



AGENDA

CITY OF HALF MOON BAY PLANNING COMMISSION MEETING

**TUESDAY, AUGUST 24, 2021
7:00 PM**

**ALL REMOTE/TELECONFERENCE MEETING
(SEE DETAILS BELOW)**

**Steve Ruddock, Chair
Sara Polgar, Vice Chair
James Benjamin, Planning Commissioner
David Gorn, Planning Commissioner
Rick Hernandez, Planning Commissioner**

This agenda contains a brief description of each item to be considered. Those wishing to address the Planning Commission on any matter not listed on the Agenda, but within the jurisdiction of the Planning Commission to resolve, may come forward to the podium during the Public Forum portion of the Agenda and will have a maximum of three minutes to discuss their item. Those wishing to speak on an agenda item are asked to fill out a speaker card. Speaker(s) will be called forward at the appropriate time during the agenda item in consideration.

Please Note: Please Provide a Copy of Prepared Presentations to the Clerk

Copies of written documentation relating to each item of business on the Agenda are on file in the Office of the City Clerk at City Hall and the Half Moon Bay Library where they are available for public inspection. If requested, the agenda shall be available in appropriate alternative formats to persons with a disability, as required by Section 202 of the Americans with Disabilities Act of 1990 (42 U.S.C. Sec. 12132.) Information may be obtained by calling 650-726-8271.

In compliance with the Americans with Disabilities Act, special assistance for participation in this meeting can be obtained by contacting the City Clerk's Office at 650-726-8271. A 48-hour notification will enable the City to make reasonable accommodations to ensure accessibility to this meeting (28 CFR 35.102-35.104 ADA Title II).

<http://hmbcity.com/>

MEETING WILL CONCLUDE BY 10:30 PM UNLESS OTHERWISE EXTENDED BY SIMPLE MAJORITY VOTE OF THE PLANNING COMMISSION.

SPECIAL TELECONFERENCE/REMOTE MEETING PROTOCOLS

In accordance with Governor Newsom's Executive Order No-29-20, this will be a teleconference meeting without a physical location to help stop the spread of COVID-19. This meeting will be conducted entirely by remote participation, in compliance with the Governor's Executive Order N-29-20 allowing for deviation of teleconference rules required by the Ralph M. Brown Act.

This meeting will be conducted via Zoom Webinar. Members of the public are welcome to login into the webinar as Attendees. During any public comment portions, attendees may use the "raise your hand" feature and will be called upon and unmuted when it is their turn to speak. The meeting will also be streamed on Channel 27, on pacificcoast.tv

Please click the link below to join:

[Click here to join the Planning Commission Meeting](#)

Webinar ID: 868 8314 3872

Passcode: 94019

Phone: 1-408-638-0968, 86883143872#, *94019#

PLEDGE OF ALLEGIANCE AND ROLL CALL

APPROVAL OF MINUTES

DRAFT MINUTES

[August 10, 2021](#)

PUBLIC COMMENT

1. PUBLIC HEARING ITEMS

1.A

STUDY SESSION - CITY OF HALF MOON BAY CITY CORPORATION YARD UPGRADE PROJECT

CITY FILE NO.: PDP-21-053

LOCATION: 880 STONE PINE ROAD

APN: 056-260-180

APPLICANT/OWNER: CITY OF HALF MOON BAY

Staff Recommendation:

Hold a public study session, receive a presentation, consider community input and provide feedback on the conceptual design plans for the City Corporation Yard Upgrade project. No action will be taken to approve or deny the project at this meeting.

[STAFF REPORT](#)

[ATTACHMENT 1](#)

[ATTACHMENT 2](#)

1.B PROJECT: COASTAL DEVELOPMENT PERMIT, ARCHITECTURAL REVIEW, COMBINED SIDE YARD SETBACK VARIANCE, MAXIMUM BUILDING ENVELOPE VARIANCE AND PARKING EXCEPTION.

FILE NO.: PDP-19-096

LOCATION: 341 MYRTLE STREET

OWNER/APPLICANT: JOHN CALLAN

PROJECT PLANNER: SCOTT PHILLIPS; SPHILLIPS@HMBCITY.COM

Staff Recommendation:

Adopt Resolution P-21-__ to approve PDP-19-096 an application for a Coastal Development Permit, Architectural Review, Combined Side Yard Setback variance, and Parking Exception to allow the construction of a new two-story 1,195 square-foot, single-family residence on a 2,806 square-foot site at 341 Myrtle Street, as shown in Design A and modified by conditions of approval, based upon the Findings and Evidence contained in Exhibit A of the Draft Resolution, and subject to the Conditions of Approval in Exhibit B. Adopt Resolution P-21-__ to approve PDP-19-096 an application for a Coastal Development Permit, Architectural Review, Combined Side Yard Setback variance and Parking Exception to allow the construction of a new two-story 1,195 square-foot, single-family residence on a 2,806 square-foot site at 341 Myrtle Street, as shown in Design A and modified by conditions of approval, based upon the Findings and Evidence contained in Exhibit A of the Draft Resolution, and subject to the Conditions of Approval in Exhibit B.

[STAFF REPORT](#)

[RESOLUTION](#)

[ATTACHMENT 2 - DESIGN A](#)

[ATTACHMENT 3 - DESIGN C](#)

[ATTACHMENT 4](#)

[ATTACHMENT 5](#)

[ATTACHMENT 6](#)

DIRECTOR'S REPORT

COURTESY NOTIFICATION OF DIRECTOR'S APPROVAL OF COASTAL DEVELOPMENT PERMIT EXEMPTIONS

[MEMO - CDP EXEMPTIONS](#)

PLANNING COMMISSION COMMUNICATIONS

ADJOURNMENT



MINUTES
CITY OF HALF MOON BAY PLANNING COMMISSION
TUESDAY, AUGUST 10, 2021
ALL REMOTE/VIRTUAL WEBINAR VIA ZOOM

Chair Ruddock called the hearing to order at 7:04 PM

PRESENT (Planning Commission): Chair Ruddock, Benjamin, Gorn and Hernandez
ABSENT: Vice Chair Polgar

PLEDGE OF ALLEGIANCE AND ROLL CALL

Chair Ruddock led the Pledge of Allegiance.

