Containers	No drums were observed on the Property at the time of the reconnaissance.
Polychlorinated Biphenyls (PCBs) Containing Equipment	No potential PCB-containing equipment, including transformers, were observed within the Property during our site reconnaissance.
Hazardous Substances and Petroleum Product Containers	Gasoline and propane containers were observed within the Property at the time of our reconnaissance.
Stains or Corrosion on Floors, Walls, or Ceilings (Except Water Staining)	No stains or corrosion on floors, walls, or ceilings were observed on the Property at the time of our reconnaissance.
Drains and Sumps	No drains or sumps were observed within the Property at the time of our reconnaissance.
Pits, Ponds, and Lagoons	No pits, ponds, or lagoons were observed within the Property at the time of our reconnaissance.
Stained Soil/Pavement	No stained soil or pavement was observed within the Property at the time of our reconnaissance.
Stressed Vegetation	No signs of stressed vegetation were observed on the Property at the time of our reconnaissance.
Solid Waste/Debris	No disposal of solid waste was observed at the Property.
Stockpiles/Fill Material	No stockpiles or fill material were observed on the Property during the reconnaissance.
Wastewater	No wastewater conveyance systems were observed at the Property during the reconnaissance.
Wells	No wells were found within the Property during our site reconnaissance.
Septic Systems	No septic systems were found within the Property during our site reconnaissance.

3.4 INTERIOR OBSERVATIONS

The interiors of the structures were not observed during our site reconnaissance.

3.5 ASBESTOS, LEAD, AND PCB-CONTAINING MATERIALS

An asbestos, lead, and PCB-containing building material survey was not conducted as part of this assessment. Given the age of the existing structures, it is conceivable that asbestos, lead, and PCB-containing materials may exist within the structures.

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4.0 INTERVIEWS

Mr. Jeff Aguilar completed a Client-based environmental site questionnaire pertaining to applicable environmental information regarding the Property on December 29, 2023. In the questionnaire, Mr. Aguilar did not identify potentially environmentally related issues with the Property. Mr. Aguilar is unaware of commonly known, reasonably ascertainable, or specialized knowledge indicative of releases or threatened releases that is material to the potential presence of RECs.

Mr. Jeff Aguilar has indicated that the purchase price of the Property is reflective of fair market value of the Property. The questionnaire is presented in its entirety in Appendix G.

Mr. Gary Palacios and Mr. Darren Gaitan completed a Key Site Manager-related environmental site questionnaire by phone pertaining to applicable environmental information regarding the Property on January 15, 2024. In the questionnaire, Mr. Palacios and Mr. Gaitan did not identify potentially environmentally related issues with the Property.

Mr. Gary Palacios and Mr. Darren Gaitan were unaware of commonly known, reasonably ascertainable, or specialized knowledge indicative of releases or threatened releases that is material to the potential presence of Recognized Environmental Conditions. The questionnaire is presented in its entirety in Appendix G.

5.0 AGRICHEMICAL SOIL ASSESSMENT

Review of historical records indicates that the Property has been used as agricultural land since at least the 1930s. Due to historical agricultural activities and historic structures, an assessment of the surface soil was conducted to evaluate the potential for residual concentrations of OCPs, arsenic, and lead.

5.1 SOIL SAMPLING

Soil samples were collected on December 26, 2023, from 12 locations across the Property (AG-1 through AG-12) and 7 locations at the perimeters of the two oldest structures (SS-1 through SS-7) (Figure 2). Soil samples were collected from 0 to 6 inches below the surface of the existing grade. The soil samples were collected using 8-ounce, pre-cleaned glass jars. Upon collection of samples, a sample label was placed on the sample, including a unique sample number, sample location, and time/date collected. The soil samples were submitted under documented chain-of-custody to Torrent Laboratories, Inc. The following analyses were performed.

- Four 3-point composite samples from across the Property were analyzed for OCPs by EPA Method 8081 (AG-1 to AG-3, AG-4 to AG-6, AG-7 to AG-9, and AG-10 to AG-12).
- Two composite samples from the perimeters of the two oldest structures on the Property were analyzed for OCPs by EPA Method 8081 (SS-1 to SS-4 and SS-5 to SS-7).
- One discrete sample from each composite (total of six samples) were analyzed for arsenic by EPA Method 6020.
- One sample from each composite and all the samples from the perimeters of the old structures (total of 11 samples) were analyzed discretely for lead by EPA Method 6020.

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5.1 ANALYTICAL RESULTS

Lead and arsenic were detected above the laboratory limits in all the samples analyzed. However, arsenic was not detected above the naturally occurring background concentration of 11 milligrams per kilogram (mg/kg)[2] in any of the samples, and lead was not detected above the San Francisco Bay Regional Water Quality Control Board (SFBRWQCB) residential environmental screening level (ESL) of 80 mg/kg[3].

Several OCPs were detected in composite Samples SS-1 to SS-4, SS-5 to SS-7, and AG-4 to AG-6. Of these detections, only chlordane exceeded the San Francisco Bay Regional Water Quality Control Board (SFBRWQCB) residential ESL of 0.48 mg/kg in SS-1 to SS-4 (0.881 mg/kg). However, the detection did not exceed the DTSC residential screening level[4] (SL) or the Environmental Protection Agency (EPA) residential Regional Screening Level[5] (RSL), both 1.7 mg/kg. SS-1 to SS-4 were subsequently analyzed discretely for OCPs. Only SS-4 exceeded the SFBRWQCB ESL with a concentration of 1.39 mg/kg. It did not exceed the DTSC residential SL or the EPA residential RSL.

A summary of the laboratory results is presented in Table A. The laboratory analytical report is presented in Appendix H.

6.0 FINDINGS AND OPINIONS

This assessment included a review of local, state, tribal, and federal environmental record sources, standard historical sources, aerial photographs, fire insurance maps, and physical setting sources. A reconnaissance of the Property was completed to review site use and current conditions to check for the storage, use, production, or disposal of hazardous or potentially hazardous materials and to conduct written/oral interviews with persons knowledgeable about current and past site use.

The site reconnaissance and records review did not find documentation or physical evidence of soil, soil gas, or groundwater impairments associated with the use or past use of the Property. A review of regulatory databases maintained by county, state, tribal, and federal agencies found no documentation of hazardous materials violations or discharge on the Property and did not identify contaminated facilities within the appropriate ASTM search distances that would reasonably be expected to impact the Property.

Based on the findings of this assessment, no RECs, no historical RECs, and no controlled RECs were identified for the Property.

Based on the review of regulatory databases and site reconnaissance, we present information on features of potential environmental concern that were either contained in the databases or observed on the Property. These features were not considered to be RECs. We briefly discuss each feature below.

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[2] Duverge, D.J., Establishing Background Arsenic in Soil of the Urbanized San Francisco Bay Region, December 2011.
[3] Regional Water Quality Control Board (RWQCB); Environmental Screening Levels (ESLs); Direct Exposure Human Health Risk Levels: Residential Shallow Soil Exposure (Table S-1); 2019 (Rev. 2).
[4] Department of Toxic Substances Control (DTSC) Human and Ecological Risk Office (HERO) Note 3; Screening Levels (SLs); Table 1: Soil; Residential Soil Exposure; June 2020, Revised May 2022.
[5] Environmental Protection Agency (EPA); Regional Screening Levels (RSLs); Residential Soil; May 2023.

- Sample SS-4, collected from the eastern side of the main residential structure, reported a chlordane concentration exceeding the San Francisco Bay Regional Water Quality Control Board (SFBRWQCB) environmental screening level (ESL) but below the Department of Toxic Substances (DTSC) residential screening level (SL) and Environmental Protection Agency (EPA) residential regional screening level (RSL).

6.1 SIGNIFICANT DATA GAPS

It is our opinion that the findings of this study are based on a sufficient level of information obtained during our contracted scope of services to render a conclusion as to whether additional appropriate investigation is required to identify the presence or likely presence of a REC. The following data gap was identified.

- The buildings were locked and inaccessible during the site reconnaissance.

The data gap identified during this process does not affect the conclusions as to the presence or lack of presence of RECs at the Property.

6.2 SIGNIFICANT ASSUMPTIONS OR DEVIATIONS FROM ASTM STANDARD PRACTICE

There were no significant deviations from ASTM Standard Practice E1527-21 in the preparation of this report.

7.0 CONCLUSIONS

It is our opinion that the findings of this study are based on a sufficient level of information obtained during our contracted scope of services to render a conclusion as to whether additional appropriate investigation is required to identify the presence or likely presence of a REC.

We have performed a modified phase I environmental site assessment in general conformance with the scope and limitations of ASTM E1527-21 and the standards and practices of the All Appropriate Inquiry – Final Rule (40 Code of Federal Regulations Part 312) of APNs 726-12-001 and 726-12-004, the Property. Any exception to, or deletions from this practice are described in Section 8.1 of the report.

This assessment has revealed no evidence of RECs in connection with the Property. We recommend the following.

- Although the chlordane exceedance at sample SS-4 only exceeded the SFBRWQCB ESL and did not exceed the DTSC residential SL or the EPA residential RSL, to be conservative we recommend future excavation and disposal of the impacted soil. Additional sampling could be conducted at the location of SS-4 to further define the extent of impact. The excavated soil should be stockpiled and sampled before disposal.

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8.0 LIMITATIONS

8.1 LIMITATIONS AND EXCEPTIONS OF ASSESSMENT

The professional staff at ENGEO strives to perform its services in a proper and professional manner with reasonable care and competence but is not infallible. The recommendations and conclusions presented in this report were based on the findings of our study, which were developed solely from the contracted services. The findings of the report are based in part on contracted database research, out-of-house reports, and personal communications. The opinions formed by ENGEO are based on the assumed accuracy of the relied upon data in conjunction with our relevant professional experience related to such data interpretation. We assume no liability for the validity of the materials relied upon in the preparation of this report.

This document must not be subject to unauthorized reuse; that is, reuse without written authorization of ENGEO. Such authorization is essential because it requires ENGEO to evaluate the document's applicability given new circumstances, not the least of which is passage of time. The findings from a phase I environmental site assessment are valid for 1 year after from the earliest date of the following components: records review, site reconnaissance, interviews, declaration by environmental professional. Updates of portions of the assessment may be necessary after a period of 180 days of the earliest date of the four components.

A more extensive assessment that would include a subsurface exploration with laboratory testing of soil, soil gas, and groundwater samples could provide more definitive information concerning site-specific conditions. If additional assessment activities are considered for the Property and if other entities are retained to provide such services, ENGEO cannot be held responsible for any and all claims arising from or resulting from the performance of such services by other persons or entities. ENGEO can also not be held responsible from any and all claims arising or resulting from clarifications, adjustments, modifications, discrepancies, or other changes necessary to reflect changed field or other conditions.

8.2 SPECIAL TERMS AND CONDITIONS

We have prepared this report for the exclusive use of our client, Valley Oak Partners, LLC. It is recognized and agreed that ENGEO has assumed responsibility only for undertaking the study for the Client. The responsibility for disclosures or reports to a third party and for remedial or mitigative action shall be solely that of the Client.

This modified phase I environmental site assessment is not intended to represent a complete soil, soil gas, or groundwater characterization, nor define the depth or extent of soil, soil gas, or groundwater contamination. It is intended to provide an evaluation of potential environmental concerns associated with the use of the Property. Laboratory testing of soil, soil gas, or groundwater samples was not within the scope of the contracted services. The assessment did not include an asbestos survey, an evaluation of lead-based paint, an inspection of light ballasts for polychlorinated biphenyls (PCBs), or a mold survey. A radon evaluation was not performed.

This report is based upon field and other conditions discovered at the time of preparation of ENGEO's assessment. Visual observations referenced in this report are intended only to represent conditions at the time of the reconnaissance. We would not be aware of site contamination, such as dumping and/or accidental spillage, which occurred subsequent to the reconnaissance conducted by ENGEO personnel.

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SELECTED REFERENCES

Dibblee. 2005. Geologic map of the Morgan Hill quadrangle, Santa Clara County, California. Dibblee Geological Foundation. April 2005.

Google Maps (http://maps.google.com)

California Department of Water Resources (http://www.water.ca.gov/waterdatalibrary/)

California Department of Public Health – Radon Program– (https://www.cdph.ca.gov/Programs/CEH/DRSEM/CDPH%20Document%20Library/EMB/Radon/Radon%20Test%20Results.pdf).

California Geologic Energy Management Division (CalGEM) (https://www.conservation.ca.gov/calgem)

CalGEM Well Finder (https://maps.conservation.ca.gov/doggr/wellfinder/#openModal/-118.94276/37.12009/6)

National Pipeline Mapping System (NPMS) public viewer website https://pvnpms.phmsa.dot.gov/PublicViewer/

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TABLE A

ANALYTICAL LABORATORY RESULTS

TABLE A: ANALYTICAL LABORATORY RESULTS

Sample ID	Depth (inches below ground surface)	Date Collected	Metals		Organochlorine Pesticides (OCPs)																				
			Arsenic	Lead	4,4-DDD	4,4-DDE	4,4-DDT	Aldrin	alpha-BHC	alpha-Chlordane	beta-BHC	Chlordane	delta-BHC	Dieldrin	Endosulfan I	Endosulfan II	Endosulfan Sulfate	Endrin	Endrin Aldehyde	Endrin Ketone	gamma-BHC	gamma-Chlordane	Heptachlor	Heptachlor Epoxide	Methoxychlor	Toxaphene
Units			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
SFBRWQCB Residential ESL[1]			**0.067**	**80**	**2.7**	**1.8**	**1.9**	**0.035**	**--**	**--**	**--**	**0.48**	**--**	**0.037**	**420**		**--**	**21**	**--**	**--**	**--**	**--**	**0.12**	**0.062**	**350**	**0.51**
DTSC HERO Note 3 Residential SL[2]			**0.11**	**80**	**2.3**	**2.0**	**1.9**	**0.039**	**0.086**	**--**	**0.30**	**1.7**	**--**	**0.034**	**450**		**380**	**19**	**--**	**--**	**0.57**	**--**	**0.13**	**0.070**	**320**	**0.45**
USEPA Residential RSL[3]			**0.68**	**400**	**2.3**	**2.0**	**1.9**	**0.039**	**0.086**	**36**	**0.30**	**1.7**	**--**	**0.034**	**470**		**380**	**19**	**--**	**--**	**0.57**	**36**	**0.13**	**0.070**	**320**	**0.49**
Background Arsenic Concentration[4]			**11**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**		**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**
SS-1	0 to 6	12/26/2023	**5.10**	**25.1**	<0.0019	**0.0388**	**0.00606**	<0.00088	<0.00075	**0.0512**	<0.0013	**0.346**	<0.0019	<0.00074	<0.00086	<0.0010	<0.0015	<0.0024	<0.0015	<0.0013	<0.0021	**0.0284**	<0.00080	**0.00276 (J)**	<0.0077	<0.067
SS-2	0 to 6	12/26/2023	--	**20.2**	<0.0019	**0.0184**	**0.00804**	<0.00088	<0.00075	**0.0180**	<0.0013	**0.147**	<0.0019	<0.00074	<0.00086	<0.0010	<0.0015	<0.0024	<0.0015	<0.0013	<0.0021	**0.0113**	<0.00080	<0.00092	<0.0077	<0.067
SS-3	0 to 6	12/26/2023	--	**13.7**	<0.0019	**0.0172**	<0.0022	<0.00088	<0.00075	**0.0120**	<0.0013	**0.105**	<0.0019	<0.00074	<0.00086	<0.0010	<0.0015	<0.0024	<0.0015	<0.0013	<0.0021	**0.00714 (J)**	<0.00080	<0.00092	<0.0077	<0.067
SS-4	0 to 6	12/26/2023	--	**33.0**	<0.0019	**0.139**	**0.00402 (J)**	<0.00088	<0.00075	**0.286**	<0.0013	**1.39**	<0.0019	<0.00074	<0.00086	<0.0010	<0.0015	<0.0024	<0.0015	<0.0013	<0.0021	**0.192**	<0.00080	<0.00092	<0.0077	<0.067
SS-5	0 to 6	12/26/2023	**5.92**	**16.8**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SS-6	0 to 6	12/26/2023	--	**25.5**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SS-7	0 to 6	12/26/2023	--	**22.2**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AG-1	0 to 6	12/26/2023	**3.82**	**12.5**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AG-4	0 to 6	12/26/2023	**3.16**	**7.40**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AG-7	0 to 6	12/26/2023	**3.21**	**10.2**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AG-10	0 to 6	12/26/2023	**3.55**	**8.70**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
COMP-SS1-SS4	0 to 6	12/26/2023	--	--	<0.0032	**0.0494**	**0.0239**	<0.0015	<0.0013	**0.116**	<0.0022	**0.881**	<0.0032	<0.0012	<0.0014	<0.0017	<0.0025	<0.0039	<0.0025	<0.0022	<0.0035	**0.0736**	<0.0013	**0.00215 (J)**	<0.013	<0.11
COMP-SS5-SS7	0 to 6	12/26/2023	--	--	<0.0032	**0.0108**	**0.0101**	<0.0015	<0.0013	**0.0211**	<0.0022	**0.188**	<0.0032	**0.00135 (J)**	<0.0014	<0.0017	<0.0025	<0.0039	<0.0025	<0.0022	<0.0035	**0.0145 (J)**	<0.0013	<0.0015	<0.013	<0.11
COMP-AG1-AG3	0 to 6	12/26/2023	--	--	<0.0032	<0.0030	<0.0037	<0.0015	<0.0013	<0.0018	<0.0022	<0.013	<0.0032	<0.0012	<0.0014	<0.0017	<0.0025	<0.0039	<0.0025	<0.0022	<0.0035	<0.0074	<0.0013	<0.0015	<0.013	<0.11
COMP-AG4-AG6	0 to 6	12/26/2023	--	--	<0.0032	**0.00335 (J)**	<0.0037	<0.0015	<0.0013	<0.0018	<0.0022	<0.013	<0.0032	<0.0012	<0.0014	<0.0017	<0.0025	<0.0039	<0.0025	<0.0022	<0.0035	<0.0074	<0.0013	<0.0015	<0.013	<0.11
COMP-AG7-AG9	0 to 6	12/26/2023	--	--	<0.0032	<0.0030	<0.0037	<0.0015	<0.0013	<0.0018	<0.0022	<0.013	<0.0032	<0.0012	<0.0014	<0.0017	<0.0025	<0.0039	<0.0025	<0.0022	<0.0035	<0.0074	<0.0013	<0.0015	<0.013	<0.11
COMP-AG10-AG12	0 to 6	12/26/2023	--	--	<0.0032	<0.0030	<0.0037	<0.0015	<0.0013	<0.0018	<0.0022	<0.013	<0.0032	<0.0012	<0.0014	<0.0017	<0.0025	<0.0039	<0.0025	<0.0022	<0.0035	<0.0074	<0.0013	<0.0015	<0.013	<0.11

Notes:

Results are shown in milligrams per kilogram (mg/kg).

Results are reported to the method detection limit (MDL).

<0.0019 indicates analyte was not detected above the laboratory MDL of 0.0019 mg/kg.

-- indicates analyte was not analyzed or screening level not established.

BOLD indicates the concentration was detected above laboratory reporting limits.

J - indicates a value between the MDL and practical quantitation limit (PQL). Values reported with a J qualifier should be considered as estimated.

Highlighted values exceed residential screening criteria.

[1]San Francisco Bay Regional Water Quality Control Board (SFBRWQCB); Environmental Screening Levels (ESLs); Direct Exposure Human Health Risk Levels: Residential Shallow Soil Exposure (Table S-1); 2019 (Rev. 2).

[2]Department of Toxic Substances Control (DTSC) Human and Ecological Risk Office (HERO) Note 3; Screening Levels (SLs); Table 1: Soil; Residential Soil Exposure; June 2020, Revised May 2022.

[3]Environmental Protection Agency (EPA); Regional Screening Levels (RSLs); Residential Soil; May 2023.

[4]The commonly accepted naturally occurring background concentration for arsenic in the urbanized Bay Area is 11 mg/kg (Duverge, D.J., Establishing Background Arsenic in Soil of the Urbanized San Francisco Bay Region, December 2011).

The technical appendices to this report are available for review at
City of Morgan Hill Development Services Department offices,
17575 Peak Avenue, Morgan Hill, CA 95037, during regular business hours.

Appendix F

Preliminary Stormwater Mitigation Plan

MH engineering Co.
16075 Vineyard Blvd. Morgan Hill, CA 95037 - (408) 779-7381

Preliminary Region3 Stormwater Mitigation Plan

For
375 Diana Avenue
July 16, 2024

Attachments:

Performance Requirement Checklists
Preliminary Storm Water Analysis
Soils Study & Infiltration Rates Report
Preliminary Civil Grading & Drainage Related Plans
Prepared by:

Harinder Singla, PE, QSD
MH engineering Co.
16075 Vineyard Blvd, Morgan Hill, CA 95037
408.779.7381
Harrys@mhengineering.com

Attachment B:
Performance Requirement Checklists

PERFORMANCE REQUIREMENT NO. 1
SITE DESIGN AND RUNOFF REDUCTION

CERTIFICATION

	DESIGN STRATEGY	INCORPORATED?
1.	Limit disturbance of creeks and natural drainage features.	
2.	Minimize compaction of highly permeable soils.	
3.	Limit clearing and grading of native vegetation at the site to the minimum area needed to build the project, allow access, and provide fire protection.	✓
4.	Minimize impervious surfaces by concentrating improvements on the least sensitive areas of the site, while leaving the remaining land in a natural undisturbed state.	✓
5.	Minimize stormwater runoff by implementing one or more of the following design measures:	
	a) Direct roof runoff into cisterns or rain barrels for reuse.	
	b) Direct roof runoff onto vegetated areas safely away from building foundations and footings.	✓
	c) Direct runoff from sidewalks, walkways, and/or patios onto vegetated areas safely away from building foundations and footings.	✓
	d) Direct runoff from driveways and/or uncovered parking lots onto vegetated areas safely away from building foundations and footings.	✓
	e) Construct bike lanes, driveways, uncovered parking lots, sidewalks, walkways, and patios with permeable surfaces.	

I, Harry Singla, acting as the Project Engineer for VOD Diana project, located at 375 Diana Ave., hereby state that the Site Design and Runoff Reduction design strategies indicated above have been incorporated into the design of the project.

Signature

2-22-24
Date

SOURCE CONTROL CHECKLIST	
ON-SITE SOURCE CONTROL MEASURES	**INCORPORATED?**
Wash area/racks, drain to sanitary sewer[1]	☐
Covered dumpster area, drain to sanitary sewer[1]	☐
Sanitary sewer connection or accessible cleanout for swimming pool/spa/fountain[1]	☐
Parking garage floor drains plumbed to sanitary sewer[1]	☐
Fire sprinkler test water/condensate drain lines drain to landscape/sanitary sewer[1]	☑
Interior floor drains/boiler drain lines plumbed to sanitary sewer	☐
Beneficial landscaping/IPM (minimize irrigation, runoff, pesticides and fertilizers; promotes treatment)	☑
Outdoor material storage protection	☑
Covers, drains for loading docks, maintenance bays, fueling areas	☑
Maintenance (pavement sweeping, catch basin cleaning, good housekeeping)	☑
Storm drain labeling	☑
Other[2] _____	☐

Notes:

[1] Subject to sanitary sewer authority requirements.

[2] See CASQA Stormwater BMP Handbook for New Development and Redevelopment for additional BMPs for vehicle service repair facilities, fuel dispensing areas, industrial processes, rooftop equipment and other pollutant generating activities and sources: https://www.casqa.org/resources/bmp-handbooks/new-development-redevelopment-bmp-handbook

PERFORMANCE REQUIREMENT NO. 2: WATER QUALITY TREATMENT

CERTIFICATION

	ON-SITE WATER QUALITY TREATMENT MEASURES (IN ORDER OF PRIORITY)	INCORPORATED?
1.	Low Impact Development (LID) Treatment Systems designed to retain stormwater runoff generated by the 85th percentile 24-hour storm. Stormwater Control Measures implemented (circle all that apply, design documentation is required): • Harvesting and Use, • Infiltration, • Evapotranspiration	✓
2.	Biofiltration Treatment Systems – with the following design parameters: a) Maximum surface loading rate appropriate to prevent erosion, scour and channeling within the biofiltration treatment system itself and equal to 5 inches per hour, based on the flow of runoff produced from a rain event equal to or at least: i. 0.2 inches per hour intensity; or ii. Two times the 85th percentile hourly rainfall intensity for the applicable area, based on historical records of hourly rainfall depth b) Minimum surface reservoir volume equal to the biofiltration treatment system surface area times a depth of 6 inches c) Minimum planting medium depth of 24 inches. The planting medium must sustain a minimum infiltration rate of 5 inches per hour throughout the life of the project and must maximize runoff retention and pollutant removal. A mixture of sand (60%-70%) meeting the specifications of American Society for Testing and Materials (ASTM) C33 and compost (30%-40%) may be used. A Regulated Project may utilize an alternative planting medium if it demonstrates its planting medium is equal to or more effective at attenuating pollutants than the specified planting medium mixture. d) Proper plant selection[13] e) Subsurface drainage/storage (gravel) layer with an area equal to the biofiltration treatment system surface area and having a minimum depth of 12 inches f) Underdrain with discharge elevation at top of gravel layer g) No compaction of soils beneath the biofiltration facility (ripping/loosening of soils required if compacted) h) No liners or other barriers interfering with infiltration, except for situations where lateral infiltration is not technically feasible	

[13] Technical guidance for designing bioretention facilities is available from the Central Coast LID Initiative. The guidance includes design specifications and plant lists appropriate for the Central Coast climate: http://www.centralcoastlidi.org/Central_Coast_LIDI/LID_Structural_BMPs.html

3.	Non-Retention Based Treatment Systems – designed to meet at least one of the following hydraulic sizing criteria:	
	(a) Volume Hydraulic Design Basis – Treatment systems whose primary mode of action depends on volume capacity shall be designed to treat stormwater runoff equal to the volume of runoff generated by the 85th percentile 24-hour storm event, based on local rainfall data.	
	(b) Flow Hydraulic Design Basis – Treatment systems whose primary mode of action depends on flow capacity shall be sized to treat: (i) The flow of runoff produced by a rain event equal to at least two times the 85th percentile hourly rainfall intensity for the applicable area, based on historical records of hourly rainfall depths; or (ii) The flow of runoff resulting from a rain event equal to at least 0.2 inches per hour intensity.	

I, Harry Singla, acting as the Project Engineer for _____ project, located at 375 Diana Ave., hereby state that the On-Site Water Quality Treatment Measures indicated above have been incorporated into the design of the project.

H Singla

Signature

2.22.24

Date

PERFORMANCE REQUIREMENT NO. 3: RUNOFF RETENTION

Design Rainfall Events & Treatment Requirements for WMZs

WMZ[1]	Treatment Options & Design Rainfall	Check Applicable WMZs
WMZ 1	Via optimized infiltration[2], prevent offsite discharge from events up to the 95th percentile 24-hour rainfall event as determined from local rainfall data.	✓
WMZ 2	Via storage, rainwater harvesting, infiltration, and/or evapotranspiration, prevent offsite discharge from events up to the 95th percentile 24-hour rainfall event as determined from local rainfall data.	
WM 4 *	Via optimized infiltration[2], prevent offsite discharge from events up to the 95th percentile 24-hour rainfall event as determined from local rainfall data.	
WMZ 5	Via optimized infiltration[2] prevent offsite discharge from events up to the 85th percentile 24-hour rainfall event as determined from local rainfall data.	
WMZ 6	Via storage, rainwater harvesting, infiltration, and/or evapotranspiration, prevent offsite discharge from events up to the 85th percentile 24-hour rainfall event as determined from local rainfall data.	
WMZ 9	Via storage, rainwater harvesting, infiltration, and/or evapotranspiration, prevent offsite discharge from events up to the 85th percentile 24-hour rainfall event as determined from local rainfall data.	
WMZ 10 *	Via optimized infiltration[2], prevent offsite discharge from events up to the 95th percentile 24-hour rainfall event as determined from local rainfall data	

Notes:

* Applicable only to those areas that overlay designated Groundwater Basins

1. Includes only those WMZs contained in Santa Clara County.
2. Storage, rainwater harvesting, and/or evapotranspiration may be used when infiltration is optimized.

PERFORMANCE REQUIREMENT NO. 3: RUNOFF RETENTION

LID Site Assessment Checklist

ITEMS TO DOCUMENT:	INCLUDED?
1. Site topography	☑
2. Hydrologic features including contiguous natural areas, wetlands, watercourses, seeps, or springs	☐
3. Depth to seasonal high groundwater	☑
4. Locations of groundwater wells used for drinking water	☐
5. Depth to an impervious layer such as bedrock	☐
6. Presence of unique geology (e.g., karst)	☐
7. Geotechnical hazards	☐
8. Documented soil and/or groundwater contamination	☐
9. Soil types and hydrologic soil groups	☑
10. Vegetative cover/trees	☑
11. Run-on characteristics (source and estimated runoff from offsite which discharges to the project area)	☐
12. Existing drainage infrastructure for the site and nearby areas including the location of municipal storm drains	☑
13. Structures including retaining walls	☑
14. Utilities	☑
15. Easements	☑
16. Covenants	☑
17. Zoning/Land Use	☑
18. Setbacks	☑
19. Open space requirements	☑
20. Other pertinent overlay(s)	☐

PERFORMANCE REQUIREMENT NO. 3: RUNOFF RETENTION

LID Site Design Measures

	DESIGN MEASURE	INCORPORATED?
1.	Defining the development envelope, identifying the protected areas, and identifying areas that are most suitable for development and areas to be left undisturbed	
2.	Identifying conserved natural areas, including existing trees, other vegetation, and soils (shown on the plans)	
3.	Limit the overall impervious footprint of the project	✓
4.	Design of streets, sidewalks, or parking lot aisles to the minimum widths necessary, provided that public safety or mobility uses are not compromised	✓
5.	Set back development from creeks, wetlands, and riparian habitats	
6.	Design conforms the site layout along natural landforms	✓
7.	Design avoids excessive grading and disturbance of vegetation and soils	✓

I, Harry Singla, acting as the Project Engineer for _____ project, located at 375 Diana Ave., hereby state that LID Site Design Measures indicated above have been incorporated into the design of the project.

H Singla — 2-24-24

Signature — Date

PERFORMANCE REQUIREMENT NO. 3: RUNOFF RETENTION

Technical Infeasibility Checklist

N/A

	Site Conditions	Check If Applicable
1.	Depth to seasonal high groundwater limits infiltration and/or prevents construction of subgrade stormwater control measures[14]	☐
2.	Depth to an impervious layer such as bedrock limits infiltration	☐
3.	Sites where soil types significantly limit infiltration	☐
4.	Sites where pollutant mobilization in the soil or groundwater is a documented concern	☐
5.	Space constraints (e.g., infill projects, some redevelopment projects, high density development)	☐
6.	Geotechnical hazards	☐
7.	Stormwater Control Measures located within 100 feet of a groundwater well used for drinking water	☐
8.	Incompatibility with surrounding drainage system (e.g., project drains to an existing stormwater collection system whose elevation or location precludes connection to a properly functioning treatment or flow control facility)	☐

[14] See Santa Clara Valley Water District guidelines for minimum groundwater separation from stormwater infiltration devices (Section 7, Table 6, of this Manual).

APPENDIX B

Stormwater Control Plan Checklist

Stormwater Control Plan Required Contents	PR Level	Done?
1. Project Information	All	
• Project name		✓
• Application number		✓
• Address and assessor's parcel number		✓
• Name of Applicant		✓
• Project Phase number (if project is being constructed in phases)		N/A
• Project Type (e.g., commercial, industrial, multi-unit residential, mixed-use, public), and description		
2. Project Areas	All	
• Total project site area		✓
• Total new impervious surface area		✓
• Total replaced impervious surface area		✓
• Total new pervious area		✓
• Calculation of Net Impervious Area		✓
3. Statement of Performance Requirements that apply to the project:	All	
• Performance Requirement No.1 – Site Design and Runoff Reduction		✓
• Performance Requirement No.2 – Water Quality Treatment		✓
• Performance Requirement No. 3 – Runoff Retention		✓
• Performance Requirement No. 4 – Peak Management		✓
4. Delineation of Drainage Management Areas (DMAs)	All	✓
5. Summary of Site Design and Runoff Reduction Performance Requirement measures selected for the project (see PR-1 checklist)	PR-1	✓
6. Description of Runoff Reduction Measures and Structural Stormwater Control Measures, by Drainage Management Area and for entire site	PR-2, 3, and 4	✓
7. Water quality treatment calculations used to comply with the Water Quality Treatment Performance Requirement and any analysis to support infeasibility determination	PR-2	✓
8. Documentation certifying that the selection, sizing, and design of the Stormwater Control Measures meet the full or partial Water Quality Treatment Performance Requirements (see PR-2 checklist)	PR-2	✓

Project Data:

The general purpose of this Stormwater Control Plan (SWCP) is to demonstrate compliance with the Central Coast Regional Water Quality Control Board's (CCRWQCB) Post-Construction Stormwater Compliance Resolution R3-2013-0032 and the Stormwater Management Guidance Manual for Low Impact Development & Post Construction Requirements, June 2015, City of Gilroy, City of Morgan Hill and County of Santa Clara.

All new construction and redevelopment projects are required to comply with these regulations if they create and/or replace at least 2,500 square feet of impervious area. The requirements are designed preserve the health of watersheds that may be impacted by the improvement of the subject property. Developments are encouraged to maximize the use of Low Impact Development (LID) techniques and incorporate as many Stormwater Control Measures (SCM) and Best Management Practices (BMP) as possible to reduce contaminants leaving the site and affecting downstream water bodies. A Stormwater Control Plan prepared by, or under the direction of, a Professional Civil Engineer is required to detail the potential impacts and mitigation measures implemented by the project.

Table 1: Project Data

Project Name/Number	23100
Application Submittal Date	7/12/2024
Project Location	Diana Avenue at Butterfield Blvd.
Project Phase	N/A
Project Type and Description	93 Unit Reisdential Condominimum Development on a RAM (Attached Medium) Zoned parcel
APN#	726-12-001, & 004
Total Project Area	232,043sf (5.327ac)
Total New Impervious Area	162,337sf (3.727ac)
Total Replaced Impervious Area (SF)	19,819sf
Out of Tract Run-on Diana Frontage Pavement (SF)	0
Total Pre-Project Impervious Area (SF)	19,819sf
Total Post-Project Impervious Area (SF)	162,337sf (3.727ac)
Net Impervious Area (SF)	162,337sf (3.727ac)
Watershed Management Zone	WMZ1
85th Design Storm	1.10 inch
95th Design Storm	1.75 inch

Setting

Project Location and Description

This 5.30 acre parcel with a ranch house and other accessory structures is located at the northeast corner if Butterfield Blvd and Diana Avenue. There are four mature oak trees located on the property. Site lays in the westerly direction with little over 1% slope. Diana Avenue frontage is already improved. There are single family developments along the north and east sides. Butterfield flood channel runs along the entire westerly boundary.

This development is a proposal for 93 condominium units and the land lies within Monterey Bay, Region 3.

I. Low Impact Development Design Strategies

I.A. Performance Requirements

The CCRWQCB Resolution R3-2013-0032 as well as the *Stormwater Management Guidance Manual for Low Impact Development & Post Construction Requirements, June 2015, City of Gilroy, City of Morgan Hill and County of Santa Clara* describe levels of Post-Construction Requirements based upon the amount of impervious area created/replaced. Below is a discussion of each of the performance requirements and mitigation measures intended to comply with each Performance Requirement Tier.

I.A.1. Performance Requirement No. 1 (PR-1): Site Design and Runoff Reduction

Development projects that create and/or replace at least 2,500 square feet of impervious areas are subject to PR-1. PR-1 requires the following:

- Limit Disturbance of creeks and natural drainage features
- Limit disturbance of highly permeable soils
- Limit disturbance of native vegetation
- Minimize creation and/or replacement of impervious areas
- Minimize runoff using:
    - Cisterns or rain barrels for reuse
    - Route runoff through vegetation
    - Use of permeable pavements

Following design measures are incorporated into the site layout:

• impervious areas have been limited under the approved zoning
• hardscape is minimized within the scope of project
• site layout is conformed along natural landforms
• grading has been optimized
• roof runoff is directed onto vegetated areas
• runoff from sidewalks, walkways and other private hardscape is generally directed onto vegetated areas

I.A.2. Performance Requirement No. 2 (PR-2): Water Quality Treatment

Development projects that create and/or replace at least 5,000 square feet (15,000 square feet for Single-Family Detached Homes) Net Impervious Area are subject to PR-2 in addition to PR-1. Net Impervious Area credits apply when the Post-Development Impervious Area is less than Pre-Development Conditions and is calculated below:

Net Impervious Area=(Total Post Development Impervious Area)-(Reduced Impervious Area Credit)

Where Reduced Impervious Area Credit =
(Total Pre-Development Impervious Area) – (Total Post-Development Impervious Area)

Projects subject to the requirements of PR-2 are responsible for treating any contaminants that are created by the development. Table 2 below corresponds to Table 4 in *Stormwater Management Guidance Manual for Low Impact Development & Post Construction Requirements, June 2015, City of Gilroy, City of Morgan Hill and County of Santa Clara* and is listed in order of preference according to said manual.

Table 2: Water Quality Treatment Measures Design Criteria (Guidance Manual Table 4)

Water Quality Treatment Measure*	**Design Criteria**
LID Treatment System – *Harvesting and use, infiltration, evapotranspiration, and bioretention* ***(without an underdrain)*** *SCMs*	Retain stormwater from the 85th Percentile 24-hour single storm event routing method
Biofiltration Treatment System – *Bioretention with raised underdrain, or other facilities at least as effective as a system with the specified design criteria.*	Design of rain event of 0.2 in/hr intensity or 2 x 85th percentile hourly rainfall intensity or other specified design criteria include: • Maximum surface loading rate of 5 in/hr • Minimum surface reservoir depth (6") • Minimum planting minimum depth (24") • Proper plant selection • Subsurface gravel layer (minimum depth of 12") • Underdrain placement near the top of the gravel layer • No compaction of soils beneath the facility • No liners preventing infiltration
Non-Retention Based Treatment Systems – *Lined bioretention, flow-through planters, and high rate tree well filters and media filters*	Volume Hydraulic Design Basis: 85th Percentile 24-hour storm event Flow Hydraulic Design Basis: 0.2 in/hr intensity OR 2 x 85th Percentile hourly rainfall intensity
*Multiple SCMs may be used to collectively achieve the design criteria.	

Pre-treatment has been incorporated in both DMAs to provide initial treatment to first flush generated from the travelled ways and parking areas. It is our understanding that 4% treatment criteria only applies to Region-2 for use with C3 methodology, however we've been informed by the City to not mix compliance criteria from both regions and strictly follow Region-3 LID criteria using 85th and 95th design storms for computation of retention volumes.

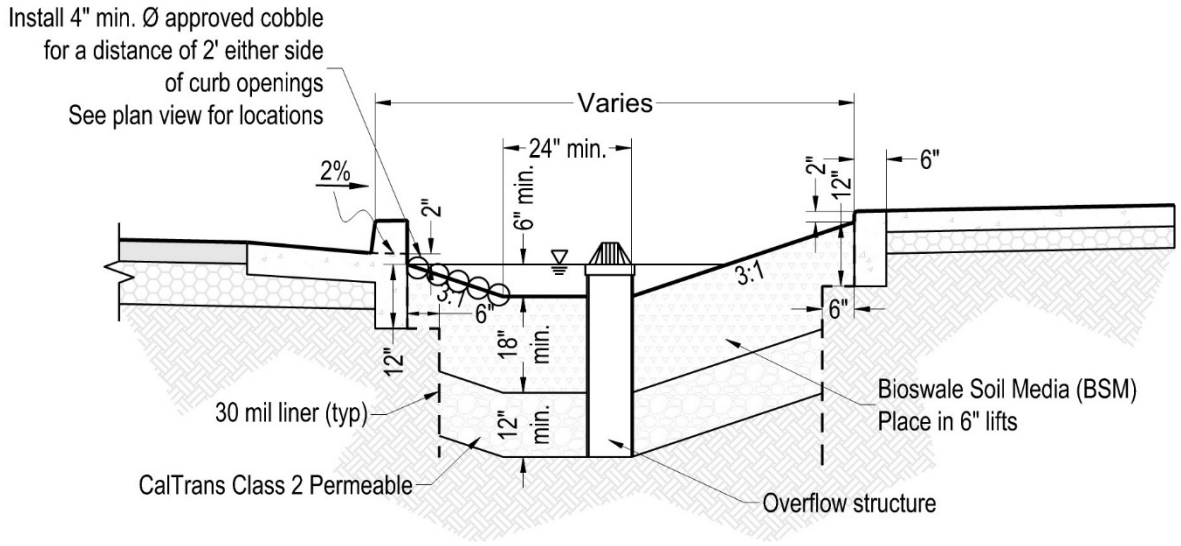
Development will meet PR2 with the use of pre-treatment through bio-retention systems and full retention of 85th percentile storm **with no underdrains** *and percolation in less than 48 hours.*

Field testing was performed by the Soils Engineer to obtain actual field percolation rates. Attached is the letter prepared by Cornerstone Earth Group, dated 7-12-24 indicating those rates picked up at five different locations within SCM-1 and SCM-2. Rates vary from a high of 14.1 in/hr and a low of 1.2in/hr. After disregarding the high value of 14.1 and low value of 1.2, the average of remaining 3 values of 2.6, 4.2 and 1.5 computes to 2.77 in/hr, which has been further reduced by a factor of safety 2.0. The resulting value of 1.38in/hr is being utilized to calculate dissipation of 95th percentile volume at the underground pipe manifold SCM-3 under 48 hours.