APPROVAL OF MINUTES

July 13, 2021

M/S: Benjamin/Gorn

Roll Call Vote: 3-0-1 (yes: Ruddock, Benjamin, Gorn; abstained: Hernandez was absent at the July 13th meeting)

PUBLIC COMMENT

Moved to the end of the meeting.

ITEM 1.A. PROJECT DESCRIPTION: Adopt a Mitigated Negative Declaration and associated Mitigation Monitoring and Reporting Program (MMRP) (Attachment 3) for the proposed project; and an application for a Coastal Development Permit and Architectural Review to allow the construction of a new 2,026 square-foot, two-story single-family residence and a 672 square foot attached accessory dwelling unit (ADU) on a 5,000 square-foot site

FILE NO.: PDP-19-045

LOCATION: 909 Grandview Blvd.

APPLICANT/OWNER: Bruce Stebbins

PROJECT PLANNERS: Scott Phillips; 650-726-8299; sphillips@hmbcity.com

Staff Presentation: Scott Phillips presented to the Planning Commission.

Property owner/applicant presented design and offered to reduce the house and ADU to 2,500 SF and to increase the east side setback. Would eliminate two windows on the west side and replace two larger bathroom windows with 2x2 windows using obscure glass.

Bill Stagnaro with BioMass - With respect to Area 4, it has not yet been tested for hydric soils recently or for the 2008 study; however, a sample 10-12 inches deep was completely dry. No wetland plant species during flowering stage were identified within Area 4 during the wetland delineation. Biomass conducted field work and prepared the BRE in spring 2020.

Commission and Committee Clarifying Questions

Q: Where are the road/right-of-way improvements with relative to the wetland buffer?
Staff clarified that the r-o-w improvements do not extend into the buffer.

Q: Asked about memo and if the emails sent to staff from the PC were included.
Staff confirmed that the emails were not included, but responses were provided to all of the questions/comments within the memo.

Q. Asked about lot coverage and FAR for single-family development and ADUs.
Staff clarified State law and the pending update to the City's ADU ordinance.

Q. With respect to setbacks and FAR for the house, are these relative to the City code absent the ADU?

Staff clarified that the proposed project meets the setbacks for the zoning district and is not taking advantage of allowances for substandard lots.

Q. Could there be a "marker" associated with the wetland buffer?
Staff clarified that the draft condition of approval maintains the force to impose the buffer requirements and a deed restriction or conservation easement is not necessary. Staff will look into the concept for a physical marker.

Q. With respect to utility requirements, are they adequate – specifically sewer and water?
Staff confirmed

Q. Asked about the PV solar system as a requirement for the home and ADU.
Staff confirmed that the PV system was sized to meet code for both residences.

Q. Maximum FAR is based on lot size, not on buildable portion of the lot area. Seems that about 15% of the lot is in the buffer.
Staff confirmed that gross lot area is used as the base for lot coverage and FAR in the zoning ordinance.

Q. Why are wetlands studies allowed to be performed in July and August.
Staff clarified that each year is different. If there is adequate moisture to evaluate for wetland plants, then it can be done later in the year. Other years, when drier, not advisable.

Q. Clarify the location of the past wetland delineations and the wetland #4 in the 2008 study.
Staff clarified.

Q. Building looks much bigger than the houses in the neighborhood. How tall are the other buildings in the neighborhood?
Staff confirmed that no height survey was prepared, and that the house to the west is lower. The site grade is also raised above the roadway.

Q. Will it conform to the newly certified Local Coastal Program?
Staff confirmed.

Q. Asked about buffers relative to various drainages.
Staff confirmed that new LUP is being used.

PUBLIC COMMENT

None

Planning Commission Discussion

- Include Planning Commission emails in the public record
- Concerned about green areas shown in the project vicinity. Surmises that the soil must be wet because the vegetation is green
- Missing evidence related to wetlands and the buffer and specifically about hydric soils; make sure that soils are confirmed
- Wants to see the plans revised as presented by the applicant (e.g. reduced lot coverage, FAR, changed windows); supportive of changes offered by the applicant to the project
- Wants feedback on height and scale of other houses in the area
- Window privacy concerns
- Architectural Advisory Committee review needed

Motion to continue project PDP-19-045; 909 Grandview Blvd project to a date uncertain; to come back with the following information and/or revisions:

- Design - Applicant revise design
- Confirm watercourse type, wetlands and associated buffers
- Consider a permanent monument identifying the wetland buffer edge

M/S: Benjamin/Hernandez

Vote: 4-0 (yes: Ruddock, Benjamin, Gorn and Hernandez)

PUBLIC COMMENT

- 1) **Pamela Fisher, Resident** – surprised that the Cabrillo Unified School District’s CDP project was not on the Planning Commission agenda. Requesting that it be placed on an agenda, regarding the project that arose out of the High School CDP for field lights. Now the project includes pruning or removing 81 trees. The trees are no longer a buffer, but just a screen.

DIRECTOR REPORT

PLANNING COMMISSION COMMUNICATIONS

ADJOURNMENT

Motion to adjourn

M/S: Hernandez/Benjamin

Roll Call Vote: 4-0 (yes: Ruddock, Benjamin, Gorn, and Hernandez)

Meeting adjourned at 9:28 PM

Respectfully Submitted:

Approved:

Bridget Jett, Planning Analyst

Steve Ruddock, Chair

Virtual Meeting Attendance List 08/10/2021

Bridget Jett	Bill Stagnaro	Bruce Stebbins
Steve Ruddock	Maz Bozorginia	Kristin
James Benjamin	Jill Ekas	Michelle Dragony
Rick Hernandez	PCT Live	14154404267
David Gorn	Scott Phillips	BlueSky Timer
Juliet Bolding	Pamela Fisher	
Winter King	David Gorn	

**BUSINESS OF THE PLANNING COMMISSION
OF THE CITY OF HALF MOON BAY**

AGENDA REPORT

For meeting of: August 24, 2021

TO: Honorable Chair and Planning Commissioners

FROM: John Doughty, Public Works Director
Douglas Garrison, Senior Planner

TITLE: Study Session—880 Stone Pine, City Corporation Yard Upgrade Project

RECOMMENDATION

Hold a study session, receive a presentation, consider community input and provide feedback on the conceptual design plans for the City Corporation Yard Upgrade project. No action will be taken to approve or deny the project at this meeting.