Bio-retentions system (SCM-1 & 2) are the proposed pre-treatment systems within DMA-1 and 2.

A standard detail is indicated below for a bio-retention basin, however, specific detailed cross sections of all SCMs with proposed bio-soil media and drain rock depths are shown on the relevant civil drawings included in this study.

Figure 1: Standard Bio-retention Detail

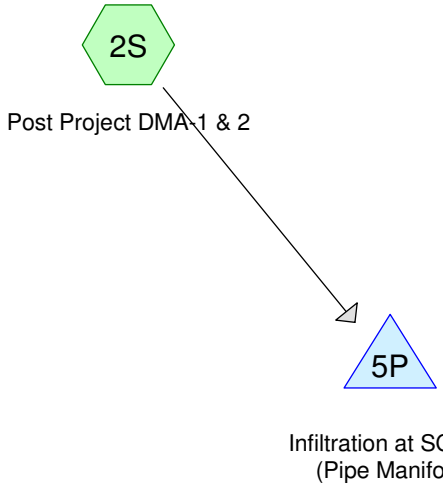


I.A.3. Performance Requirement No. 3 (PR-3): Runoff Retention

Development projects that create and/or replace 15,000 square feet of impervious area (Single Family Detached Homes are allowed to use Net Impervious Area as defined in PR-2) and are located within Watershed Management Zones 1, 2, 5, 6, 8, 9, and portions of Watershed Management Zones 4, 7, and 10 that lie in designated Groundwater Basins are subject to Performance Requirement 3 as we well as PR-1 and PR-2. PR-3 requires the retention of the volume of runoff that could contain contaminants and that would naturally infiltrate in pre-development conditions. Appendix D of the Stormwater Management Guidance Manual for Low Impact Development & Post Construction Requirements, June 2015, City of Gilroy, City of Morgan Hill and County of Santa Clara.

SCM retention sizing has been determined based on the routing method (single event-based) as discussed in Central Coast Post-Construction Requirements (PRs) Attachment D (Resolution No. R3-2012-0025). Retention volumes will dissipate into native soil well under 24 hours given fairly food percolation rates at this site.

95th percentile routing Analysis through SCM-3 (underground pipe manifold):



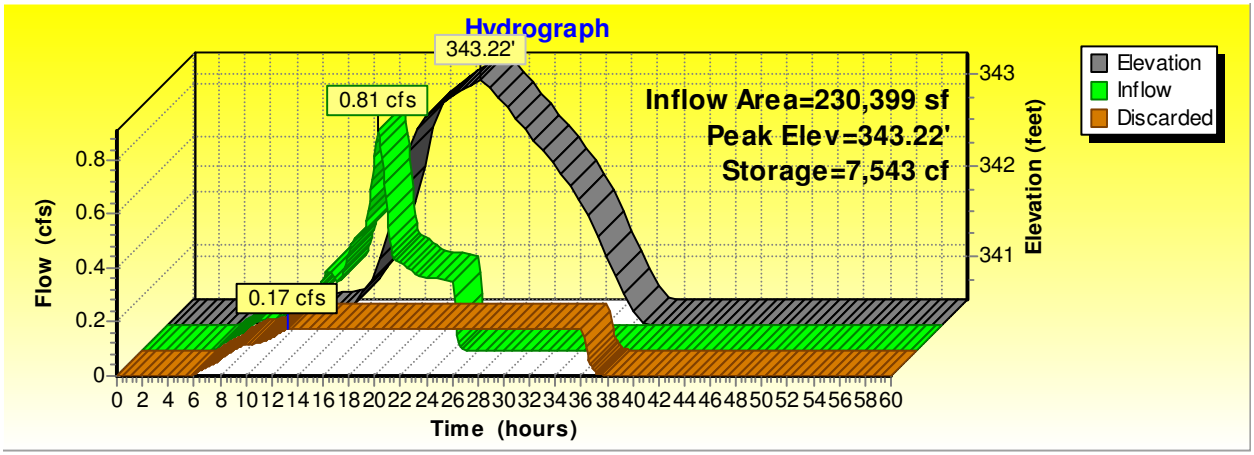
Summary for Subcatchment 2S: Post Project DMA-1 & 2

Runoff = 0.81 cfs @ 18.28 hrs, Volume= 16,982 cf, Depth= 0.88"
Routed to Pond 5P : Infiltration at SCM-3 (Pipe Manifold)

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-60.00 hrs, dt= 0.10 hrs
SCWD 1956 Storm 95th Rainfall=1.75"

	Area (sf)	CN	Description
*	230,399	90	Composite Cn Value
	230,399		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
20.0					**Direct Entry,**



Events for Pond 5P: Infiltration at SCM-3 (Pipe Manifold)

Event	Inflow (cfs)	Outflow (cfs)	Discarded (cfs)	Elevation (feet)	Storage (cubic-feet)
95th	**0.81**	**0.17**	**0.17**	**343.22**	**7,543**

Summary for Pond 5P: Infiltration at SCM-3 (Pipe Manifold)

Inflow Area = 230,399 sf, 0.00% Impervious, Inflow Depth = 0.88" for 95th event
Inflow = 0.81 cfs @ 18.28 hrs, Volume= 16,982 cf
Outflow = 0.17 cfs @ 13.20 hrs, Volume= 16,982 cf, Atten= 79%, Lag= 0.0 min
Discarded = 0.17 cfs @ 13.20 hrs, Volume= 16,982 cf

Routing by Stor-Ind method, Time Span= 0.00-60.00 hrs, dt= 0.10 hrs
Peak Elev= 343.22' @ 24.23 hrs Surf.Area= 5,374 sf Storage= 7,543 cf

Plug-Flow detention time= 327.3 min calculated for 16,954 cf (100% of inflow)
Center-of-Mass det. time= 328.0 min (1,365.8 - 1,037.8)

Volume	Invert	Avail.Storage	Storage Description
#1A	340.53'	8,121 cf	**42.99'W x 125.00'L x 5.67'H SCM-3 42"Ø Portion A** 30,450 cf Overall - 10,146 cf Embedded = 20,303 cf x 40.0% Void
#2A	341.36'	8,077 cf	**ADS N-12 42"** x 35 Inside #1 Inside= 41.1"W x 41.1"H => 9.20 sf x 20.00'L = 184.0 cf Outside= 48.0"W x 48.0"H => 11.56 sf x 20.00'L = 231.1 cf Row Length Adjustment= +14.00' x 9.20 sf x 7 rows 39.99' Header x 9.20 sf x 2 = 735.9 cf Inside
#3B	344.83'	1,835 cf	**18.00'W x 68.00'L x 5.67'H SCM-3 42"Ø Portion B** 6,934 cf Overall - 2,346 cf Embedded = 4,588 cf x 40.0% Voids
#4B	345.66'	1,868 cf	**ADS N-12 42"** x 6 Inside #3 Inside= 41.1"W x 41.1"H => 9.20 sf x 20.00'L = 184.0 cf Outside= 48.0"W x 48.0"H => 11.56 sf x 20.00'L = 231.1 cf Row Length Adjustment= +17.00' x 9.20 sf x 3 rows 16.00' Header x 9.20 sf x 2 = 294.4 cf Inside
		19,902 cf	Total Available Storage

Storage Group A created with Chamber Wizard
Storage Group B created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Discarded	340.53'	**1.380 in/hr Exfiltration over Surface area**

Discarded OutFlow Max=0.17 cfs @ 13.20 hrs HW=340.63' (Free Discharge)
1=Exfiltration (Exfiltration Controls 0.17 cfs)

Hydrograph for Pond 5P: Infiltration at SCM-3 (Pipe Manifold)

Time (hours)	Inflow (cfs)	Storage (cubic-feet)	Elevation (feet)	Discarded (cfs)
0.00	0.00	0	340.53	0.00
2.00	0.00	0	340.53	0.00
4.00	0.00	0	340.53	0.00
6.00	0.02	10	340.53	0.01
8.00	0.08	79	340.57	0.06
10.00	0.12	144	340.60	0.12
12.00	0.15	179	340.61	**0.14**
14.00	0.26	353	340.69	**0.17**
16.00	0.36	1,169	341.07	0.17
18.00	**0.72**	3,311	342.04	0.17
20.00	**0.32**	5,953	342.80	0.17
22.00	0.27	6,822	343.03	0.17
24.00	0.26	**7,493**	**343.21**	0.17
26.00	0.00	**6,544**	**342.96**	0.17
28.00	0.00	5,308	342.63	0.17
30.00	0.00	4,072	342.28	0.17
32.00	0.00	2,836	341.88	0.17
34.00	0.00	1,600	341.27	0.17
36.00	0.00	364	340.70	0.17
38.00	0.00	1	340.53	0.00
40.00	0.00	0	340.53	0.00
42.00	0.00	0	340.53	0.00
44.00	0.00	0	340.53	0.00
46.00	0.00	0	340.53	0.00
48.00	0.00	0	340.53	0.00
50.00	0.00	0	340.53	0.00
52.00	0.00	0	340.53	0.00
54.00	0.00	0	340.53	0.00
56.00	0.00	0	340.53	0.00
58.00	0.00	0	340.53	0.00
60.00	0.00	0	340.53	0.00

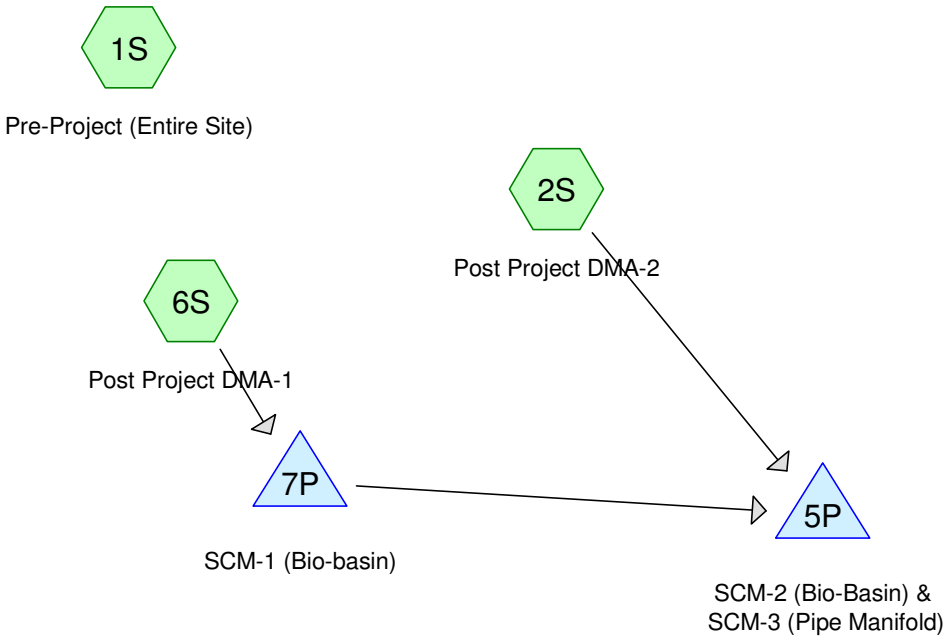
I.A.4. Performance Requirement No. 4 (PR-4): Peak Management
Development Projects that create and/or replace at least 22,500 square feet of impervious areas and within Watershed Management Zones 1, 2, 3, 6, and 9 are required to comply with Performance Requirement 4 in addition to previously discussed performance requirements. PR-4 is intended to mitigate the increased runoff created by the project's increase in impervious areas, thus preventing any adverse flooding conditions downstream of the project. PR-4 requires developments to detain increased runoff from the 2, 5, and 10 year events such that they release at rates at, or below, pre-development conditions.

Peak Management Routing model has been setup for the hydrology analysis using the SCS Method. Hydrographs for post-project events are routed through the SCM storage system. Model includes a storage structure and outflow structure. Outflow structure is setup with fixed diameter orifice at fixed elevation. Storage volumes are entered into the file at incremental elevations. A stage/storage rating curve for each BMP is presented at the beginning of each routing.

During the routing, a post project hydrograph of certain rainfall event flows through the SCM, stores the difference of post versus pre project volume and releases at controlled discharge. Orifice size is fine-tuned to keep the release peak discharges at or below pre-project levels.

A typical routing hydrograph graph indicates time increment along the x-axis and flow along the y-axis. *Hydrographs generated by the new program (HydroCAD) are color coded: green as inflow into the basin; light grey as total resulting outflow released via outlet control structures; orange as exfiltration that gets deducted from the outflow producing Primary, which is net discharge into offsite public storm drain in cyan color. Dark grey curve indicates water elevation at various time intervals.*

Routing Analysis through SCM-1,2 & 3 is detailed below:



Rainfall:

Rainfall Events Listing

Event#	Event Name	Storm Type	Curve	Mode	Duration (hours)	B/B	Depth (inches)	AMC
1	95th	SCVWD 1956 Storm		Default	24.00	1	1.75	2
2	2-yr	SCVWD 1956 Storm		Default	24.00	1	2.65	2
3	5-yr	SCVWD 1956 Storm		Default	24.00	1	3.48	2
4	10-yr	SCVWD 1956 Storm		Default	24.00	1	4.17	2
5	25-yr	SCVWD 1956 Storm		Default	24.00	1	5.24	2
6	100-yr	SCVWD 1956 Storm		Default	24.00	1	6.50	2

Pre-project Q peak Summary:

Events for Subcatchment 1S: Pre-Project (Entire Site)

Event	Rainfall (inches)	Runoff (cfs)	Volume (cubic-feet)	Depth (inches)
2-yr	2.65	0.79	14,245	0.74
10-yr	4.17	1.74	34,564	1.80
25-yr	5.24	2.44	50,931	2.65
100-yr	**6.50**	**3.29**	**71,471**	**3.71**

Post-project Q peak Summary:

Events for Pond 5P: SCM-2 (Bio-Basin) & SCM-3 (Pipe Manifold)

Event	Inflow (cfs)	Outflow (cfs)	Discarded (cfs)	Primary (cfs)	Elevation (feet)	Storage (cubic-feet)
2-yr	1.43	0.73	**0.00**	0.73	345.28	14,467
10-yr	2.43	1.72	0.00	1.72	347.83	21,084
25-yr	3.18	2.19	0.00	2.19	348.88	24,075
100-yr	**3.96**	**2.67**	0.00	**2.67**	**350.31**	**28,007**

Summary for Subcatchment 1S: Pre-Project (Entire Site)

Runoff = 3.29 cfs @ 18.25 hrs, Volume= 71,471 cf, Depth= 3.71"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-60.00 hrs, dt= 0.10 hrs
SCVWD 1956 Storm 100-yr Rainfall=6.50"

	Area (ac)	CN	Description
*	5.304	75	
	5.304		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
18.0					**Direct Entry,**

Post-Project (DMA-1)

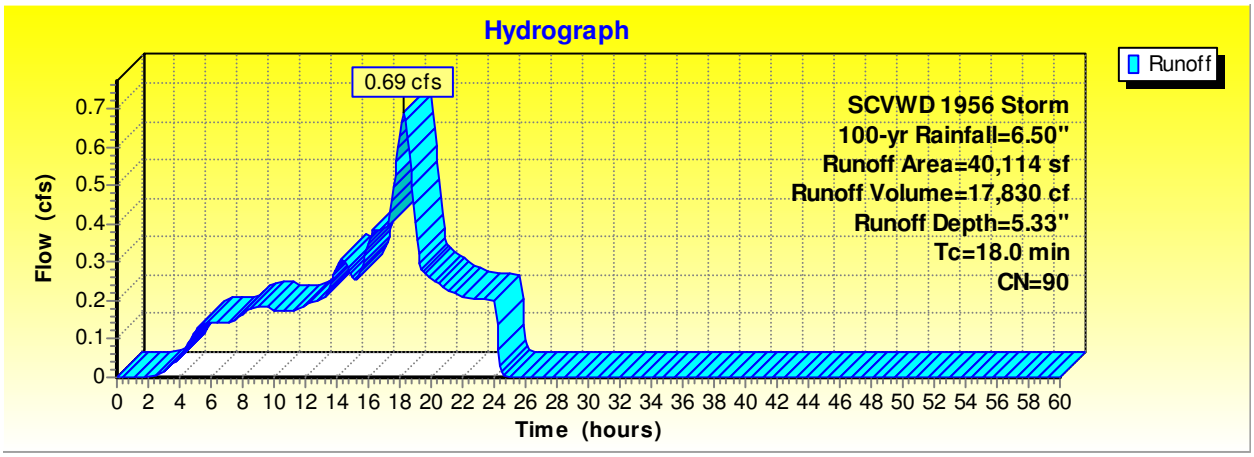
Summary for Subcatchment 6S: Post Project DMA-1

Runoff = 0.69 cfs @ 18.24 hrs, Volume= 17,830 cf, Depth= 5.33"
Routed to Pond 7P : SCM-1 (Bio-basin)

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-60.00 hrs, dt= 0.10 hrs
SCVWD 1956 Storm 100-yr Rainfall=6.50"

	Area (sf)	CN	Description
*	40,114	90	
	40,114		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
18.0					**Direct Entry,**



Post-Project (DMA-1) Storage-Routing Setup:

Summary for Pond 7P: SCM-1 (Bio-basin)

[92] Warning: Device #1 is above defined storage
[93] Warning: Storage range exceeded by 0.09'
[88] Warning: Qout>Qin may require smaller dt or Finer Routing
[85] Warning: Oscillations may require smaller dt or Finer Routing (severity=68)

Inflow Area = 40,114 sf, 0.00% Impervious, Inflow Depth = 5.33" for 100-yr event
Inflow = 0.69 cfs @ 18.24 hrs, Volume= 17,830 cf
Outflow = 0.70 cfs @ 18.28 hrs, Volume= 15,933 cf, Atten= 0%, Lag= 2.6 min
Primary = 0.70 cfs @ 18.28 hrs, Volume= 15,933 cf
Routed to Pond 5P : SCM-2 (Bio-Basin) & SCM-3 (Pipe Manifold)

Routing by Stor-Ind method, Time Span= 0.00-60.00 hrs, dt= 0.10 hrs
Peak Elev= 349.74' @ 18.28 hrs Surf.Area= 1,510 sf Storage= 1,897 cf

Plug-Flow detention time= 121.6 min calculated for 15,933 cf (89% of inflow)
Center-of-Mass det. time= 68.1 min (996.4 - 928.2)

Volume	Invert	Avail.Storage	Storage Description
#1	346.40'	1,897 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
346.40	1,150	0.0	0	0
346.41	1,150	40.0	5	5
347.40	1,150	40.0	455	460
347.41	1,150	25.0	3	463
348.89	1,150	25.0	425	888
348.90	1,150	100.0	11	900
349.65	1,510	100.0	998	1,897

Device	Routing	Invert	Outlet Devices
#1	Primary	349.65'	**24.0" x 24.0" Horiz. Overflow 24" DI** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=0.69 cfs @ 18.28 hrs HW=349.74' (Free Discharge)
1=Overflow 24" DI (Weir Controls 0.69 cfs @ 0.97 fps)

Post-Project (DMA-2)

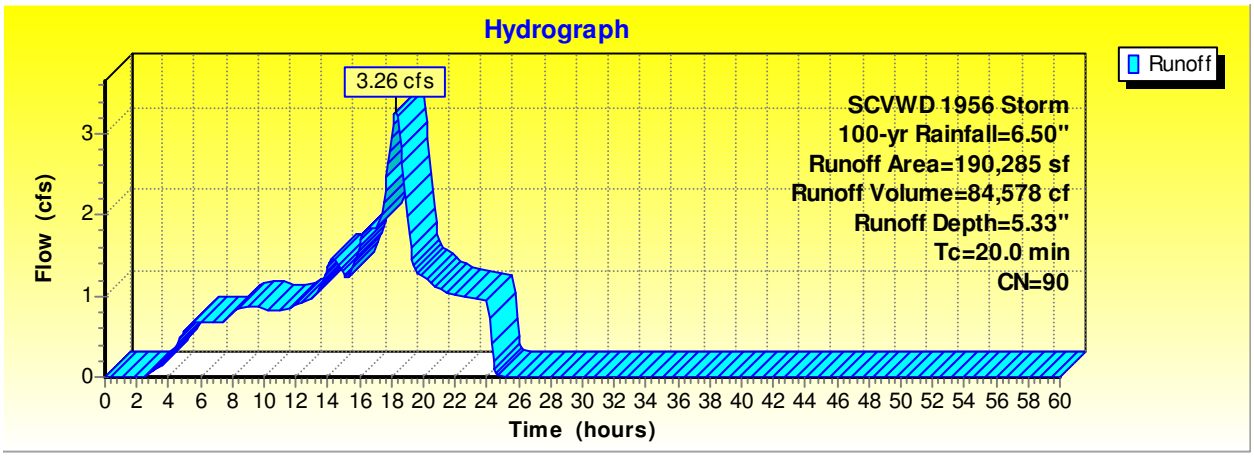
Summary for Subcatchment 2S: Post Project DMA-2

Runoff = 3.26 cfs @ 18.27 hrs, Volume= 84,578 cf, Depth= 5.33"
Routed to Pond 5P : SCM-2 (Bio-Basin) & SCM-3 (Pipe Manifold)

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-60.00 hrs, dt= 0.10 hrs
SCVWD 1956 Storm 100-yr Rainfall=6.50"

	Area (sf)	CN	Description
*	190,285	90	Composite Cn Value
	190,285		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
20.0					**Direct Entry,**



Post-Project (DMA-2) Storage-Routing Setup:

Summary for Pond 5P: SCM-2 (Bio-Basin) & SCM-3 (Pipe Manifold)

[81] Warning: Exceeded Pond 7P by 0.59' @ 18.90 hrs

Inflow Area = 230,399 sf, 0.00% Impervious, Inflow Depth = 5.23" for 100-yr event
Inflow = 3.96 cfs @ 18.27 hrs, Volume= 100,510 cf
Outflow = 2.67 cfs @ 18.90 hrs, Volume= 92,959 cf, Atten= 33%, Lag= 37.7 min
Primary = 2.67 cfs @ 18.90 hrs, Volume= 92,959 cf

Routing by Stor-Ind method, Time Span= 0.00-60.00 hrs, dt= 0.10 hrs
Peak Elev= 350.31' @ 18.90 hrs Surf.Area= 7,137 sf Storage= 28,007 cf

Plug-Flow detention time= 227.9 min calculated for 92,805 cf (92% of inflow)
Center-of-Mass det. time= 192.0 min (1,132.6 - 940.6)

Volume	Invert	Avail.Storage	Storage Description
#1	346.20'	8,198 cf	**SCM-2 (bio-basin) (Prismatic)** Listed below (Recalc)
#2A	340.53'	8,121 cf	**42.99'W x 125.00'L x 5.67'H SCM-3 42"Ø Portion A** -Impervious 30,450 cf Overall - 10,146 cf Embedded = 20,303 cf x 40.0% Void
#3A	341.36'	8,077 cf	**ADS N-12 42"** x 35 Inside #2 Inside= 41.1"W x 41.1"H => 9.20 sf x 20.00'L = 184.0 cf Outside= 48.0"W x 48.0"H => 11.56 sf x 20.00'L = 231.1 cf Row Length Adjustment= +14.00' x 9.20 sf x 7 rows 39.99' Header x 9.20 sf x 2 = 735.9 cf Inside
#4B	344.83'	1,835 cf	**18.00'W x 68.00'L x 5.67'H SCM-3 42"Ø Portion B** 6,934 cf Overall - 2,346 cf Embedded = 4,588 cf x 40.0% Voids
#5B	345.66'	1,868 cf	**ADS N-12 42"** x 6 Inside #4 Inside= 41.1"W x 41.1"H => 9.20 sf x 20.00'L = 184.0 cf Outside= 48.0"W x 48.0"H => 11.56 sf x 20.00'L = 231.1 cf Row Length Adjustment= +17.00' x 9.20 sf x 3 rows 16.00' Header x 9.20 sf x 2 = 294.4 cf Inside
		28,100 cf	Total Available Storage

Storage Group A created with Chamber Wizard
Storage Group B created with Chamber Wizard

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
346.20	5,167	0.0	0	0
346.21	5,167	40.0	21	21
347.20	5,167	40.0	2,046	2,067
347.21	5,167	25.0	13	2,080
348.69	5,167	25.0	1,912	3,992
348.70	5,167	100.0	52	4,043
349.45	5,913	100.0	4,155	8,198

Device	Routing	Invert	Outlet Devices
#1	Primary	343.21'	**4.5" Vert. 4"Ø Orifice** C= 0.600 Limited to weir flow at low heads
#2	Primary	346.90'	**5.2" Vert. 5.25"Ø Orifice** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=2.67 cfs @ 18.90 hrs HW=350.31' TW=341.30' (Fixed TW Elev= 341.30')
↑—**1=4"Ø Orifice** (Orifice Controls 1.40 cfs @ 12.66 fps)
└—**2=5.25"Ø Orifice** (Orifice Controls 1.27 cfs @ 8.60 fps)

Storage Manifold PORTION 'A'

Chamber Model = ADS N-12 42" (ADS N-12® Pipe)
Inside= 41.1"W x 41.1"H => 9.20 sf x 20.00'L = 184.0 cf
Outside= 48.0"W x 48.0"H => 11.56 sf x 20.00'L = 231.1 cf
Row Length Adjustment= +14.00' x 9.20 sf x 7 rows

48.0" Wide + 24.0" Spacing = 72.0" C-C Row Spacing

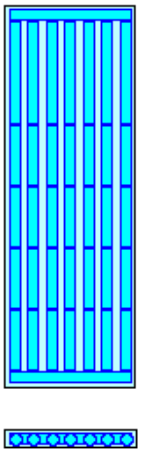
5 Chambers/Row x 20.00' Long +14.00' Row Adjustment +4.00' Header x 2 = 122.00' Row Length +18.0" End Stone x 2 = 125.00' Base Length
7 Rows x 48.0" Wide + 24.0" Spacing x 6 + 18.0" Side Stone x 2 = 42.99' Base Width
10.0" Stone Base + 48.0" Chamber Height + 10.0" Stone Cover = 5.67' Field Height

35 Chambers x 184.0 cf +14.00' Row Adjustment x 9.20 sf x 7 Rows + 39.99' Header x 9.20 sf x 2 = 8,077.5 cf Chamber Storage
35 Chambers x 231.1 cf +14.00' Row Adjustment x 11.56 sf x 7 Rows + 39.99' Header x 11.56 sf x 2 = 10,146.5 cf Displacement

30,449.8 cf Field - 10,146.5 cf Chambers = 20,303.3 cf Stone x 40.0% Voids = 8,121.3 cf Stone Storage

Chamber Storage + Stone Storage = 16,198.8 cf = 0.372 af
Overall Storage Efficiency = 53.2%
Overall System Size = 125.00' x 42.99' x 5.67'

35 Chambers
1,127.8 cy Field
752.0 cy Stone



Storage Manifold PORTION 'B'

Chamber Model = ADS N-12 42" (ADS N-12® Pipe)
Inside= 41.1"W x 41.1"H => 9.20 sf x 20.00'L = 184.0 cf
Outside= 48.0"W x 48.0"H => 11.56 sf x 20.00'L = 231.1 cf
Row Length Adjustment= +17.00' x 9.20 sf x 3 rows

48.0" Wide + 24.0" Spacing = 72.0" C-C Row Spacing

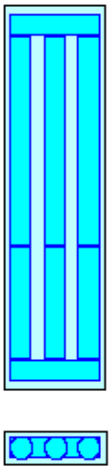
2 Chambers/Row x 20.00' Long +17.00' Row Adjustment +4.00' Header x 2 = 65.00' Row Length +18.0" End Stone x 2 = 68.00' Base Length
3 Rows x 48.0" Wide + 24.0" Spacing x 2 + 12.0" Side Stone x 2 = 18.00' Base Width
10.0" Stone Base + 48.0" Chamber Height + 10.0" Stone Cover = 5.67' Field Height

6 Chambers x 184.0 cf +17.00' Row Adjustment x 9.20 sf x 3 Rows + 16.00' Header x 9.20 sf x 2 = 1,867.6 cf Chamber Storage
6 Chambers x 231.1 cf +17.00' Row Adjustment x 11.56 sf x 3 Rows + 16.00' Header x 11.56 sf x 2 = 2,345.9 cf Displacement

6,934.0 cf Field - 2,345.9 cf Chambers = 4,588.0 cf Stone x 40.0% Voids = 1,835.2 cf Stone Storage

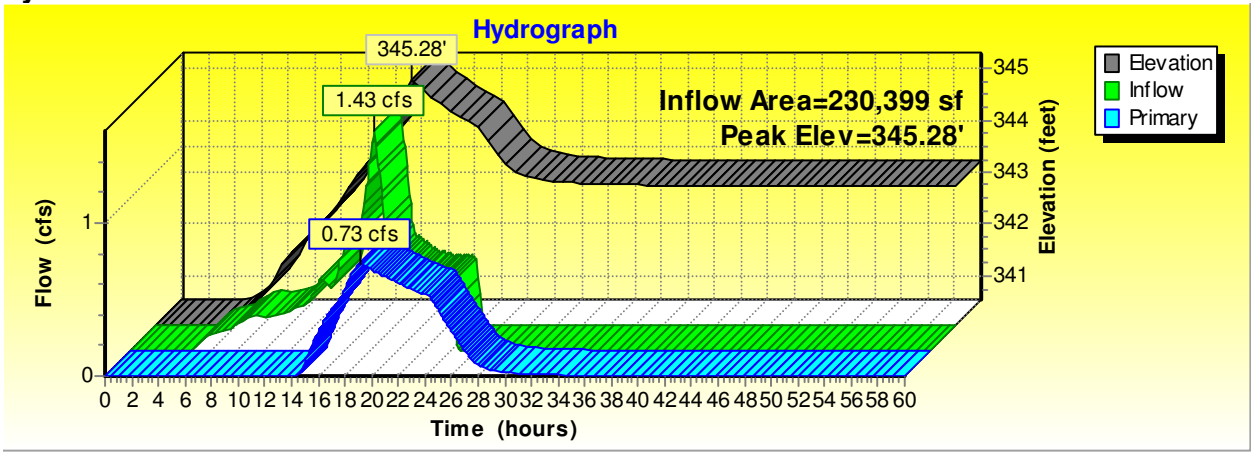
Chamber Storage + Stone Storage = 3,702.8 cf = 0.085 af
Overall Storage Efficiency = 53.4%
Overall System Size = 68.00' x 18.00' x 5.67'

6 Chambers
256.8 cy Field
169.9 cy Stone

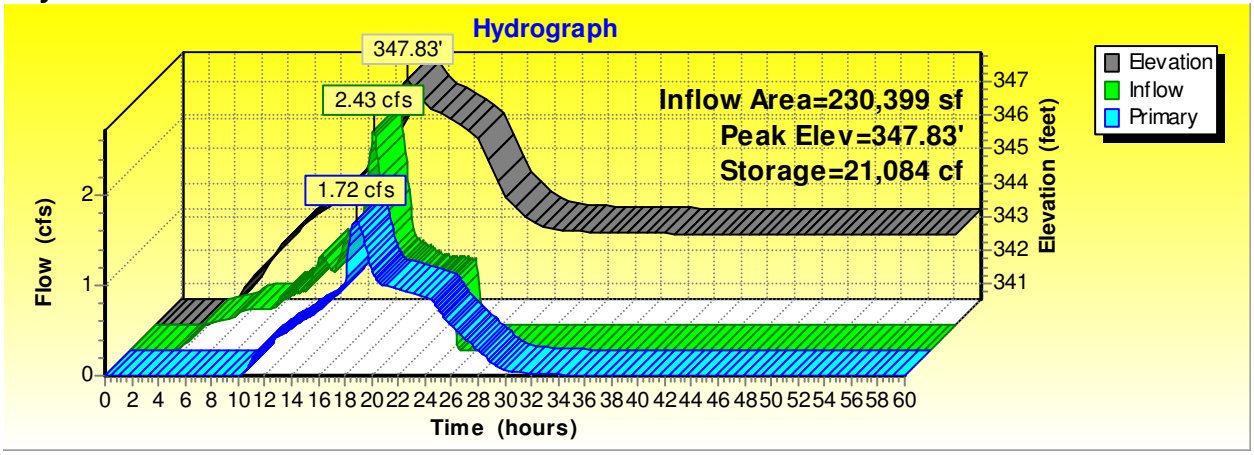


Routed Hydrographs at SCM-2 & SCM-3:

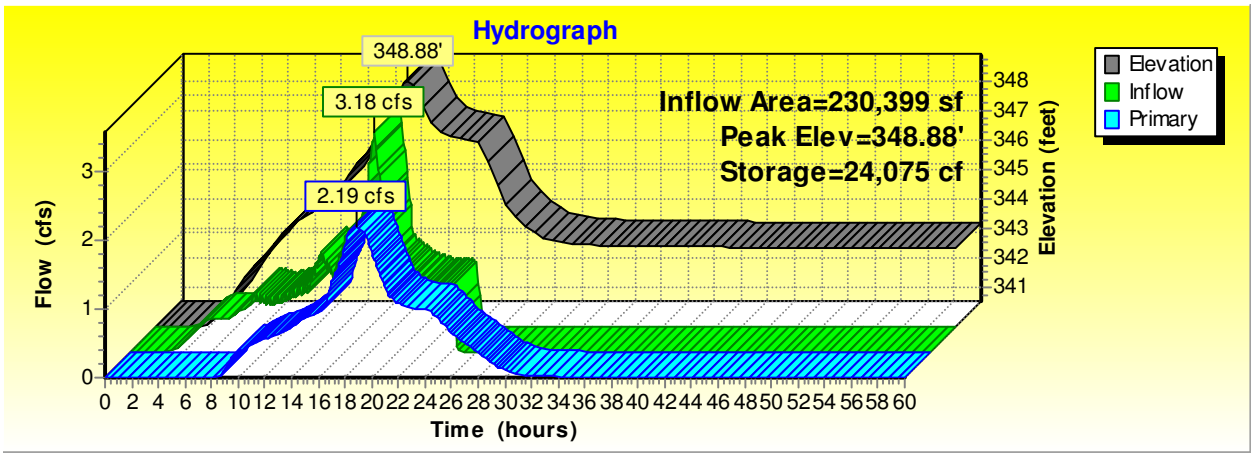
2yr



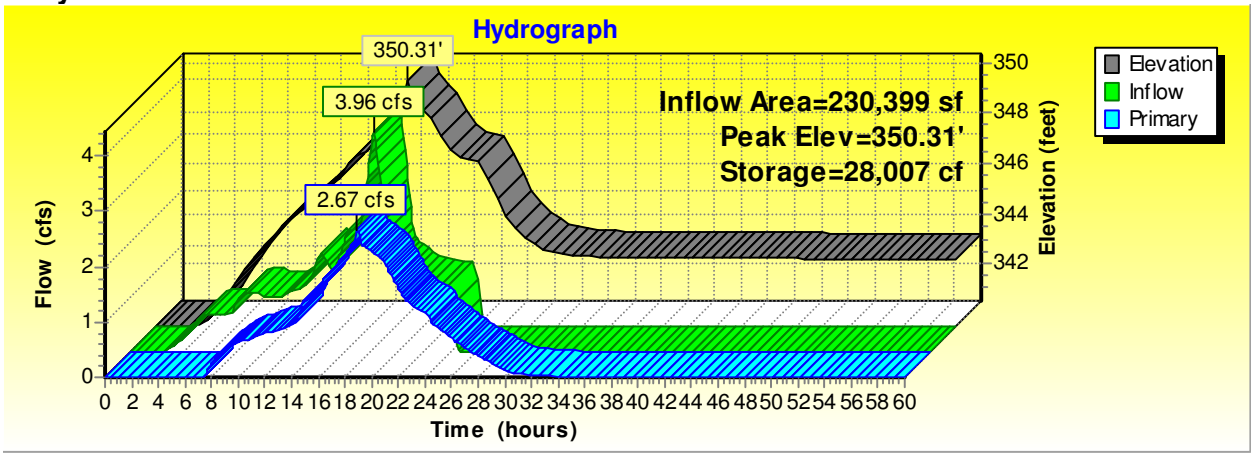
10yr



25yr



100yr


Hydrograph
350.31'
3.96 cfs
2.67 cfs
Inflow Area=230,399 sf
Peak Elev=350.31'
Storage=28,007 cf
Elevation
Inflow
Primary
Flow (cfs)
Elevation (feet)
Time (hours)
0 1 2 3 4
342 344 346 348 350
0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34 36 38 40 42 44 46 48 50 52 54 56 58 60

CORNERSTONE EARTH GROUP

Date:	July 12, 2024
Project No.:	384-21-2
Prepared For:	Mr. Jeff Aguilar **VALLEY OAK PARTNERS, LLC** 734 The Alameda San Jose, California 95126
Re:	Field Infiltration Testing Results 375 Diana Avenue Morgan Hill, California

Dear Mr. Aguilar:

As requested, this letter presents infiltration test results and recommendations for the planned stormwater infiltration system for the above referenced project. Our services were performed in accordance with our agreement dated June 28, 2024.

For our use we were provided a conceptual plan titled "Conceptual Storm Water Management Plan, 375 Diana Avenue," prepared by MH Engineering Co., dated May 2024, with markups indicating desired test locations and depths.

PROJECT SUMMARY

We understand the project is still in the planning stages and the exact configuration, development, and building layouts are not yet finalized. Based on our discussions with you and review of the conceptual plan provided, we understand the project will consist of redeveloping the approximately 5¼-acre site for residential use. Based on the current plans, we understand the new development will include 93 residential condominiums. We anticipate the new residential units will likely consist of a mix of at-grade two-story duets and three-story townhomes.

SURFACE AND SUBSURFACE DESCRIPTION

The approximately 5¼-acre site is located at 375 Diana Avenue in Morgan Hill, California. The site is bounded by residential development to the north and east, Diana Avenue to the south, and Butterfield Boulevard to the west.

The site is currently occupied by an existing single-story residence and open field. Several detached single-story structures and a covered metal carport were observed to the north of the main residence. Several mature trees were observed along the asphalt concrete driveway off Diana Avenue. The driveway appeared moderately to severely distressed with observed cracking and uplift. Based on our observations, the existing pavements are in poor condition

with significant cracking. The remainder of the site was undeveloped and appeared relatively level, except for a raised area along the northern edge of the site. Based on our review of the site history, we anticipate areas of the undeveloped field may consist of loose surficial soils due to past orchard or agricultural uses.

Beneath the existing ground surface, our infiltration Borings P-1 through P-5 generally encountered sandy to silty lean clay with varying amounts of sand and gravel to the maximum depth explored of 8 feet. Our borings generally encountered higher sand and gravel content starting at a depth of about 6 feet and Boring P-1 encountered cobbles starting at a depth of about 6 feet.

IN-SITU WATER INFILTRATION

To estimate the infiltration rate of the soils at locations and depths provided by the civil engineer (MH Engineering Co.) for the project, we performed five in-situ field infiltration tests using a Guelph permeameter by Soil Moisture Equipment Corp., Model #2800, in general accordance with ASTM D5126. Generally, the Guelph permeameter is a constant head device, which uses two water-filled chambers to measure infiltration rate in a shallow borehole. A constant head level is established in the borehole and the rate of water outflow into the surrounding soil is noted. The rate of flow when it reaches a steady state, or constant rate, is used to determine an approximate infiltration rate for that location and depth.

The approximate locations of the in-situ infiltration tests (P-1 to P-5) are shown on the attached Site Plan, Figure 1. Test results are summarized in Table 1.