Summary of Project	
File Number	PDP-21-053
Requested Permits/Approvals	Coastal Development Permit, Architectural and Site Design Review, Environmental Review
Site Location	880 Stone Pine Road/ APN: 056-260-180
Applicant/Property Owner	City of Half Moon Bay
Zoning District	P-S Public and Quasi-Public (proposed in updated LUP) U-R Urban Reserve (current zoning district)
LCP Land Use Plan Designation	Public Facilities and Institutions (New Land Use Plan)

PROJECT BACKGROUND

In 2004, the City purchased the approximately 20-acre former Nurseryman’s Exchange property located at 880 Stone Pine Road as a potential site for a community park and corporation (maintenance) yard location. The purchase was made in partnership with the Peninsula Open Space Trust (POST). Over the next several years, the City’s plans to develop a park were set aside. In 2009 POST exercised its right to take possession of the property. POST allowed the City to continue operating its corporation yard in exchange for management of the property and lease payments.

In 2018, POST gave the City an opportunity to purchase the land prior to placing the property on the open market. The City Council subsequently authorized the purchase of the

property. In 2020, the City purchased the property for purposes of establishing a permanent Corporation Yard. This decision was made following years of efforts to identify a site suitably sized, located and appropriately zoned for a Corporation Yard.

The City obtained financing for acquisition and initial improvements of the Corporation Yard from the California Infrastructure Bank (IBank). The IBank loan requires use of all funds in 2022. The City has applied for a Coastal Development Permit (CDP) to facilitate the phased development of the property.

The City Corporation Yard is a critical facility for Half Moon Bay and the greater Coastside area. A permanent, ADA compliant facility is necessary to house maintenance staff, vehicles, equipment, and materials which are currently stored outside or in a number of temporary shipping containers. The City demolished unsafe storage buildings recently which previously served to house the paint and sign shops.

The City and POST worked together to develop a plan for the City to acquire the site for continued use as a corporation yard, while continuing both organizations' desire to preserve and protect the natural habitat on and adjacent to the property. A requirement of the sale was for the City to record an approximately 100 foot wide trail /conservation easement along Pilarcitos Creek (in anticipation of this linking a more extensive trail east and west in the creek corridor). The project does not include any development within the easement. In the future, a trail could be developed within the easement area; the exact location, timing and other details are unknown at this time. Any future trail would be subject to separate review and permitting.¹

The City has retained an architectural firm, ELS Architecture+Urban Design, to prepare project plans. Because the site contains environmentally sensitive habitat areas (ESHAs), the City initiated work with a qualified biologist, HT Harvey, prior to purchasing the property during the City's "due diligence" period. HT Harvey prepared a biological resource evaluation (BRE) and delineation study, further discussed below. The City has also retained a local environmental consulting firm, SWCA, to complete a comprehensive environmental review, pursuant to the requirements of the California Environmental Quality Act (CEQA). SWCA is also conducting a peer review of the BRE. The CEQA work is currently in development.

The conceptual plans (Attachment 1) incorporate riparian and wetland buffers based on information in the BRE (Attachment 2). Primary ESHA areas include Pilarcitos Creek and an abandoned agricultural pond. Existing facilities, consisting of a trash enclosure and miscellaneous storage containers that are located within the buffer will be removed as part of the project. Figure 1 and 2 include an aerial and a photograph of the site as viewed from Highway 92. Surrounding uses are also summarized below.

¹ The Pilarcitos Creek Trail is acknowledged in the 2019 Bicycle and Pedestrian Master Plan as a future project for which alignment is not yet fully defined and requires study due to the sensitive nature of its location within or near the Pilarcitos Creek riparian buffer. The Trail is also acknowledged in the certified Land Use Plan.

Figure 1. Project Location



Figure 2. Proposed Project



Surrounding Properties

	Use	Zoning
West	Residential: Townhouses and Hilltop Mobile Home Park	Planned Unit Development (PUD)
North	Pedestrian path, Highway 92 and mostly undeveloped land across the highway	Industrial (IND), Public and Quasi-public (P-S) and PUD
East	Mixed light industrial, retail, residential	IND
South	Pilarcitos Creek and greenhouses beyond	Open Space Reserve and Open Space Conservation

Project Description

The City of Half Moon Bay is the applicant and is proposing to upgrade the existing City Corporation Yard. The project includes three phases:

Phase 1: Remove existing trash enclosure and miscellaneous shipping containers and trailers; construct a new fabric tension warehouse building with restrooms, a covered trash/materials enclosure, a paved access road and parking facilities; and install new fencing only around the corporation yard area. The project includes utility upgrades, consisting primarily of new electrical and water service adequate to support fire hydrants and sprinklers.

Phase 2: Construct a solar field which would tie into the existing overhead PG&E transmission line.

Phase 3: Establish a community garden, with a visitor parking area for the community garden as well as for access to a potential future trailhead parking. Access to the site will continue to be from Stone Pine Road.

Initial construction is anticipated to begin in the spring 2022 to meet lender requirements.

DISCUSSION

The purpose of this study session is to introduce the project to the community and the Planning Commission and to provide an opportunity for early feedback on the conceptual plans. The following discussion briefly summarizes compliance with key policies, regulations and the primary design elements.

General Plan

The General Plan establishes broad policies that address transportation, housing and other areas potentially affected by population growth. The project consists of improvements to an existing facility and will not result in a substantial increase in intensity of use, traffic or noise. The project

includes substantial buffers, typically over 100 feet, from ESHA. The property is not currently designated for residential growth. Consequently, the project is consistent with General Plan goals and policies. This facility is critical for the City's implementation of public safety and infrastructure needs, fulfilling General Plan requirements.

Local Coastal Program Land Use Plan (LUP):

The LUP provides policies to protect coastal access, recreational opportunities, visual resources and environmentally sensitive habitat areas (ESHA). It also considers siting standards for critical facilities and hazard avoidance measures. A brief summary of the LUP policies applicable to this project are presented in this discussion.

Land Use (LUP Chapter 2). The project site is designated as Public Facilities and Institutions on the 2021 updated LUP Land Use Map. The current and proposed future use of the property is addressed in the LUP (p 2-71).

The 21-acre site just east of the Cypress Cove condominiums houses the City's corporation yard, as well as an abandoned irrigation impoundment that has been identified as a California red-legged frog (CRLF) breeding pond. The City intends to improve the corporation yard site to better meet City needs while establishing a conservation corridor to support CRLF and protect the Pilarcitos Creek riparian corridor on the southern border of the site. Additional uses such as agriculture may be appropriate at this site, as it was formerly in agriculture use.

The proposed continued use as the City corporation yard and development of a new community garden and solar energy facility is consistent with the land use classification and LCP Policy 2-100.

Policy 2-100. Public Facilities and Institutions Permitted Uses. Permitted uses in the Public Facilities and Institutions land use designation include educational, governmental, agricultural, and institutional uses such as schools, hospitals, churches, community gardens, fire stations, cemeteries, and emergency shelters.

Natural Resources (LUP Chapter 6). Prior to purchase of the property, the City prepared a Biological Resource Evaluation (BRE) and a Wetlands Delineation (Attachment 2). The BRE identifies sensitive environmental resources on the property and includes measures to avoid impacts. The BRE was prepared prior to final adoption of the LUP update. Consequently, the BRE assumed that a 50-foot riparian buffer and 100-foot wetland buffer would be required. The new LUP includes potentially broader riparian buffer requirements. Under the revised policies, the buffer is 50 feet from the edge of riparian vegetation or 100 feet from the creek top of bank, whichever is greater. As shown on the project plans, the conservation easement includes an area that is typically over 100 feet wide. The City will confirm that all proposed new development meets revised LUP policies as project review progresses. A comprehensive environmental review will also be prepared in compliance with the California Environmental Quality Act (CEQA) which will include enforceable avoidance and mitigation measures to ensure biological resources, water

quality and other resources will not be adversely affected by the construction or operation of the facility.

Visual Resources (LUP Chapter 9). The upgraded facilities will be visible from Highway 92. Highway 92 is part of the “Town Boulevard” visual resource area designated in the LUP. The most relevant LUP policies for this site are 9-12 parts b and c and 9-13 part b.:

- 9-12. Town Boulevard Scenic Corridor. Require that new development in close proximity to or easily visible from the Town Boulevard scenic corridor, including Highways 1 and 92:
- a. Protects views of visual resource areas as seen from the Town Boulevard, including views to the ocean, upland slopes (i.e. minimizes intrusions into the ridgeline), and the historic Johnston House;
 - b. Incorporates design standards such as screening of commercial parking areas and landscaping provisions; and
 - c. Is visually compatible with the surrounding land and development.

...

- 9-13. Highway 1 and 92 Frontages. Improve the appearance of the Highway 1 and 92 frontages as properties redevelop through the following means:
- a. Establish build-to lines to frame and define the transportation corridors.
 - b. Reduce visual clutter by consolidating utilities, phasing out monument signs, and requiring permanent maintenance of frontage landscaping.

Additional visual resource policies relevant to this site and proposed development address gateways, significant plant communities, and open space conservation areas.

The proposed new 50 by 135 foot building (6,750 sq. ft.) would be approximately 24 feet tall. It will be located approximately 300 feet from the highway. As part of the CDP and CEQA review, visual simulations will be prepared to assist in evaluating visual effects. It should also be noted that the City granted PG&E a CDP which allows removal of 11 trees located along the property’s highway frontage. The CDP requires PG&E to provide funding for 33 new trees on the property. PG&E has fulfilled this obligation. These trees will be incorporated into project’s landscape plan.

Coastal Access (LUP Chapter 5). Numerous LUP policies would be relevant to the future alignment of the segment of Pilarcitos Creek Trail on this site. The easement established as a condition of the sale of the property from POST provides ample room for the trail’s alignment and on-going use to conform to these policies, as well as to the ESHA policies specific to riparian corridors.

Environmental Hazards (LUP Chapter 7). It is of note that the site abuts an extremely high fire severity zone and is within the Pilarcitos dam inundation zone. The proposed project will be designed to meet fire codes and flood hazard requirements accordingly. Due to the required riparian setbacks, creek flooding is not expected to affect the project, although a future trail may need to be designed to withstand such occurrences.

Agriculture (LUP Chapter 4). The site is characterized by prime and non-prime agricultural soils. Although formerly in agricultural use, it has not been farmed in many years. The proposed project includes a community garden which is supported by the Public Facilities land use designation which allows agricultural uses. The project will therefore restore some use of the site for agricultural use for the community's benefit.

Zoning Code

The Zoning Code provides more detailed standards for implementing the policies of the LUP. The Code is currently being reviewed and updated to ensure consistency with the LUP. Implementation of the recently certified LUP puts forth that this site is to be rezoned from Urban Reserve (U-R) to Public and Quasi-Public Land Use (P-S). Because the LUP policies take precedence over the zoning code during this transition phase of LUP implementation, the zoning assessment will be based on the P-S zoning district. It is noted that future standards may be updated; however, the project is consistent with all existing P-S standards, which are summarized below.

Height, Setbacks and Lot Coverage. Currently, under the P-S zoning standards, the maximum allowed building height is 50 feet and not more than four stories. The proposed building will be less than half this height. The highest point of the proposed building would be approximately 24 feet. A minimum 20-foot front setback is required, there are no side or rear setback requirements. The minimum lot size is 5,000 square feet. Due, in part, to the substantial ESHA buffers and the large size of the lot, the project is well within the P-S zoning development standards, and it is anticipated that it will comply with all standards in the revised zoning code.