Table 1: In-Situ Field Guelph Permeameter Test Results

Location	Depth Below Existing Grade (ft)	Infiltration Rate	
		(in/hr)	(cm/min)
P-1	8.0	14.1	0.6
P-2	8.0	2.6	0.1
P-3	8.0	4.2	0.2
P-4	7.0	1.5	0.1
P-5	7.0	1.2	0.1

Reliability of Field Test Data

Test results may not be truly indicative of the long-term in-situ infiltration. Other factors including stratifications, heterogeneous deposits, overburden stress, disturbance, organic content, depth to groundwater, and other factors can influence test results. In addition, for stratified soils such as those encountered at the site, the average horizontal infiltration is typically greater than the average vertical infiltration.

Findings and Recommendations

Based on our findings, the soil at the locations tested and at depths of about 7 to 8 feet below existing grade have infiltration rates ranging from about 1.2 to 14.1 inches per hour. Based on

our test results, the in-situ field tests indicated a variable but generally moderate with areas of high infiltration rate at the depths and locations tested.

We recommend the above estimate be confirmed in the field at the time of construction, as required. In addition, the project civil engineer should review the above infiltration and provide additional recommendations as deemed necessary.

General Comments and Design Considerations

As discussed, the tests were performed at discrete locations and depths. In addition, some disturbance in preparing the test hole may have occurred. Therefore, the above results can vary significantly and may not be representative over the entire site. Localized areas/depths with higher or lower permeable materials can increase or decrease the actual infiltration rates. Therefore, we recommend the potential for variations be considered when evaluating the soil infiltration capacity or performance.

CLOSURE

We hope this provides the information you need at this time. Recommendations presented in this letter have been prepared for the sole use of Valley Oak Partners, LLC specifically for the property at 375 Diana Avenue in Morgan Hill, California. Our professional services were performed, our findings obtained, and our recommendations prepared in accordance with generally accepted geotechnical engineering principles and practices at this time and location. No warranties are either expressed or implied.

If you have any questions or need any additional information from us, please call and we will be glad to discuss them with you.

Sincerely,

Cornerstone Earth Group, Inc.

Maura Ruffatto

Maura F. Ruffatto, P.E.
Principal Engineer

MFR:nsd

Attachments: Figure 1 – Site Plan

DMA-1
1.90ac

DMA-1
4.20ac

Gutter Slope @ 0%
Slotted Drain

Note

Overland
Flood Release

Overland
Flood Release

Overland
Flood Release

Overland
Flood Release

SD

Diana Avenue

(E)48" Storm Drain

66'
±46'
±25'
±21'

Guelph #1

Guelph #2

Guelph #3

Guelph #4

Guelph #5

SCM-2
Bio-Retention Basin
5,314sf

SCM-1
Bio-Retention Basin
1,150sf

SCM-3
42"Ø Perforated
Underground Pipe Manifold

Approximate
Site Boundary

C.M.H. (Flood Channel)

C.M.H.

Butterfield Boulevard

N

Legend

Approximate location of infiltration test (Guelph #)

0 60 120

APPROXIMATE SCALE (FEET)

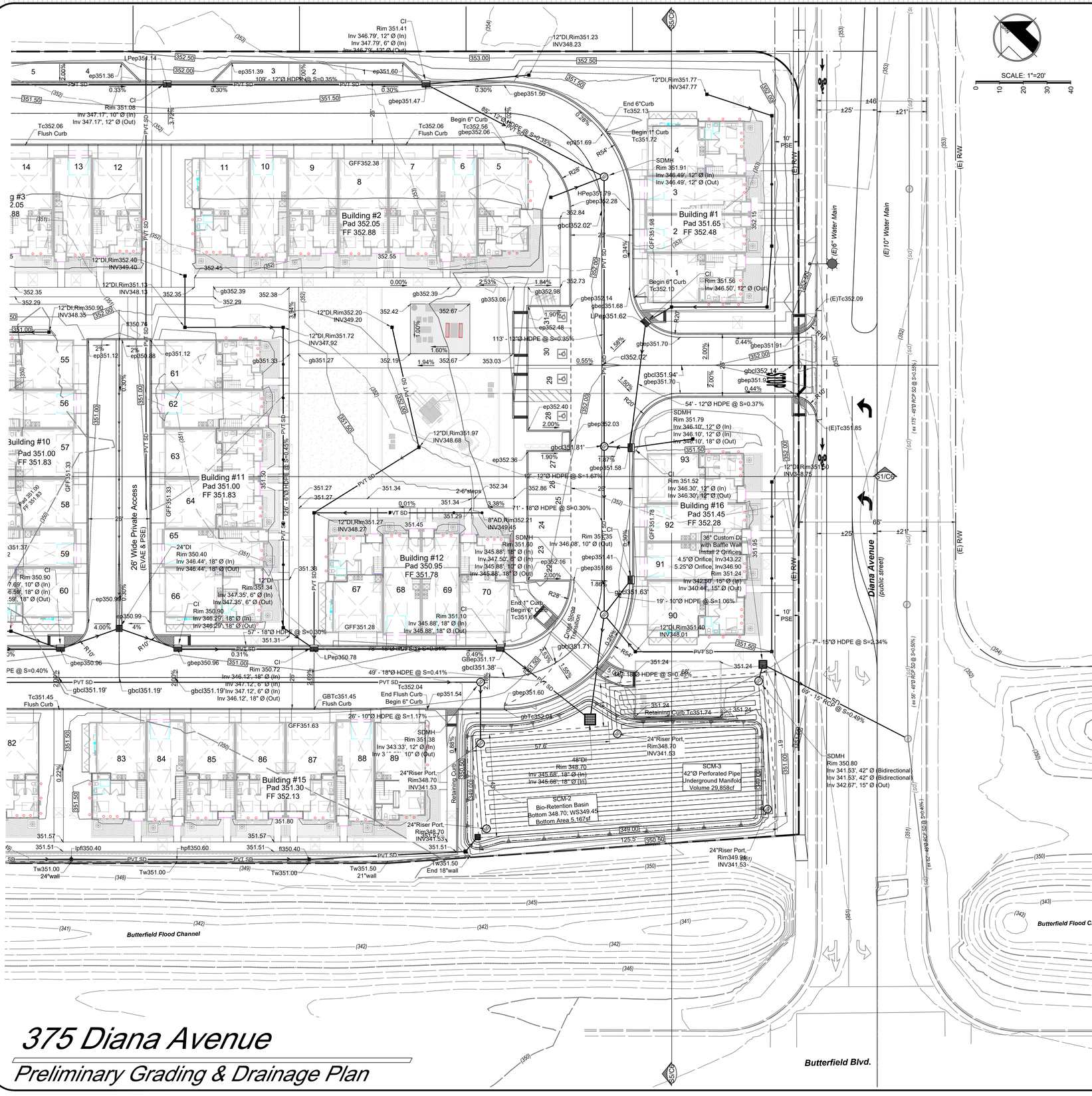
Base by Google Earth, dated 09/27/2021
Overlay by MH Engineering Co., Conceptual Storm Water Management Plan - C2, dated 05/2024

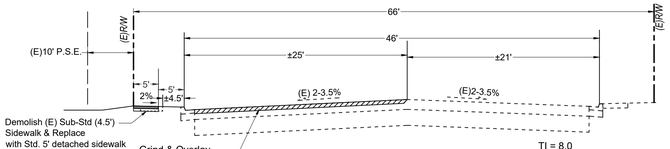
Site Plan

375 Diana Avenue Residential
Morgan Hill, CA

Project Number	384-21-2
Figure Number	Figure 1
Date	July 2024
Drawn By	RRN

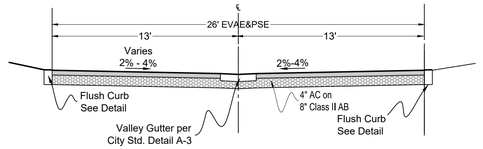
CORNERSTONE EARTH GROUP



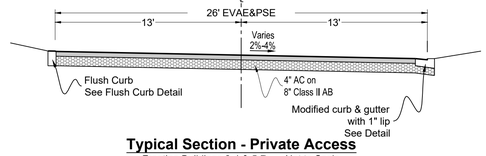


Street Section-Diana Avenue
Looking Northeasterly Not to Scale

TI = 8.0



Typical Section - Private Access
Fronting Buildings 8-11 Not to Scale



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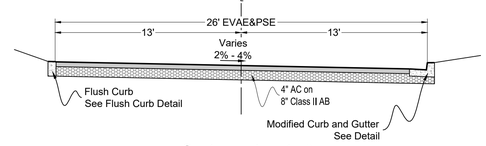
Fronting Buildings 2-4 & 5-7 Not to Scale



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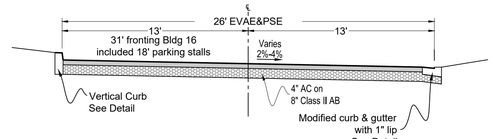
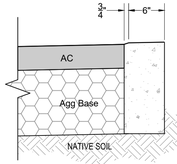
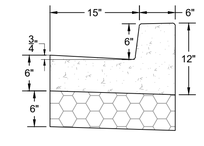
Fronting Buildings 2-4 & 13-15 Not to Scale



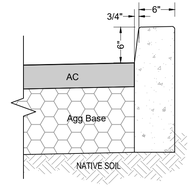
Typical Section - Private Access
Fronting Buildings 1 & 16 Not to Scale



Flush Curb Detail
Not to Scale



Modified Curb and Gutter Detail
Not to Scale



Vertical Curb Detail
Not to Scale

375 Diana Avenue

Preliminary Grading & Drainage Plan

MH engineering Co.
16075 Vineyard Boulevard Morgan Hill, CA 95037

DATE: 07/2024 DRAWN:RS CHECKED: HS

Sheet **C3** of **09**
223100

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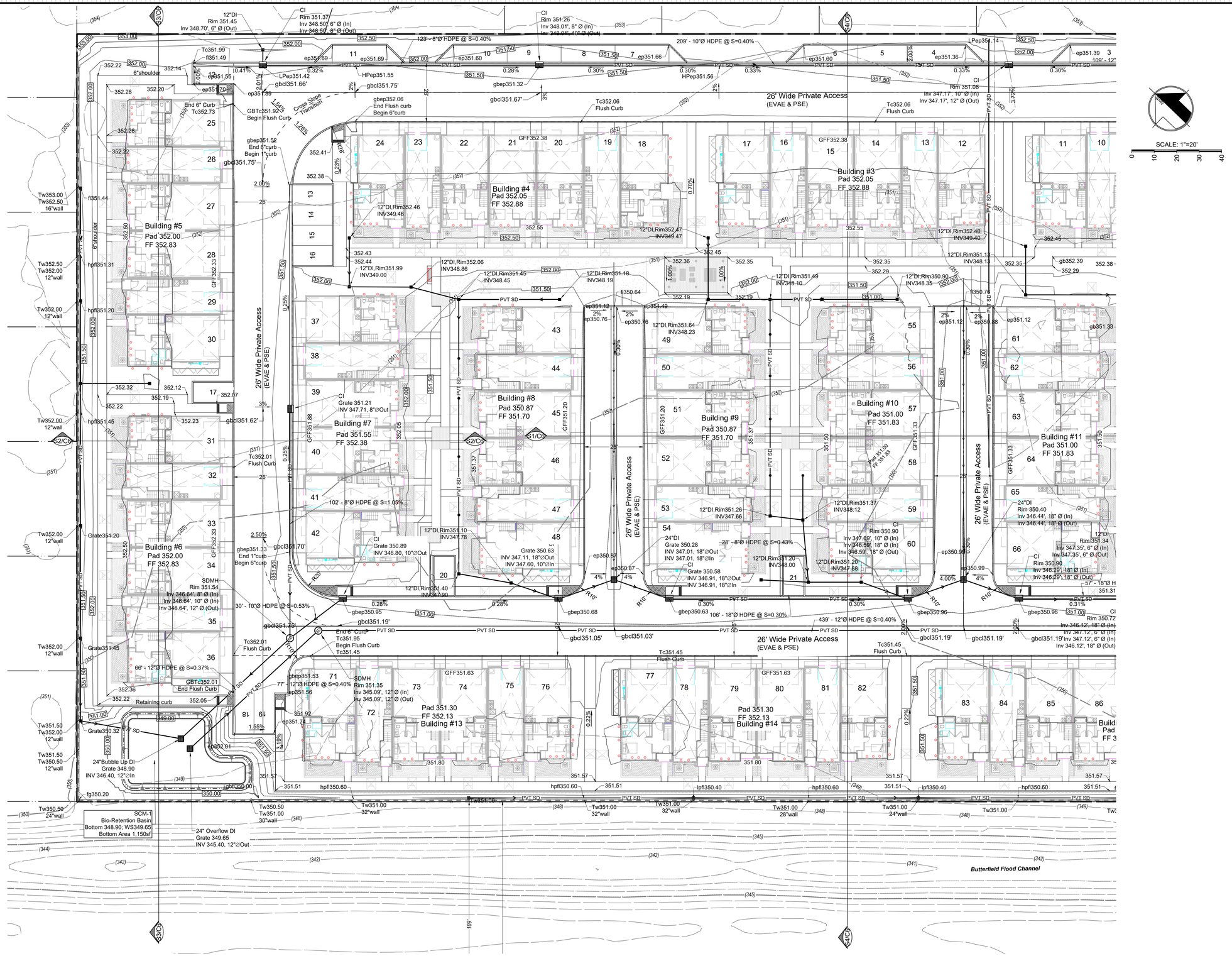

375 Diana Avenue

Preliminary Grading & Drainage Plan

MH engineering Co.
16075 Vineyard Boulevard
Morgan Hill, CA 95037

DATE: 07/2024 DRAWN:RS CHECKED: HS

Sheet **C4** of 09

223100

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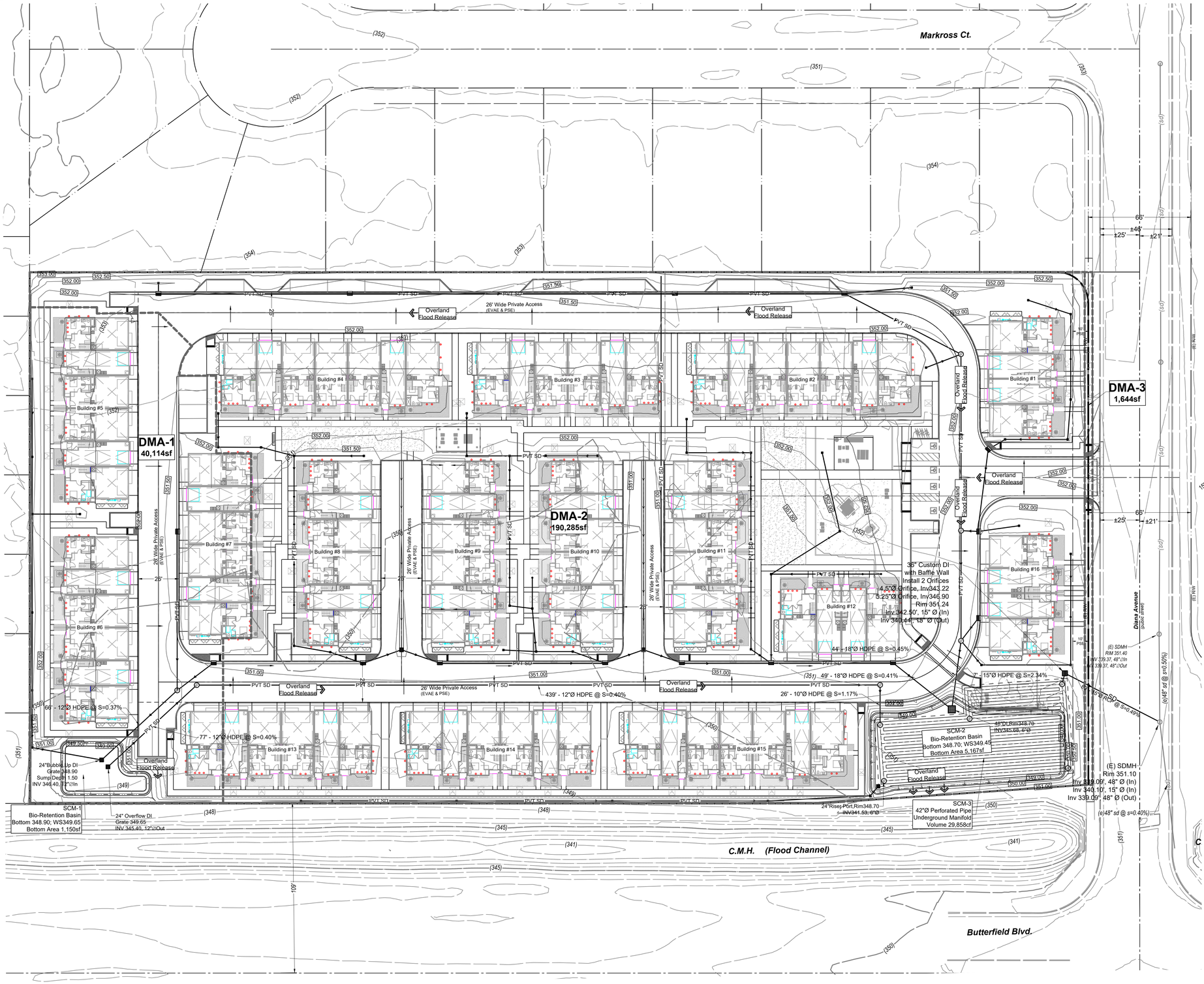
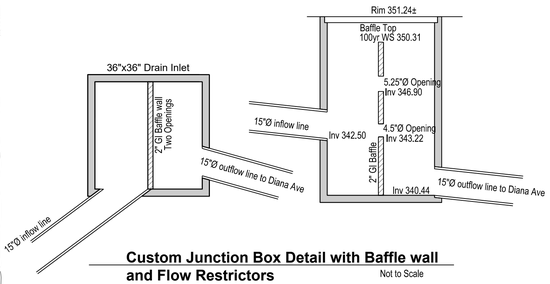
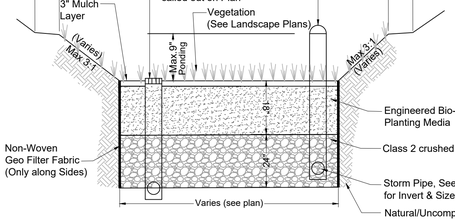
Project Name/Number	23100
Application Submittal Date	7/12/2024
Project Location	Diana Avenue at Butterfield Blvd.
Project Phase	N/A
Project Type and Description	93 Unit Reisdential Condominimum Development on a RAM (Attached Medium) Zoned parcel
APN#	726-12-001, & 004
Total Project Area	232,043sf (5.327ac)
Total New Impervious Area	162,337sf (3.727ac)
Total Replaced Impervious Area (SF)	19,819sf
Out of Tract Run-on Diana Frontage Pavement (SF)	0
Total Pre-Project Impervious Area (SF)	19,819sf
Total Post-Project Impervious Area (SF)	162,337sf (3.727ac)
Net Impervious Area (SF)	162,337sf (3.727ac)
Watershed Management Zone	WMZ1
85th Design Storm	1.10 inch
95th Design Storm	1.75 inch





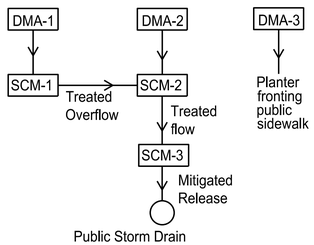
Custom Junction Box Detail with Baffle wall and Flow Restrictors

Not to Scale



Typ. Bio-Retention Basin (SCM-1 & 2)

Scale: None



Watershed Model Schematic

Scale: None

375 Diana Avenue

Preliminary Storm Water Management Plan

MH engineering Co.
16075 Vineyard Boulevard Morgan Hill, CA 95037

DATE: 07/2024 DRAWN:RS CHECKED: HS

Sheet **C5** of **09**

223100

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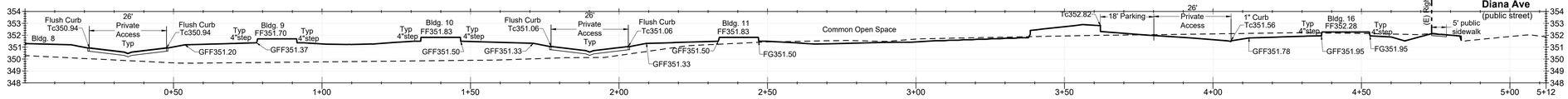
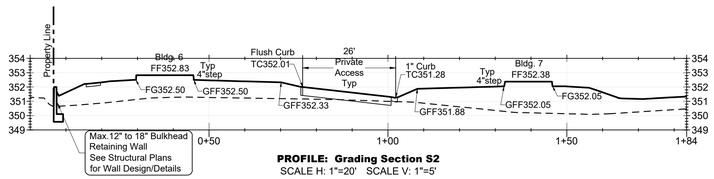