DESIGN

The site plan has been developed to avoid ESHA, and much of the property will remain as open space. All vehicle access to the site will continue to be from Stone Pine Road via a reconfigured single two-way driveway. Construction of the new 6,750 sq. ft building will reduce the number of shipping containers, materials stockpiles and equipment stored outside, which will give the site a less haphazard appearance. The City will retain the existing office (former ranch house) for offices and records storage. The landscape plan is forthcoming and will be developed with future phases in mind. It will also ensure visual effects are minimized. Landscaping will be drought tolerant, emphasizing coastal natives and habitat compatible species, and is anticipated to be minimized to reduce water usage.

CEQA

The City has retained a local environmental consulting firm, SWCA, to complete environmental review pursuant to the requirements of the CEQA and to prepare additional technical reports that will be required to support the CEQA review.

Conclusion

Staff seeks Planning Commission and community feedback regarding the preliminary plans including the site plan layout, uses, density and intensity of use, parking provisions, architectural approach, and landscaping and open space concepts.

The next steps for this application include:

- Refine plans based on Study Session comments
- Complete CEQA environmental evaluation
- Planning Commission Public Hearing

ATTACHMENTS

1. Project Plans
2. Biological Resource Evaluation

CITY OF HALF MOON BAY CORPORATION YARD

CITY OF HALF MOON BAY
880 STONE PINE ROAD

PROJECT NUMBER: 202005

NOT FOR CONSTRUCTION

06/09/2021



CONCEPTUAL DESIGN / PRICING PACKAGE

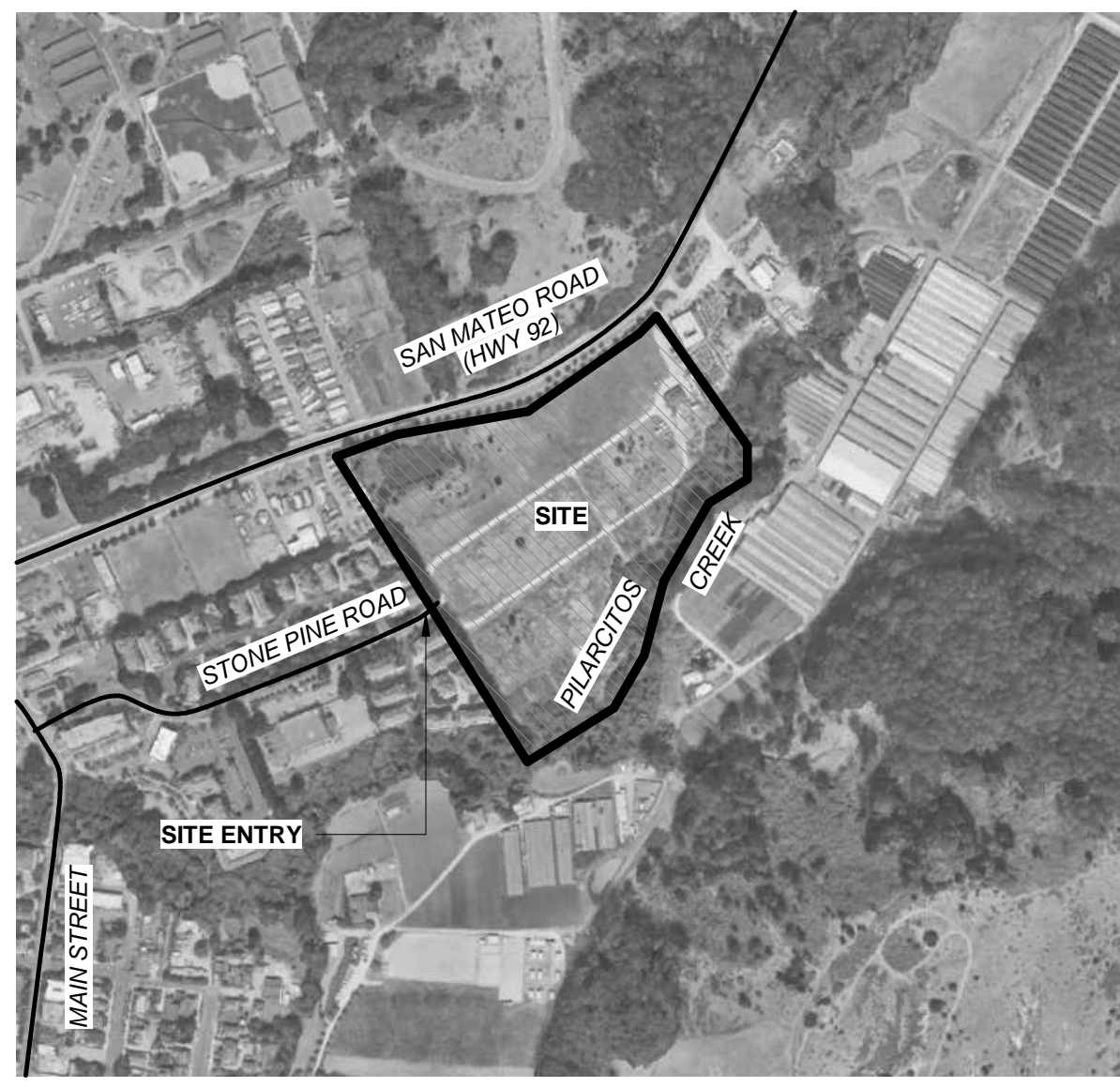
ABBREVIATIONS

Table of abbreviations with columns for various categories like PENNY (NAIL), ANCHOR BOLT, BOTTOM OF CURB, etc., and their corresponding full names.

GENERAL NOTES

- 1. The Contractor shall carefully study and compare the Contract Documents with each other and shall at once report to the Architect errors, inconsistencies or omissions discovered.
2. Where new construction abuts existing construction to remain, all conditions affecting work progress and conformance to plans and specifications shall be verified by Contractor prior to start of work.

PROJECT LOCATION



SHEET INDEX

Table listing sheet numbers and titles: A000 COVER SHEET, A001 INDEX SHEET, X-002 TOPOGRAPHIC SURVEY (1 OF 2 - FOR REFERENCE ONLY), X-003 TOPOGRAPHIC SURVEY (2 OF 2 - FOR REFERENCE ONLY).

els architecture+urban design
CITY OF HALF MOON BAY
CORPORATION YARD
CONCEPTUAL DESIGN
PROJECT NUMBER: 202005

SYMBOLS LEGEND

Table of symbols and their meanings: GRID, TITLE SCALE, INTERIOR ELEVATION, EXTERIOR ELEVATION, SECTION KEY, DETAIL SECTION KEY, DETAIL PLAN KEY, ELEVATION TARGET, SPOT ELEVATION, WORK POINT, WINDOW TYPE, LOUVER TYPE, PAINT TYPE, TEMPERED AND/OR LAMINATED GLASS, DOOR NUMBER, PARTITION TYPE, KEYNOTE, ROOM KEY, GRAPHIC SCALE, DRAWING REVISION.

REFLECTED CEILING PLAN LEGEND

Table of reflected ceiling plan symbols: RECESSED DOWNLIGHT, ACCESS PANEL, 2 x 2 LAY-IN FLUORESCENT FIXTURE, 2 x 4 LAY-IN FLUORESCENT FIXTURE, 2 x 4 ACOUSTIC CEILING PANEL, SINGLE TUBE FLUORESCENT FIXTURE, GYPSUM BOARD CEILING, DIFFUSER, SUPPLY RETURN, EXIT SIGN, CEILING MOUNTED, WALL MOUNTED.

DEFERRED SUBMITTALS

- 1. TENSION FABRIC BUILDING STRUCTURE
2. FIRE SPRINKLER AND ALARM SYSTEM

PROJECT DATA

Table with project data: A.P.N.: 066-260-180, LOT SIZE: PARCEL ONE - 14.86 ACRES (638,792 SQ. FT.), AREA OF WORK: WORKSHOP / STORAGE BUILDING, OCCUPANCY: S1 - WORKSHOP / STORAGE BUILDING, BUILDING CONSTRUCTION: TYPE V: WORKSHOP / STORAGE BUILDING, BUILDING HEIGHT: 19' - 0" - WORKSHOP / STORAGE BUILDING.

PROJECT SCOPE

THE PROJECT SCOPE INCLUDES A NEW PUBLIC PARKING AREA AND A NEW PAVED ACCESS ROAD FROM THE WEST AT STONE PINE ROAD TO A LOOP ROAD IN THE NEW CORPORATION YARD AT THE EAST END OF THE SITE. ROLLING GATES WITH KEYCARD ACCESS ARE TO BE LOCATED ON THE ACCESS ROAD NEAR THE PUBLIC PARKING AREA AND AT THE NEW SECURITY FENCE ENCLOSING THE CORPORATION YARD.

Table listing project team: ARCHITECT: ELS ARCHITECTURE AND URBAN DESIGN, CIVIL ENGINEER (SEPARATE CONTRACT): BKFC ENGINEERS, ENVIRONMENTAL CONSULTANT: SWCA, ELECTRICAL ENGINEER: OMI CONSULTING, COST ESTIMATOR: MACKS.

Table for REVISIONS with columns: NUMBER, DATE, DESCRIPTION.

ISSUE: CONCEPTUAL DESIGN / PRICING PACKAGE
DATE: 06 / 09 / 2021
STAMP:



SHEET TITLE: INDEX SHEET

SHEET NUMBER: A001

PROJECT: CITY OF HALF MOON BAY

CORPORATION YARD CONCEPTUAL DESIGN

PROJECT NUMBER: 202005

CLIENT: CITY OF HALF MOON BAY

880 STONE PINE ROAD, HALF MOON BAY, CA 94019

PROJECT TEAM:

ARCHITECT: ELS ARCHITECTURE AND URBAN DESIGN

CIVIL ENGINEER (SEPARATE CONTRACT): BKF ENGINEERS

ENVIRONMENTAL CONSULTANT: SWICA

ELECTRICAL ENGINEER: CIMM CONSULTING

COST ESTIMATOR: MACKS

255 SHORELINE DR., SUITE 200, REDWOOD CITY, CA 94065 (650) 482-6300 www.bkf.com

BKF ENGINEERS STATE OF CALIFORNIA

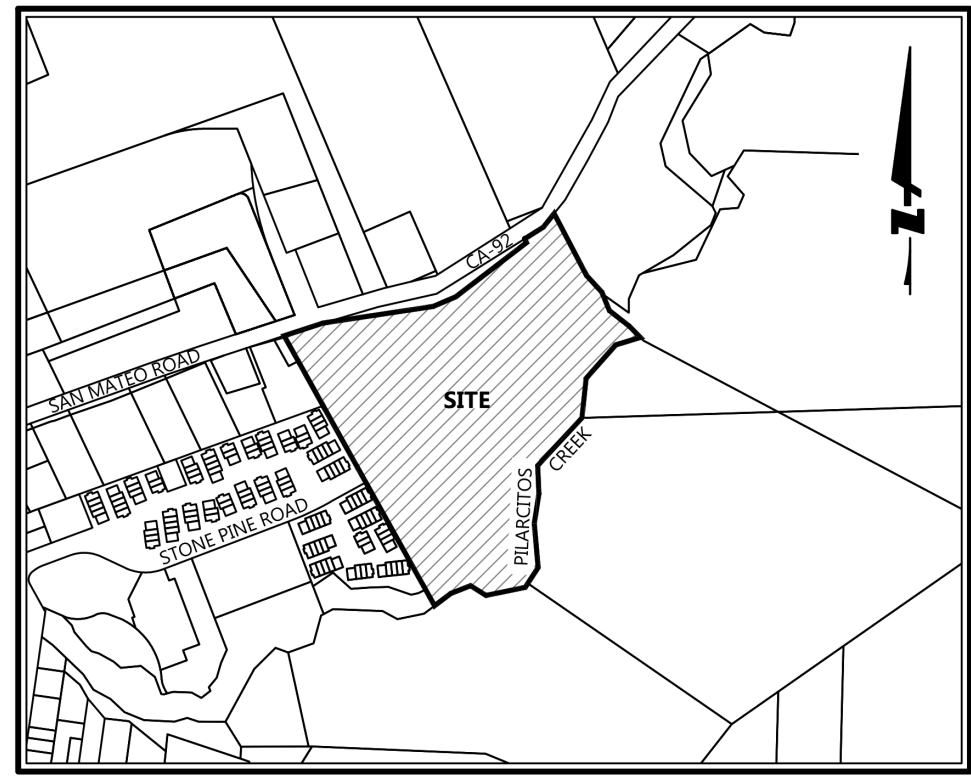
ALTA, N.S.P.S. LAND TITLE SURVEY OF THE LANDS OF CITY OF HALF MOON BAY, A MUNICIPAL CORPORATION COUNTY OF SAN MATEO