PROFILE: Grading Section S1
SCALE H: 1"=20' SCALE V: 1"=5'



PROFILE: Grading Section S2
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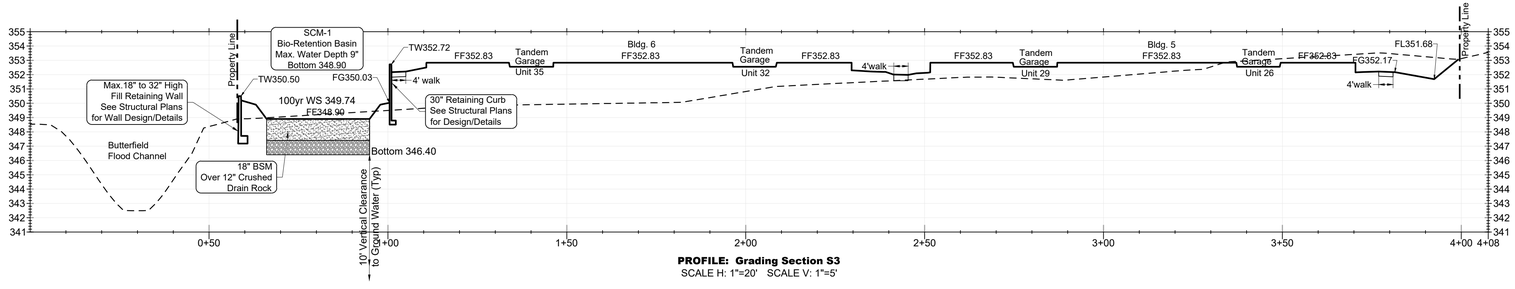

PROFILE: Grading Section S3
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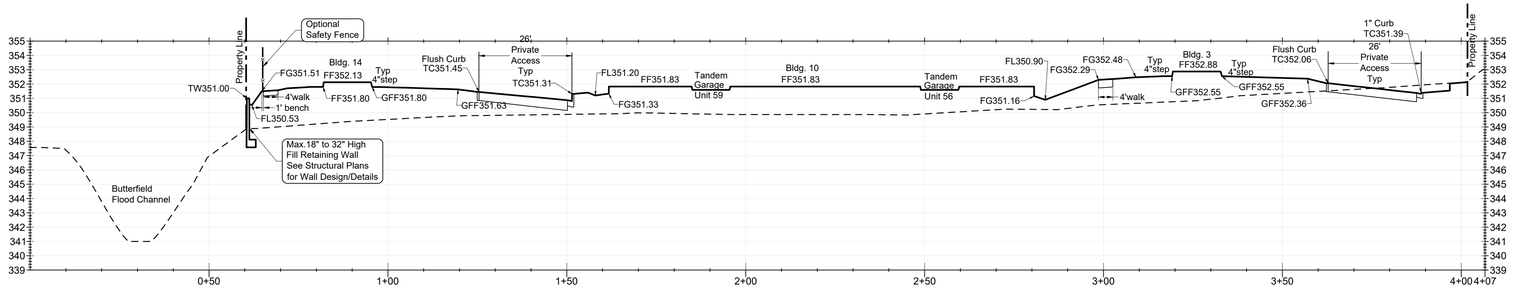

PROFILE: Grading Section S4
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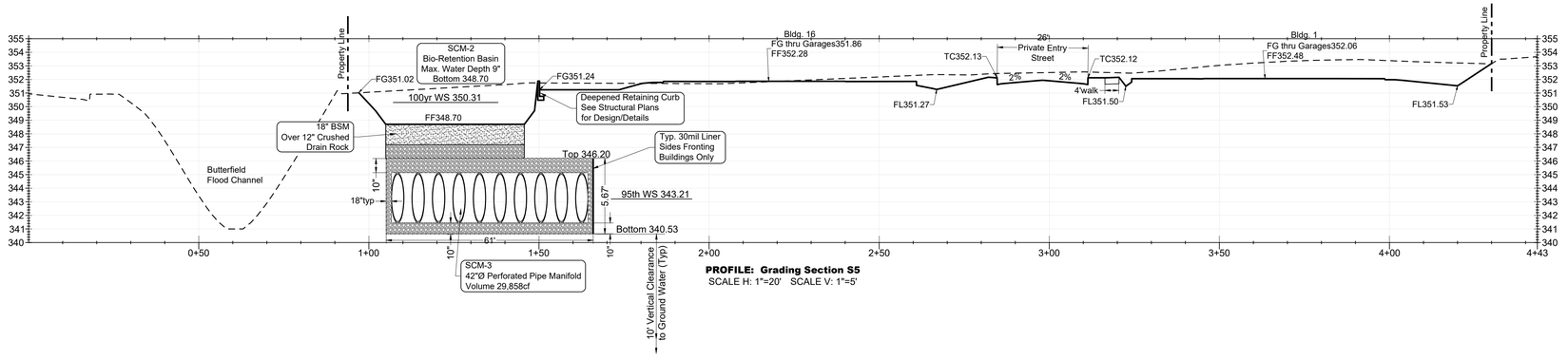
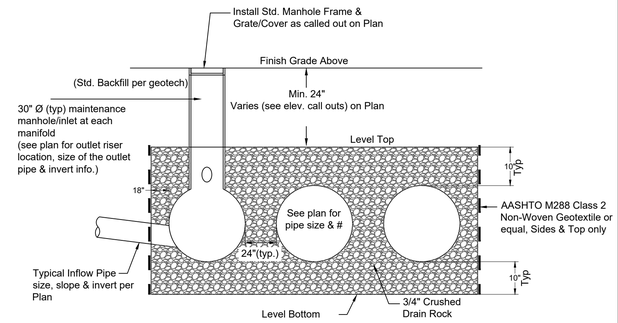
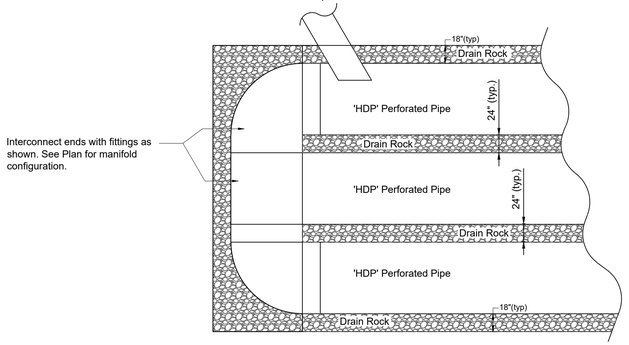


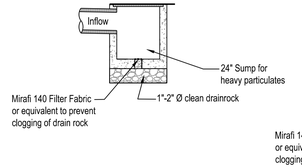
PROFILE: Grading Section S5
SCALE H: 1"=20' SCALE V: 1"=5'



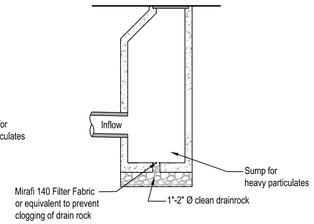
Typical Detail-Interconnected 'HDPE' Perforated Pipe Manifold
Scale: None



Typical Horizontal Layout
Interconnected 'HDPE' Perforated Pipe Manifold
Scale: None



Detail-Bioretention Pond Bubble Up
Scale: none



Detail-Storm Manhole/Inlet with a Sump
Scale: none

375 Diana Avenue

Preliminary Grading Sections

MH engineering Co.
16075 Vineyard Boulevard Morgan Hill, CA 95037

DATE: 07/2024 DRAWN:RS CHECKED: HS

Sheet **C6** of **09**
223100

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Appendix G

Noise Impact Analysis

FCS
An ADEC Innovation

Memorandum

Date: December 12, 2024 *(Revised January 9, 2025)*

To: Jeff Aguilar, Diana MH Homes, LLC

From: Philip Ault, Director of Noise and Air Quality, FirstCarbon Solutions

Subject: Noise Impact Analysis for the 375 Diana Avenue Multi-family Residential Project in Morgan Hill, California

At the request of the project applicant, FirstCarbon Solutions (FCS), prepared this memorandum to evaluate noise impacts that could result from the construction and operations of the proposed 375 Diana Avenue Multi-family Residential Project (proposed project). Supporting documents such as calculation worksheets and other modeling outputs are included as attachments to this memorandum.

PROJECT DESCRIPTION

The project site is located at 375 Diana Avenue in the City of Morgan Hill, California. The project site consists of Assessor's Parcel Numbers (APNs) 726-12-001 and 726-12-004 at 375 Diana Avenue. The project applicant proposes to demolish all existing on-site structures and one tree and construct 93 townhome residential units in 15 separate buildings. The townhomes would be grouped into buildings of six or seven units, with a total building construction area of approximately 223,515 square feet. In addition, the proposed project would provide approximately 75,065 square feet of common open space and private open space, including 6,317 square feet of bioretention basins. The proposed common open space would include various amenities such as barbeque areas, benches, exercise structures, etc. The site would be accessed via a driveway connecting to Diana Avenue in the northeast corner of the project site, and internal circulation would be provided by an internal road. Additionally, the proposed project would provide 218 residential parking spaces, and 31 visitor parking spaces.

The project site is surrounded to the north, east, and south by residential uses, and is surrounded by public and commercial uses to the south and west. See aerial image in Attachment B.

The project site is designated as "Residential Attached Medium" by the Morgan Hill 2035 General Plan (General Plan) and the City's Zoning Ordinance zones the project site as Residential Attached Medium Density (RAM).

NOISE AND VIBRATION FUNDAMENTALS

A summary of the fundamentals of noise and vibration are provided as an attachment to this document.

REGULATORY SETTING

Federal Regulations

Currently, no federal noise standards regulate environmental noise associated with temporary construction activities or the long-term operations of development projects. As such, both temporary and long-term noise impacts resulting from the proposed project would be largely regulated or otherwise evaluated by State and City standards designed to protect public well-being and health.

Federal Transit Administration

Though not regulatory in nature, vibration impact criteria for buildings and other structures have been established by the Federal Transit Authority (FTA), as building and structural damages are generally the foremost concern when evaluating the impacts of construction-related vibrations. For the evaluation of the proposed project's construction-related vibration impacts, the following FTA vibration impact criteria, shown in Table 1, are used given the absence of applicable federal, State, and City standards specific to temporary construction activities and their potential to result in building and structural damages.[1]

Table 1: Federal Transit Administration Construction Vibration Impact Criteria

Building Category	PPV (in/sec)
I. Reinforced—Concrete, Steel or Timber (no plaster)	0.5
II. Engineered Concrete and Masonry (no plaster)	0.3
III. Nonengineered Timber and Masonry Buildings	0.2
IV. Buildings Extremely Susceptible to Vibration Damage	0.12

Notes:
PPV = peak particle velocity
VdB = vibration measured as root mean square (rms) velocity in decibels of 1 microinch per second
Source: Federal Transit Administration (FTA). 2018. Transit Noise and Vibration Impact Assessment Manual.

State Regulations

2017 General Plan Guidelines

The State of California's 2017 General Plan Guidelines propose county and City standards for acceptable exterior noise levels based on land use. These standards are incorporated into land use planning processes to prevent or reduce noise and land use incompatibilities. The State's suggested compatibility considerations between various land uses and exterior noise levels are not regulatory in nature but are recommendations intended to aid communities in determining their own noise-acceptability standards.

[1] Federal Transit Administration (FTA). 2018. Transit Noise and Vibration Impact Assessment Manual.

California Building Standards Code

The State of California has established noise insulation standards for new hotels, motels, apartment houses, and dwellings (other than single-family detached housing). These requirements are provided in the 2022 California Building Standards Code (CBC) (California Code of Regulations [CCR] Title 24).[2] As provided in the CBC, the noise insulation standards set forth an interior standard of 45 A-weighted decibel (dBA) Community Noise Equivalent Level (CNEL) as measured from within the structure's interior. Title 24 standards are typically enforced by local jurisdictions through the building permit application process.

Assembly Bill 1307

Assembly Bill (AB) 1307 went into effect January 1, 2024. This bill clarifies that "for residential projects, the effects of noise generated by project occupants and their guests on human beings is not a significant effect on the environment." Therefore, this analysis does not address potential noise impacts from future occupants and their guests on sensitive receptors in the project vicinity.

Local Regulations

The project site is located within the City of Morgan Hill and this analysis was performed using the City's noise regulations. The City of Morgan Hill addresses noise in the Noise section of the General Plan and in the Morgan Hill Municipal Code (Municipal Code).

Morgan Hill 2035 General Plan

The General Plan includes the following noise-related goals and policies in regard to the proposed project:

GOAL SSI-8 Prevention of noise from interfering with human activities or causing health problems.

Policy SSI-8.1 **Exterior Noise Level Standards:** Require new development projects to be designed and constructed to meet acceptable exterior noise level standards.

- Apply a maximum exterior noise level of 60 dBA $_{Ldn}$ in residential areas where outdoor use is a major consideration (e.g., backyards in single-family housing developments and recreation areas in multi-family housing projects). Where the City determines that providing an L_{dn} of 60 dBA or lower cannot be achieved after the application of reasonable and feasible mitigation, an L_{dn} of 65 dBA may be permitted.
- Indoor noise levels should not exceed an L_{dn} of 45 dBA in new residential housing units.
- Noise levels in new residential development exposed to an exterior L_{dn} 60 dBA or greater should be limited to a maximum instantaneous noise level (e.g., trucks on busy streets, train warning whistles) in bedrooms of 50 dBA. Maximum instantaneous

[2] ICC Digital Codes. 2022 California Building Standards Code, Title 23, Part 2. Website: https://codes.iccsafe.org/content/CABC2022P2/chapter-12-interior-environment#CABC2022P2_Ch12_Sec1206. Accessed June 25, 2024.

noise levels in all other habitable rooms should not exceed 55 dBA. The maximum outdoor noise level for new residences near the railroad shall be 70 dBA L_{dn}, recognizing that train noise is characterized by relatively few loud events.

Policy SSI-8.2 **Impact Evaluation**: The impact of proposed development project on existing land uses should be evaluated in terms of the potential for adverse community response based on significant increase in existing noise levels, regardless of compatibility guidelines.

Policy SSI-8.5 **Traffic Noise Level Standards:** Consider noise level increases resulting from traffic associated with new projects significant if: a) the noise level increase is 5 dBA L_{dn} or greater, with a future noise level of less than 60 dBA L_{dn}, or b) the noise level increase is 3 dBA L_{dn} or greater, with a future noise level of 60 dBA L_{dn} or greater.

Policy SSI-8.6 **Stationary Noise Level Standards:** Consider noise levels produced by stationary noise sources associated with new projects significant if they substantially exceed existing ambient noise levels.

Policy SSI-8.9 **Site Planning and Design:** Require attention to site planning and design techniques other than sound walls to reduce noise impacts, including: (a) installing earth berms, (b) increasing the distance between the noise source and the receiver; (c) using non-sensitive structures such as parking lots, utility areas, and garages to shield noise-sensitive areas; (d) orienting buildings to shield outdoor spaces from the noise source; and (e) minimizing the noise at its source.

Morgan Hill Municipal Code

The Municipal Code establishes a number of regulations that would apply to the proposed project's temporary construction activities and long-term operations.

Chapter 8.28–Noise, Section 8.28.040

D. "Construction activities" are defined as including, but not limited to, excavation, grading, paving, demolition, construction, alteration or repair of any building, site, street or highway, delivery or removal of construction material to a site, or movement of construction materials on a site. Construction activities are prohibited other than between the hours of seven a.m. and eight p.m., Monday through Friday and between the hours of nine a.m. to six p.m. on Saturday. Construction activities may not occur on Sundays or federal holidays.

I. Noises Adjacent to Schools, Courts, Churches and Hospitals. The creation of any excessive noise on any street adjacent to any school, institution of learning, church or court while the same is in use or adjacent to any hospital, which noise unreasonably interferes with the workings of such institution or which disturbs or unduly annoys patients in the hospital; provided, conspicuous signs are displayed in such streets indicating that the street is adjacent to a school, hospital or court.

J. Pile Drivers, Hammers and Similar Equipment. The operation, between the hours of eight p.m. and seven a.m. of any pile driver, steam shovel, pneumatic hammer, derrick, steam or electric hoist or other appliance, the use of which is attended by loud or unusual noise.

18.76.090 - Noise.

No land use or activity may produce a noise level in excess of the standards in Table 18.76-1.

Table 18.76-1: Maximum Noise Levels

Receiving Land Use	Maximum Noise Level at Lot Line of Receiving Use [1]
Industrial and Wholesale	70 dBA
Commercial	65 dBA
Residential or Public/Quasi-Public	60 dBA

Noise standards in Table 18.76-1 do not apply to noise generated by vehicle traffic in the public right-of-way or from temporary construction, demolition, and vehicles that enter and leave the site of the noise-generating use (e.g., construction equipment, trains, trucks).

18.76.130 - Vibration.

Vibration transmitted through the ground that is discernible without instruments at the lot line of the establishment or use is prohibited. Vibrations from temporary construction, demolition, and vehicles that enter and leave the lot (e.g., construction equipment, trains, trucks, etc.) are exempt from this standard.

EXISTING NOISE CONDITIONS

FCS Noise Study

On July 16, 2024, noise measurements were obtained at multiple locations near the project site to further aid in the characterization of daytime ambient noise conditions surrounding the proposed project and nearby sensitive receptors. The measurements ranged between 57.2 dBA and 71 dBA equivalent sound level (L_{eq}) as shown in Table 2. Noise sources were primarily vehicle traffic along Diana Avenue, Markross Court, and Butterfield Boulevard, as well as construction noise on an adjacent street. Noise measurement data sheets are included in Attachment B.

Table 2: FCS Noise Measurements

#	Time	Location	Primary Noise Sources	Noise Level (dBA L_{eq})
1.	1:01 p.m.–1:16 p.m.	On the sidewalk. At the southeast corner of the project site. Approximately 115 feet southwest of the corner of Diana Avenue and Markross Court.	Traffic, Pedestrians, light electrical hum.	57.2
2.	1:28 p.m.–1:43 p.m.	Sidewalk at the south corner of the site. Approximately 60 feet northeast of the intersection of Diana Avenue and Butterfield Boulevard.	Traffic, music from vehicles, intersection noise.	61.4
3.	1:54 p.m.–2:09 p.m.	At the northwest corner of the site. Approximately 65 feet from Butterfield Boulevard.	Residential noise, construction noise on adjacent street 150 feet away. Equipment recorded saw, drill, and hammer. Dog barking. Also, traffic and pedestrian noise.	71.0

Notes:
dBA = A-weighted decibel
L_{eq} = equivalent sound level
Source: Attachment B

THRESHOLDS OF SIGNIFICANCE AND IMPACT ANALYSIS

Thresholds of Significance

According to the California Environmental Quality Act (CEQA) Guidelines, Appendix G, to determine whether impacts related to noise and vibration are significant environmental effects, the following questions are analyzed and evaluated.

Would the proposed project:

a) Generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

b) Generate excessive groundborne vibration or groundborne noise levels?

c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

Substantial Noise Increase in Excess of Standards

Construction Noise Impacts

For purposes of this analysis, a significant impact would occur if construction activities would result in a substantial temporary increase in ambient noise levels outside of the City's permissible hours for construction that would result in annoyance or sleep disturbance of nearby sensitive receptors. The City's permissible hours for construction activity are between the hours of 7:00 a.m. and 8:00 p.m. Monday through Friday and between the hours of 9:00 a.m. to 6:00 p.m. on Saturday. Construction activities may not occur on Sundays or federal holidays.

While the City of Morgan Hill does not establish noise level thresholds for construction activities, this analysis uses the noise limits established by the FTA to identify the potential for impacts due to substantial temporary construction noise. The FTA identifies construction noise limits in the Transit Noise and Vibration Impact Assessment Manual.[3] During daytime hours, an exterior threshold of 80 dBA L_{eq} (8-hour average) shall be enforced at residential land uses, 85 dBA L_{eq} at commercial land uses, and 90 dBA L_{eq} at industrial land uses.