A.L.T.A. / N.S.P.S. LAND TITLE SURVEY

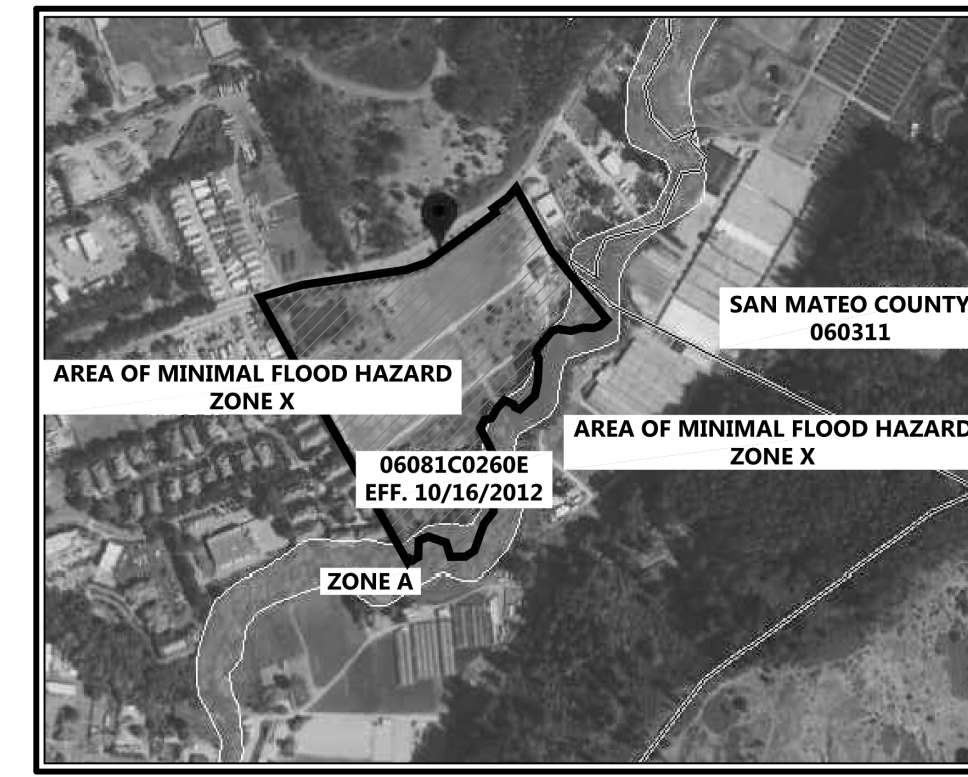
OF THE LANDS OF:

CITY OF HALF MOON BAY, A MUNICIPAL CORPORATION

AS DESCRIBED IN THE CLTA STANDARD COVERAGE POLICY OF TITLE INSURANCE PREPARED BY: OLD REPUBLIC NATIONAL TITLE INSURANCE COMPANY



VICINITY MAP (NOT TO SCALE)



FEMA MAP DETAIL (NOT TO SCALE)

REFERENCED POLICY OF TITLE INSURANCE

TITLE COMPANY: OLD REPUBLIC NATIONAL TITLE INSURANCE COMPANY
FILE NUMBER: 0626031179-AC
POLICY NUMBER: A04201-FTYA-171971
DATED: JANUARY 15TH, 2021 AT 5:42:00 PM
NATURE OF TITLE: FEE
TITLE VESTED IN: CITY OF HALF MOON BAY, A MUNICIPAL CORPORATION
PROPERTY ADDRESS: 880 STONE PINE ROAD, HALF MOON BAY, CA (PROVIDED BY THE CLIENT)
ASSESSOR'S PARCEL NO.: 056-260-180

OVERALL SITE INFORMATION

FLOOD ZONES: ZONE A - WITHOUT BASE FLOOD ELEVATION (BFE)
ZONE X - AREA OF MINIMAL FLOOD HAZARD
FEMA FLOOD INSURANCE RATE MAP NUMBER: 06081C0260E
EFFECTIVE DATE: OCTOBER 18, 2012
ZONING: URBAN RESERVE (U-R)

LEGAL DESCRIPTION

THE LAND REFERRED TO IN THIS POLICY IS SITUATED IN THE COUNTY OF SAN MATEO, CITY OF HALF MOON BAY, STATE OF CALIFORNIA, AND IS DESCRIBED AS FOLLOWS:

PARCEL ONE:

BEGINNING AT A STAKE STANDING IN THE FENCE IN THE EASTERLY LINE OF THE HALF MOON BAY AND SAN MATEO COUNTY ROAD WHICH SAID STAKE BEARS FROM THE POINT OF INTERSECTION OF THE EASTERLY LINE OF THE HALF MOON BAY AND SAN MATEO COUNTY ROAD AND THE NORTHERLY LINE OF THE AMESPORT ROAD, THE FOLLOWING COURSES AND DISTANCES, VIZ: NORTH 68-1/2' EAST 14.60 CHAINS AND NORTH 72-1/2' EAST 4.81 CHAINS AND RUNNING THENCE ALONG THE EASTERLY LINE OF SAID HALF MOON BAY AND SAN MATEO COUNTY ROAD THE FOLLOWING COURSES AND DISTANCES, VIZ: NORTH 72-3/4' EAST 4.42 CHAINS, NORTH 77' EAST 3.94 CHAINS, NORTH 67-3/4' EAST 3.08 CHAINS NORTH 60-1/2' EAST 0.90 CHAINS; THENCE SOUTH 30' EAST 3.95 CHAINS TO THE CENTER OF PILARCITOS CREEK, THENCE DOWN THE CENTER OF SAID CREEK SOUTH 13' WEST 3.00 CHAINS, SOUTH 5.30 CHAINS, SOUTH 77-3/4' WEST 5.03 CHAINS, SOUTH 68-3/4' WEST 0.30 CHAINS, THENCE LEAVING THE CENTER OF SAID CREEK AND RUNNING NORTH 30' WEST 17.60 CHAINS TO THE POINT OF BEGINNING.