Construction is completed in discrete steps, each of which has its own mix of equipment and, consequently, its own noise characteristics. These various sequential phases would change the character of the noise generated on the site and, therefore, the noise levels surrounding the site as construction progresses. Despite the variety in the type and size of construction equipment, similarities in the dominant noise sources and patterns of operation allow construction-related noise ranges to be categorized by work phase. Typical operating cycles for these types of construction equipment may involve 1 or 2 minutes of full-power operation followed by 3 or 4 minutes at lower power settings. Impact equipment, such as impact pile drivers, are not planned to be used during construction of this proposed project.

The loudest phase of construction is typically the site preparation as that is when the loudest pieces of heavy construction equipment would operate. For example, the maximum noise level generated by each grader is assumed to be 85 dBA maximum noise/sound level (L_{max}) at 50 feet from this equipment. Each front-end loader would also generate 80 dBA L_{max} at 50 feet. The maximum noise level generated by each backhoe is approximately 80 dBA L_{max} at 50 feet.

A conservative but reasonable assumption is that this equipment would operate simultaneously and continuously over at least a 1-hour period in the vicinity of the closest existing residential receptors but would move linearly over the project site as they perform their earthmoving operations, spending a relatively short amount of time adjacent to any one receptor. A characteristic of sound is that each doubling of sound sources with equal strength increases a sound level by 3 dBA. Assuming that each piece of construction equipment operates at some distance from the other equipment, a reasonable worst-case combined noise level during this phase of construction would be 91 dBA L_{max} at a distance of 50 feet from the acoustic center of a construction area. The acoustical center reference is used because

[3] Federal Transit Administration (FTA). 2018. Transit Noise and Vibration Impact Assessment Manual. September.

construction equipment must operate at some distance from one another on a project site, and the combined noise level as measured at a point equidistant from the sources (acoustic center) would be the worst-case maximum noise level. These operations would be expected to result in a reasonable worst-case hourly average of 90 dBA L_{eq} at a distance of 50 feet from the acoustic center of a construction area. These worst-case construction noise levels would only occur during the site preparation phase of development.

The closest noise-sensitive receptors to the proposed project site are single-family residences located directly northwest of the project site. The closest residence would be located approximately 35 feet from the acoustic center of construction activity where multiple pieces of heavy construction equipment would potentially operate at the project site. At this distance, and assuming no shielding from existing fencing, worst-case construction noise levels could range up to approximately 88 dBA L_{max}, intermittently, and could have an hourly average of up to 86 dBA L_{eq}, at the façade of the nearest multi-family residential home.

Although there could be a relatively high single event noise exposure potential causing an intermittent noise nuisance, the effect of construction activities on longer-term (hourly or daily) ambient noise levels would be small; especially considering that these reasonable worst-case construction noise levels at any single receptor would reduce by 6 dBA per doubling of distance as heavy construction equipment moves across the project site. A reasonable calculation for the average daily noise level during the loudest phase of construction would be 80 dBA L_{eq} (8-hour average) , as measured at any single residential receptor adjacent to the project site. The noise calculation sheet is provided in Attachment B.

These reasonable worst-case construction noise levels would not exceed the FTA's 80 dBA L_{eq} (8-hour average) noise threshold. In addition, as noted previously, the City of Morgan Hill Municipal Code limits construction activities to between the hours of 7:00 a.m. and 8:00 p.m. Monday through Friday and between the hours of 9:00 a.m. to 6:00 p.m. on Saturday. Therefore, compliance with the City's permissible hours of construction would ensure that the project would not result in annoyance or sleep disturbance of nearby sensitive receptors. Therefore, reasonable worst-case construction noise impacts on sensitive receptors in the project vicinity would be **less than significant.**

Operational Noise Impacts

A significant impact would occur if operational noise levels generated by stationary noise sources at the proposed project site would result in a substantial permanent increase in ambient noise levels in excess of any of the noise performance thresholds established by the City. The City considers noise level increases resulting from traffic associated with new projects to be significant if: (a) the noise level increase is 5 dBA L_{dn} or greater, with a future noise level of less than 60 dBA L_{dn}, or (b) the noise level increase is 3 dBA L_{dn} or greater, with a future noise level of 60 dBA L_{dn} or greater. Furthermore, the City considers noise levels produced by stationary noise sources associated with new projects significant if they substantially exceed existing ambient noise levels. Finally, a significant impact would occur if the noise levels exceed the municipal code standard for residential areas, which is 60 dBA as measured at the lot line of a receiving residential land use.

Mechanical Equipment Noise Impacts

Reference noise levels for typical residential mechanical ventilation equipment range up to approximately 70 dBA at a distance of 3 feet. Proposed mechanical ventilation systems could be located as close as approximately 40 feet from the nearest off-site receptor, the single-family residence located along the northwest corner of the project site. At this distance and assuming no shielding from any existing fences or structures, noise generated by mechanical ventilation equipment would attenuate to below 40 dBA L_{eq} at the nearest off-site residential receptors. The calculation sheet and modeling assumptions are provided in Attachment B.

Noise levels along the project border range between 57.2 dBA and 71 dBA L_{eq} as shown in Table 2. Therefore, the proposed project's mechanical ventilation equipment operational noise levels of 40 dBA L_{eq} as measured at the nearest off-site residential receptors would not generate noise levels in excess of documented existing ambient noise levels. In addition, these operational noise levels would not exceed the City's noise performance threshold of 60 dBA as measured at the nearest receiving residential property line. Therefore, mechanical ventilation system operational noise levels would not result in a substantial permanent increase in noise levels in excess of established standards. The impact of mechanical ventilation equipment operational noise levels on sensitive off-site receptors would be **less than significant.**

Traffic Noise Impacts

A significant impact would occur if a project doubled the existing traffic volume on a roadway, which would increase the ambient noise level by approximately 3 dBA.[4] The documented ambient noise levels around the project site, summarized in Table 2 above, range from approximately 57 dBA to 71 dBA L_{eq}.

FCS calculated the project trip generation numbers based on the Institute of Transportation Engineers Trip Generation Manual 11th Edition. The trip generation data sheets are provided in Attachment B of this report. The proposed 93 unit townhomes would generate approximately 680 weekday trips, 757 Saturday trips, and 584 Sunday trips. Assuming, as a conservative assumption, a total of 760 average daily trips, project trips would generate 53 dBA CNEL as measured at 50 feet from the centerline of the outermost travel lane. The noise calculation sheets for these traffic noise levels are provided in Attachment B.

These noise levels are below the documented existing ambient noise levels shown in Table 2 above. In addition, adding these traffic noise levels to the documented existing ambient noise levels would result in a less than 2 dBA increase in ambient noise levels. This is below the City's significant increase threshold of 3 dBA.

[4] City of Morgan Hill. Morgan Hill 2035 General Plan. 2016 General Plan Noise Section. Website: https://www.morganhill.ca.gov/DocumentCenter/View/22839/MH2035-General-Plan---December-2017?bidId=. Accessed July 22, 2024.

Therefore, the proposed project would not result in a substantial permanent increase in ambient noise levels from project-generated traffic trips, and mobile source operational noise impacts would be **less than significant**.

EXCESSIVE GROUNDBORNE VIBRATION LEVELS

A significant impact would occur if the proposed project would generate groundborne vibration or groundborne noise levels in excess of established standards. The City has established in Chapter 8.28–Noise, Section 18.76.130 of the Municipal Code that vibration transmitted through the ground that is discernible without instruments at the lot line of the establishment or use is prohibited. While the City notes that vibrations from temporary construction, demolition, and vehicles that enter and leave the lot (e.g., construction equipment, trains, trucks, etc.) are exempt from this standard, for purposes of this analysis, in order to establish a conservative threshold for construction vibration impacts, the FTA's vibration impact criteria are utilized. The FTA has established industry accepted standards for vibration impact criteria and impact assessment. These guidelines are published in its Transit Noise and Vibration Impact Assessment Manual and are summarized in Table 1 above.[5]

Short-Term Construction Vibration Impacts

Of the variety of equipment used during construction, the small vibratory rollers that are anticipated to be used in the site preparation phase of construction would produce the greatest groundborne vibration levels. Typical vibration source levels from construction equipment are shown in Table 4 of Attachment A. Small vibratory rollers produce groundborne vibration levels ranging up to 0.101 inch per second (in/sec) peak particle velocity (PPV) at 25 feet from the operating equipment.

The nearest off-site structure is a single-family residential building located east of the project site, approximately 25 feet from the nearest construction footprint where small vibratory rollers would potentially operate. At this distance, groundborne vibration levels could range up to 0.101 PPV from operation of a small vibratory roller. This is below the FTA Construction Vibration Impact Criteria of 0.2 in/sec PPV for this type of structure, a building of nonengineered timber and masonry construction. For additional perspective, it is even below the FTA's most stringent 0.12 in/sec PPV threshold for historic, fragile buildings.

Therefore, construction of the proposed project would not expose nearby buildings to groundborne vibration levels in excess of their applicable FTA damage criteria, and this impact would be **less than significant.**

Operational Vibration Impacts

Implementation of the proposed project would not include any permanent sources that would expose persons in the project vicinity to groundborne vibration levels that could be discernible without instruments at any existing sensitive land use in the project vicinity. In addition, there are no existing significant permanent sources of groundborne vibration in the project vicinity to which the proposed

[5] Federal Transit Administration (FTA). 2018. Transit Noise and Vibration Impact Assessment Manual. September.

project would be exposed. Therefore, project operational groundborne vibration level impacts would be considered **less than significant**.

EXCESSIVE NOISE LEVELS FROM AIRPORT ACTIVITY

A significant impact would occur if the proposed project would expose people residing or working in the project area to excessive noise levels for a project located within the vicinity of a private airstrip or an Airport Land Use Compatibility Plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport.

The nearest airports to the project site are the San Martin Airport located approximately 4 miles south of the project site and the San José International Airport located approximately 21 miles north of the project site. Because of the distance from and orientation of the airport runways, the project site is located well outside of the 65 dBA CNEL airport noise contours. While aircraft noise is occasionally audible on the project site from aircraft flyovers, aircraft noise associated with nearby airport activity would not expose people residing or working near the project site to excessive noise levels.

Therefore, implementation of the proposed project would not expose persons residing or working in the project vicinity to noise levels from airport activity that would be in excess of normally acceptable standards for residential land use development, the project would result in **no impact** associated with airport noise.

CONCLUSION

Based on the project understanding described above, the proposed project would result in less than significant impacts related to noise. Thank you for the opportunity to conduct this noise impact analysis. Please feel free to contact Phil Ault (559.930.6191 or pault@fcs-intl.com) should you have any questions.

Sincerely,

Philip Ault, Director of Noise and Air Quality
INCE Member
FirstCarbon Solutions
2999 Oak Road, Suite 250
Walnut Creek, CA 94597

Attachment A: Fundamentals of Noise
Attachment B: Noise Monitoring and Modeling Data

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Attachment A:
Fundamentals of Noise

NOISE AND VIBRATION FUNDAMENTALS

Characteristics of Noise and Descriptors

Sound can be described in terms of its loudness (amplitude) and frequency (pitch). The standard unit of measurement for sound is the decibel, abbreviated dB. Because the human ear is not equally sensitive to sound at all frequencies, the A-weighted scale (dBA) is used to reflect the normal hearing sensitivity range of the human ear. Table 1 provides examples of A-weighted noise levels from common sources. Although the terms "sound" and "noise" are often used synonymously, noise is commonly defined as sound that is either loud, unpleasant, unexpected, or undesired.[1] Because decibels are logarithmic units, they cannot be simply added or subtracted. For example, two cars each producing 60 dBA of noise would not produce a combined 120 dBA.

Table 1: A-Weighted Decibel Scale

Common Noise Sources	Sound Level, dBA
Near Jet Engine	130
Rock and Roll Band	110
Jet Flyover at 1,000 feet	100
Power Motor	90
Food Blender	80
Living Room Music	70
Human Voice at 3 feet	60
Residential Air Conditioner at 50 feet	50
Bird Calls	40
Quiet Living Room	30
Average Whisper	20
Rustling Leaves	10
Notes: These noise levels are approximations intended for general reference and information use. They do not meet the standard required for detailed noise analysis but are provided for the reader to gain a rudimentary concept of various noise levels. Source: Cowan, James P. 1993. Handbook of Environmental Acoustics.	

Table 2 briefly defines common noise measurement descriptors and other sound terminology used in this memorandum.

[1] California Department of Transportation (Caltrans). 2013. Technical Noise Supplement to the Traffic Noise Analysis Protocol.

Table 2: Sound Terminology

Term	Definition
Sound	A vibratory disturbance created by a vibrating object which, when transmitted by pressure waves through a medium such as air, can be detected by a receiving mechanism such as the human ear or a microphone.
Noise	Sound that is loud, unpleasant, unexpected, or otherwise undesirable.
Ambient Noise	The composite of noise from all sources near and far in a given environment.
Decibel (dB)	A unitless measure of sound on a logarithmic scale which represents the squared ratio of sound pressure amplitude to a reference sound pressure. The reference pressure is 20 micropascals, representing the threshold of human hearing (0 dB).
A-Weighted Decibel (dBA)	An overall frequency-weighted sound level that approximates the frequency response of the human ear.
Equivalent Noise Level (L_{eq})	The average sound energy occurring over a specified time period. In effect, L_{eq} is the steady-state sound level that in a stated period would contain the same acoustical energy as the time-varying sound that actually occurs during the same period.
Maximum and Minimum Noise Levels (L_{max} and L_{min})	The maximum or minimum instantaneous sound level measured during a measurement period.
Day-Night Level (DNL or L_{dn})	The energy average of the A-weighted sound levels occurring during a 24-hour period, with 10 dB added to the A-weighted sound levels occurring between 10:00 p.m. and 7:00 a.m. (nighttime).
Community Noise Equivalent Level (CNEL)	The energy average of the A-weighted sound levels occurring during a 24-hour period, with 5 dB added to the A-weighted sound levels occurring between 7:00 p.m. and 10:00 p.m. and 10 dB added to the A-weighted sound levels occurring between 10:00 p.m. and 7:00 a.m.
Statistical Descriptor (L_X)	L_X is used to represent the noise level exceeded X% of a specified time period. For example, L_{90} represents the noise level that is exceeded 90% of a specified time period. L_{90} is commonly used to represent ambient or background steady-state noise levels.
Source: Data compiled by FirstCarbon Solutions (FCS) 2024.	

Effects of Environmental Noise

The degree to which noise can impact an environment ranges from levels that interfere with speech and sleep to levels that can cause adverse health effects. Most human response to noise is subjective. Factors that influence individual responses may include the intensity, frequency, and pattern of noise;

the amount of background or existing noise present; and the nature of work or human activity that is exposed to intruding noise.

According to the National Institute of Health (NIH), extended or repeated exposure to sounds at or above 85 dB can cause hearing loss. Sounds of 75 dBA or less, even after continuous and repeated exposure, are unlikely to cause hearing loss.[2] The World Health Organization (WHO) reports that adults should not be exposed to sudden "impulse" noise events of 140 dB or greater. For children, this limit is 120 dB.[3]

Exposure to elevated nighttime noise levels can disrupt sleep, leading to increased levels of fatigue and decreased work or school performance. For the preservation of healthy sleeping environments, the WHO recommends that continuous interior noise levels should not exceed 30 dBA L_{eq} and that individual noise events of 45 dBA or higher be limited.[4]

Some epidemiological studies have shown a weak association between long-term exposure to noise levels of 65 to 70 dBA L_{eq} or greater and cardiovascular effects, including ischemic heart disease and hypertension. However, at this time, the relationship is largely inconclusive.

It is generally accepted that people with normal hearing sensitivity can barely perceive a 3 dBA change in noise levels, though if changes occur to the character of a sound (i.e., changes to the frequency content), then changes less than 3 dBA may be more noticeable.[5] Changes of 5 dBA may be readily perceptible, and changes of 10 dBA are perceived as a doubling in loudness.[6] However, few people are highly annoyed by daytime noise levels below 55 dBA.[7]

Loud noises, such as those from construction activities, can interfere with peoples' abilities to effectively communicate via speech, as well as other activities, resulting in annoyance or inconvenience. The EPA has found that a home interior noise level of 45 dBA L_{eq} generally protects speech and communication by providing 100 percent intelligibility of speech sounds.[8] Other common daily activities that may be disrupted by elevated interior noise levels include watching television, listening to music, or activities requiring concentration (such as reading). The EPA has determined that, given the preservation of an indoor noise level associated with 100 percent speech intelligibility (i.e., 45 dBA L_{eq}), the average community reaction is not evident and "7 dBA below levels associated with significant complaints and threats of legal action." Any complaints and annoyance are dependent on "attitude and other non-level related factors."

Noise Attenuation

Generally speaking, noise levels decrease, or "attenuate," as distances from noise sources to receivers increases. For each doubling of distance, noise from stationary or small, localized sources, commonly

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2 National Institute of Health (NIH), National Institute on Deafness and Other Communication. www.nidcd.nih.gov/health/noise-induced-hearing-loss.
3 World Health Organization (WHO). 1999. Guidelines for Community Noise.
4 Ibid.
5 California Department of Transportation (Caltrans). 2013. Technical Noise Supplement to the Traffic Noise Analysis Protocol.
6 Ibid.
7 World Health Organization (WHO). 1999. Guidelines for Community Noise.
8 United States Environmental Protection Agency (EPA). 1974. Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety.

referred to as “point sources,” may attenuate at a rate of 6 dBA for each doubling of distance. This attenuation is referred to as the inverse square law. For example, if a point source emits a noise level of 80 dBA at a reference distance of 50 feet, its noise level would be approximately 74 dBA at a distance of 100 feet, 68 dBA at a distance of 200 feet, etc. Noise emitted by “line” sources, such as highways, attenuates at the rate of 3 dBA for each doubling of distance.[9]

Factors such as ground absorption and atmospheric effects may also affect the propagation of noise. In particular, ground attenuation by non-reflective surfaces, such as soft dirt or grass, may contribute to increased attenuation rates of up to an additional 8-10 dBA per doubling of distance.[10]

Noise is most audible when traveling by direct line of sight, an unobstructed visual path between a noise source and a receiver. Barriers that break the line of sight between noise sources and receivers, such as walls and buildings, can greatly reduce source noise levels by allowing noise to reach receivers by diffraction only. Barriers can reduce source noise levels by up to 20 dBA, though it is generally infeasible for temporary barriers to reduce source noise levels by more than 15 dBA.[11] In cases where the noise path from source to receiver is direct but grazes the top of a barrier, noise attenuation of up to 5 dBA may still occur.[12]

Characteristics of Groundborne Vibration and Descriptors

Vibration is an oscillatory motion that can be described in terms of displacement, velocity, and acceleration.[13] Unlike noise, vibration is not a common environmental issue, as it is unusual for vibration from vehicle sources to be perceptible. Common sources of vibration may include trains, construction activities, and certain industrial operations.

Table 3 briefly defines common vibration measurement descriptors and other terminology used in this analysis.

Table 3: Vibration Terminology

Term	Definition
Peak Particle Velocity (PPV)	PPV is commonly used to describe and quantify vibration impacts to buildings and other structures. PPV levels represent the maximum instantaneous peak of a vibration signal and are generally measured in inches per second (in/sec).
Vibration Decibels (VdB)	The vibration velocity level in decibel scale.
Source: Data compiled by FirstCarbon Solutions (FCS) 2024.	

[9] California Department of Transportation (Caltrans). 2013. Technical Noise Supplement to the Traffic Noise Analysis Protocol.
[10] Ibid.
[11] Ibid.
[12] Ibid.
[13] Federal Transit Administration (FTA). 2018. Transit Noise and Vibration Impact Assessment.

High levels of vibration may cause damage to buildings or even physical personal injury. However, vibration levels rarely affect human health outside the personal operation of certain construction equipment or industrial tools. Instead, most people consider environmental vibration to be an annoyance that may affect concentration or disturb sleep. Background vibration in residential areas is usually not perceptible, and perceptible indoor vibrations are generally caused by sources within buildings themselves, such as slamming doors or heavy footsteps. Vibration from traffic on smooth roadways is rarely perceptible, even from larger vehicles such as buses or trucks.[14] The threshold of human perception of vibration is approximately 0.01-0.02 in/sec peak particle velocity (PPV).[15]

Off-site sources that may produce perceptible vibrations are usually caused by construction equipment, steel-wheeled trains, and traffic on rough roads, while smooth roads rarely produce perceptible groundborne noise or vibration. Construction activities, such as blasting, pile driving and operating heavy earthmoving equipment, are common sources of groundborne vibration. Construction vibration impacts on building structures are generally assessed in terms of PPV. Typical vibration source levels from construction equipment are shown in Table 4.

[14] California Department of Transportation (Caltrans). 2020. Transportation and Construction Vibration Guidance Manual.
[15] Ibid.

Table 4: Vibration Levels of Construction Equipment

Construction Equipment	PPV at 25 feet (inches/second)	rms Velocity in Decibels (VdB) at 25 feet
Water Trucks	0.001	57
Scraper	0.002	58
Bulldozer—small	0.003	58
Jackhammer	0.035	79
Concrete Mixer	0.046	81
Concrete Pump	0.046	81
Paver	0.046	81
Pickup Truck	0.046	81
Auger Drill Rig	0.051	82
Backhoe	0.051	82
Crane (Mobile)	0.051	82
Excavator	0.051	82
Grader	0.051	82
Loader	0.051	82
Loaded Trucks	0.076	86
Bulldozer—large	0.089	87
Caisson drilling	0.089	87
Vibratory Roller–small	0.101	88
Compactor	0.138	90
Clam shovel drop	0.202	94
Vibratory Roller–large	0.210	94
Pile Driver (impact-typical)	0.644	104
Pile Driver (impact-upper range)	1.518	112

Notes:
PPV = peak particle velocity
Source: Compilation of scientific and academic literature, generated by the Federal Transit Administration (FTA) and Federal Highway Administration (FHWA).

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Attachment B:
Noise Monitoring and Modeling Data

Mobile Construction Activity Noise Calculation

Receiving residential property line	Noise Level Calculation Prior to Implementation of Noise Attenuation Requirements								
	Reference (dBA) 50 ft		Usage	Distance to	Ground	Shielding	Calculated (dBA)		
Equipment Description	Lmax	Quantity	factor[1]	Receptor	Effect[2]	(dBA)[3]	Lmax	Leq	Energy
Grader	85	1	40	35	1	0	88.1	85.7	368778735.9
Front End Loader	80	1	40	85	1	0	75.4	69.1	8141664.97
Backhoe	80	1	40	85	1	0	75.4	69.1	8141664.97
						Lmax[4]	88	Leq	86

ge of time activity occurs each hour
nd terrain between project site and receptor.
; due to terrain or structures
d Lmax is the Loudest value.

Ldn Calculations - Assuming Equipment Moving Across the Project Site						
	Time	Hourly Leq	Leq'	0.1*Leq	antiLog	
	7:00 AM	85.9	85.9	8.585530736	385062066	at 35-feet
	8:00 AM	79.9	79.9	7.985530736	96723218	at 70-feet
	9:00 AM	79.9	79.9	7.985530736	96723218	at 70-feet
	10:00 AM	79.9	79.9	7.985530736	96723218	at 70-feet
	11:00 AM	73.9	73.9	7.385530736	24295774	at 140-feet
	12:00 PM	73.9	73.9	7.385530736	24295774	at 140-feet
	1:00 PM	73.9	73.9	7.385530736	24295774	at 140-feet
	2:00 PM	67.9	67.9	6.785530736	6102822.5	at 280-feet
			Sum		754221863	
			Sum/8		94277733	
			Log10(Sum/8)		7.9744091	
			10*Log10(Sum/8)		79.744091	
			8 Hour Leq		80	

Residential-Grade Mechanical Equipment

Receptor:	Nearest Residential Receptor	Noise Level Calculation Prior to Implementation of Noise Attenuation Requirements								
		Reference (dBA) 3 ft		Usage	Distance to	Ground	Shielding	Calculated (dBA)		
No.	Equipment Description	Lmax	Quantity	factor[1]	Receptor	Effect[2]	(dBA)[3]	Lmax	Leq	Energy
1	Residential grade mechanical ventilation equipment	70	1	80	40	1	0	47.5	35.3	3375
2	Residential grade mechanical ventilation equipment	70	2	80	45	1	0	46.5	36.8	4740.740741
3	Residential grade mechanical ventilation equipment	70	2	80	60	1	0	44.0	33.0	2000
4										
5										
6										
7										
8										
9										
10										
Notes:									Leq	40

[1] Percentage of time activity occurs each hour

[2] Soft ground terrain between project site and receptor

[3] Shielding due to structural/soundwall shielding

Diana Morgan Hill Townhomes

Operational Vehicle Trip Generation Rate Adjustments

Using CalEEMod Defaults, no Traffic Study

Operations

Vehicle Data

UPDATE DEFAULTS

Your project is located in an area for which default trip purpose splits and trip lengths are available from the local Metropolitan Planning Organization (MPO) or Regional Transportation Planning Agency (RTPA). Would you like to use the MPO/RTPA data to estimate VMT?

CSTDM | MPO/RTPA

Enter VMT and Trips Manually Instead

Rates and Lengths

Land Use Sub Type	Size	Weekday Trip Rate (size/day)	Saturday Trip Rate (size/day)	Sunday Trip Rate (size/day)	Res H-W Trip Length (miles)	Res H-S Trip Length (miles)	Res H-O Trip Length (miles
Condo/Townhouse	93	7.3200001716	8.1400003433	6.2800002098	10.3258444	3.141094048	5.57033549

Purpose and Percentages

Land Use Sub Type	Size	Weekday Primary Trip (%)	Weekday Divert Trip (%)	Weekday Pass-By Trip (%)	Saturday Primary Trip (%)	Saturday Divert Trip (%)	Saturday Pas By Trip (%)
Condo/Townhouse	93	100	0	0	100	0	0

TABLE Project Trips-01
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 07/24/2024
ROADWAY SEGMENT: Diana Avenue - Butterfield Boulevard to Markross Court
NOTES: Diana Townhomes Project - Project Trips

---

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 760 SPEED (MPH): 35 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

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* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 53.00

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	0.0	0.0	0.0

---

hnical Studies
ST-3
Butterfield Blvd
Santa Clara County Superior Ct
South County Morgan Hill Courthouse
ST-2
ST-1
Marioss Ct
Ct Mazatan
Corte Caba
Diana Ave
Creekside Cir

Project Number: 6050.0001 Sheet ___of ___
Project Name: Diana Morgan HIll Townhomes
Test Personnel: Brandon Carroll

NOISE MEASUREMENT SURVEY

Site Number: ST1 Date: 07/16/24 Time: From 1:01pm To 1:16 pm

Site Location: On the sidewalk, at the southeast corner of the project site.
Approximately 116 feet southwest of the corner of Diana Avenue and Markross Court.

Primary Noise Sources: Traffic, pedestrians, light electrical hum or insect noise.

Measurement Results

	dBA
L_{eq}	57.2
L_{max}	69.8
L_{min}	37.8
L_{peak}	
L_5	64.2
L_{10}	62.1
L_{50}	49.4
L_{90}	41.3
SEL	

Observed Noise Sources/Events

Time	Noise Source/Event	dBA

Comments: Tripod was not available. I secured the SLM to fence along property.

Equipment: LxT 2 Measured Difference: -0.03 dBA
Settings: A-Weighted ☐ Other☐_____ Slow☐ Fast☐ Windscreen■

Atmospheric Conditions:

Maximum Wind Velocity (mph)	Average Wind Velocity (mph)	Temperature (F)	Relative Humidity (%)	
	< 1	78		
Comments:				

Photos Taken:

Photo Number	Location/Description
1	Photo facing north
2	Photo facing south
3	Photo facing west
4	Photo facing east

Traffic Description:

Roadway	# Lanes	Posted Speed	Average Speed	NB/EB Counts	SB/WB Counts
Diana Avenue	2	30	~30	10	11

Diagram/Further Comments:

Project Number: 6050.0001 Sheet ___of ___
Project Name: Diana Morgan Hill Townhomes
Test Personnel: Brandon Carroll

NOISE MEASUREMENT SURVEY

Site Number: ST2 Date: 7/16/24 Time: From 1:28 pm To 1:43 pm

Site Location: Sidewalk at the south corner of the site.
Approximately 60.5 feet northeast of the intersection of Diana Avenue and Butterfield Boulevard.

Primary Noise Sources: Traffic, music from cars, loud insect noises

Measurement Results

	dBA
L_{eq}	61.4
L_{max}	71.6
L_{min}	45.9
L_{peak}	
L_5	66.4
L_{10}	65.1
L_{50}	59.7
L_{90}	52.5
SEL	

Observed Noise Sources/Events

Time	Noise Source/Event	dBA

Comments: Tripod was not available. I secured the SLM to the fence that surrounds the site.

Equipment: LxT 2 Measured Difference: -0.07 dBA
Settings: A-Weighted ☐ Other☐_____ Slow☐ Fast☐ Windscreen■

Atmospheric Conditions:

Maximum Wind Velocity (mph)	Average Wind Velocity (mph)	Temperature (F)	Relative Humidity (%)	
	< 1	78		
Comments:				

Photos Taken:

Photo Number	Location/Description
1	Photo facing north
2	Photo facing south
3	Photo facing east
4	Photo facing west

Traffic Description:

Roadway	# Lanes	Posted Speed	Average Speed	NB/EB Counts	SB/WB Counts
Diana Avenue	2	30	~30	8	18
Butterfield Boulevard	6	45	~45	86	90

Diagram/Further Comments:

Project Number: 6050.0001 Sheet ___of ___
Project Name: Diana Morgan Hill Townhomes
Test Personnel: Brandon Carroll

NOISE MEASUREMENT SURVEY

Site Number: ST3 Date: 7/16/24 Time: From 1:54 pm To 2:09 pm

Site Location: At the northwest corner of the site.
Approximately 67 feet from Butterfield Boulevard.

Primary Noise Sources: There was a loud barking dog behind a fence approximately 5-6 feet away from the monitoring location; barked throughout test..
There was construction happening across the street approximately 150 feet away. Equipment included saw, drill, and hammer.
Also traffic noise and a few pedestrians walking by.

Measurement Results

	dBA
L_{eq}	71.0
L_{max}	93.6
L_{min}	47.8
L_{peak}	
L_5	76.2
L_{10}	72.9
L_{50}	64.0
L_{90}	55.1
SEL	

Observed Noise Sources/Events

Time	Noise Source/Event	dBA

Comments: Tripod was not available. I secured the SLM to the fence surrounding the site.

Equipment: LxT 2 Measured Difference: -0.08 dBA
Settings: A-Weighted ☐ Other☐_____ Slow☐ Fast☐ Windscreen■

Atmospheric Conditions:

Maximum Wind Velocity (mph)	Average Wind Velocity (mph)	Temperature (F)	Relative Humidity (%)	
	~ 5	78		
Comments:				

Photos Taken:

Photo Number	Location/Description
1	Photo facing north
2	Photo facing east
3	Photo facing south
4	Photo facing west

Traffic Description:

Roadway	# Lanes	Posted Speed	Average Speed	NB/EB Counts	SB/WB Counts
Butterfield Boulevard	6	45	~ 45	115	110

Diagram/Further Comments:

Appendix H

Trip Generation and Operations Analysis and Supplemental Vehicle Miles Traveled Evaluation

Hexagon Transportation Consultants, Inc.

Memorandum

Date: March 25, 2025

To: Abe Leider, Rincon Consultants

From: Robert Del Rio, T.E.
Daniel Choi

Subject: VMT Assessment for the Residential Development at 375 Diana Avenue in Morgan Hill, California

Hexagon Transportation Consultants, Inc. has completed a VMT assessment for the proposed residential development site located at 375 Diana Avenue in Morgan Hill, California. The project as proposed would consist of 93 residential units. The project site plan is shown on Figure 1. The purpose of this memorandum is to provide an assessment of the project's potential effect on Vehicle Miles Traveled (VMT). A separate traffic operations analysis documenting the project's consistency with the City's General Plan goals and policies is provided in a separate memorandum.

VMT Assessment Methodology and Results

Pursuant to Senate Bill (SB) 743, the California Environmental Quality Act (CEQA) 2019 Update Guidelines Section 15064.3, subdivision (b) states that VMT will be the metric in analyzing transportation impacts for land use projects for CEQA purposes. In November 2024, the City of Morgan Hill adopted its VMT policy which identify VMT screening criteria and significance thresholds to be consistent with SB 743.

VMT Screening

Per the City's VMT policy, projects located within ½-mile of an existing major transit stop or an existing stop along a high-quality transit corridor can be considered to have a less-than-significant impact on VMT. A major transit stop is defined as a site containing an existing trail transit station or the intersection of two or more major bus routes with a service interval of no longer than 15 minutes during peak commute hours. The project site is located within ½-mile of the Morgan Hill Caltrain Station. Thus, the proposed project is considered to have a less than significant impact on VMT per the City's VMT policy. Proximity and access to the Caltrain Station as well as other nearby pedestrian generators is shown on Figure 2.

8070 Santa Teresa Boulevard, Suite 230 · Gilroy, California 95020 · phone 408.846.7410 · fax 408.846.7418 · www.hextrans.com

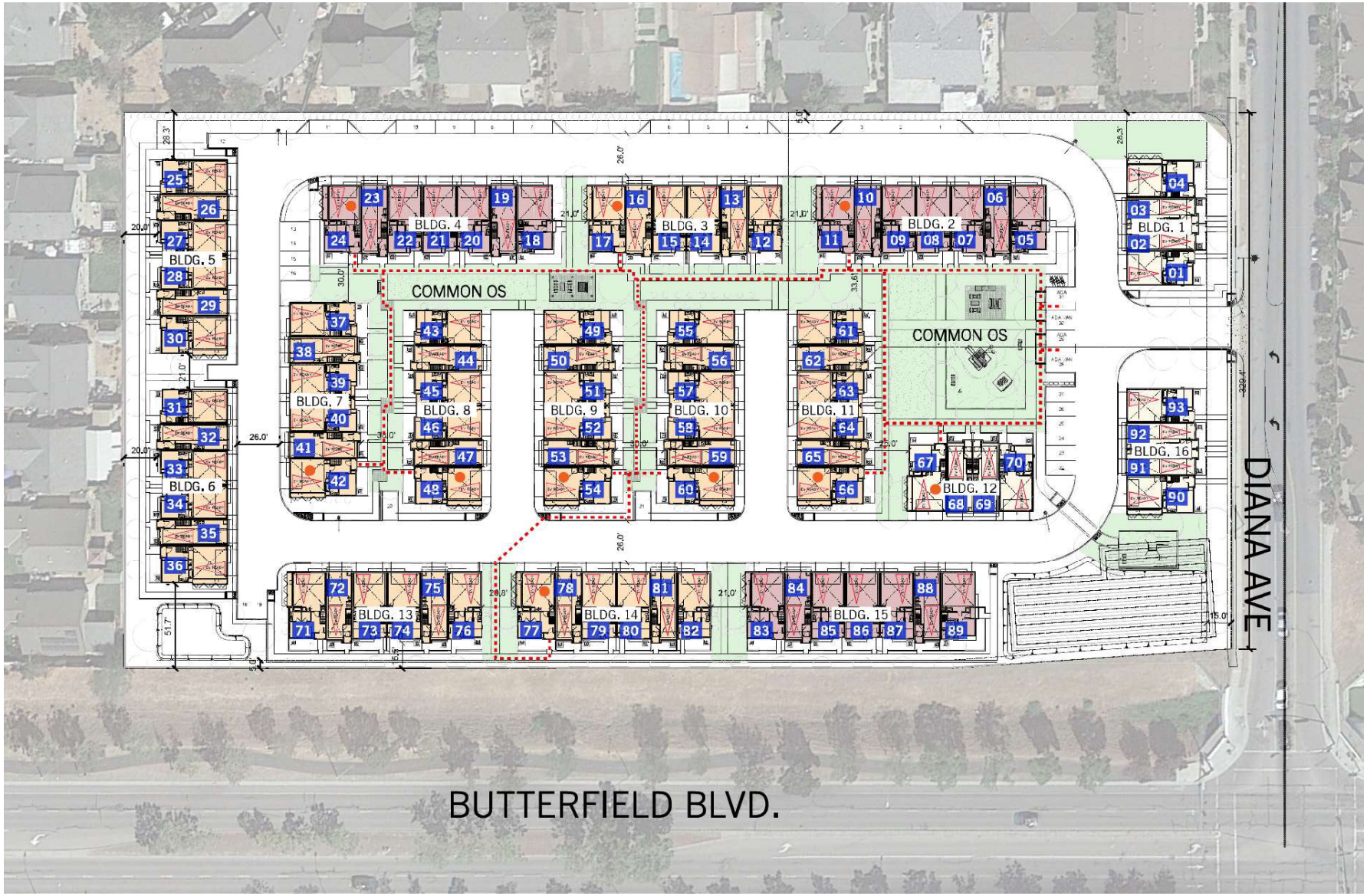

Figure 1
Site Plan

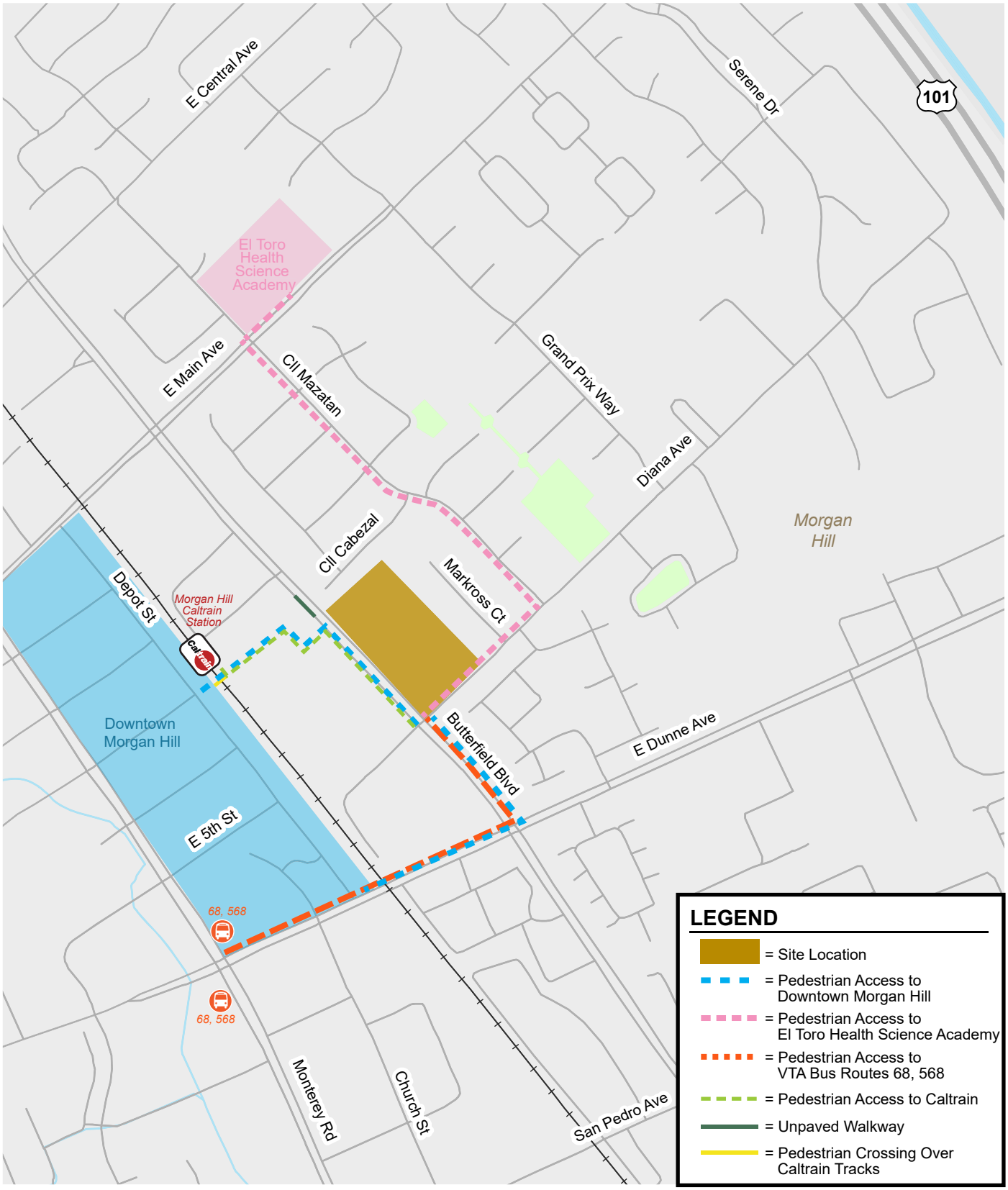

Figure 2
Caltrain Station Location and Pedestrian Generators in the Project Vicinity