PARCEL TWO:

BEGINNING AT A 6' X 6' POST STANDING IN THE EASTERLY LINE OF THE HALF MOON BAY AND SAN MATEO COUNTY ROAD, AT A POINT WHICH IS THE NORTHWESTERLY CORNER OF THE LANDS OF JAMES HATCH, AND ALSO BEING THE SOUTHWESTERLY CORNER OF THE LAND OF WM. PRINGLE, THENCE THE FOLLOWING COURSES AND DISTANCES, VIZ: SOUTH 46' WEST 3.85 CHAINS, SOUTH 68-1/2' EAST 14.60 CHAINS AND NORTH 72-1/2' EAST 4.81 CHAINS AND RUNNING THENCE ALONG THE EASTERLY LINE OF SAID HALF MOON BAY AND SAN MATEO COUNTY ROAD THE FOLLOWING COURSES AND DISTANCES, VIZ: NORTH 72-3/4' EAST 4.42 CHAINS, NORTH 77' EAST 3.94 CHAINS, NORTH 67-3/4' EAST 3.08 CHAINS NORTH 60-1/2' EAST 0.90 CHAINS; THENCE SOUTH 30' EAST 3.95 CHAINS TO THE CENTER OF PILARCITOS CREEK, THENCE DOWN THE CENTER OF SAID CREEK SOUTH 13' WEST 3.00 CHAINS, SOUTH 5.30 CHAINS, SOUTH 77-3/4' WEST 5.03 CHAINS, SOUTH 68-3/4' WEST 0.30 CHAINS, THENCE LEAVING THE CENTER OF SAID CREEK AND RUNNING NORTH 30' WEST 17.60 CHAINS TO THE POINT OF BEGINNING.

EXCEPTING THEREFROM:

A PORTION OF PARCEL ONE AND PARCEL TWO AS DESCRIBED IN THAT GRANT DEED FROM NURSERYMEN'S EXCHANGE, INC. TO THE CITY OF HALF MOON BAY, RECORDED ON OCTOBER 18, 2004 AS DOCUMENT NO. 2004-206677, OFFICIAL RECORDS OF SAN MATEO COUNTY, SITUATE IN THE CITY OF HALF MOON BAY, COUNTY OF SAN MATEO, STATE OF CALIFORNIA, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE MOST WESTERLY CORNER OF SAID PARCEL ONE, ALSO LYING ON THE SOUTHERLY RIGHT-OF-WAY LINE OF ROUTE 92 (FORMERLY KNOWN AS ROUTE 105) ALSO KNOWN AS SAN MATEO ROAD (FORMERLY HALF MOON BAY ROAD); NORTH 72' 38' 04" EAST 169.89 FEET TO THE TRUE POINT OF BEGINNING, THENCE CONTINUING ALONG SAID SOUTHERLY RIGHT-OF-WAY LINE OF ROUTE 92 THE FOLLOWING SIX (6) COURSES AND DISTANCES: (1) NORTH 73' 38' 04" EAST, 123.88 FEET, NORTH 77' 53' 28" EAST 259.67 FEET, (2) NORTH 68' 33' 21" EAST, 71.61 FEET, (3) NORTH 61' 25' 06" EAST, 52.50 FEET TO THE NORTHEASTERLY LINE OF SAID PARCEL ONE, (4) NORTH 58' 52' 19" EAST, 292.25 FEET, AND (5) NORTH 53' 33' 13" EAST, 25.26 FEET, THENCE ACROSS SAID PARCEL TWO AND PARCEL ONE THE FOLLOWING FOUR (4) COURSES AND DISTANCES: (1) SOUTH 33' 42' 36" EAST 18.78 FEET, (2) SOUTH 53' 53' 26" WEST, 326.40 FEET, (3) SOUTH 71' 33' 23" WEST, 86.92 FEET, AND (4) SOUTH 81' 43' 04" WEST, 401.12 FEET TO THE TRUE POINT OF BEGINNING.

EXCEPTIONS TO COVERAGE

- 1. TAXES AND ASSESSMENTS, GENERAL AND SPECIAL, FOR THE FISCAL YEAR 2020 - 2021, AS FOLLOWS: ASSESSOR'S PARCEL NO.: 056-260-180
BILL NO.: 2020-234628
CODE NO.: 17-005
1ST INSTALLMENT: \$7.57 MARKED PAID
2ND INSTALLMENT: \$7.57 NOT MARKED PAID
LAND VALUE: \$125,770.00
NOT A SURVEY MATTER
2. THE LIEN OF SUPPLEMENTAL TAXES, IF ANY, ASSESSED PURSUANT TO THE PROVISIONS OF SECTION 75, ET SEQ., OF THE REVENUE AND TAXATION CODE OF THE STATE OF CALIFORNIA.
PAID CURRENT TO THE DATE OF THIS POLICY
NOT A SURVEY MATTER
3. THE HEREIN DESCRIBED PROPERTY LIES WITHIN THE PROPOSED BOUNDARIES OF THE FOOTHILL BOULEVARD ASSESSMENT DISTRICT, AS DISCLOSED BY ASSESSMENT MAP RECORDED APRIL 27, 1989, IN BOOK 10 OF ASSESSMENT MAPS AT PAGE 1.
NOT A SURVEY MATTER
4. WATER RIGHTS, CLAIMS OR TITLE TO WATER, WHETHER OR NOT SHOWN BY THE PUBLIC RECORDS.
NOT A SURVEY MATTER
5. AN EASEMENT AFFECTING THAT PORTION OF SAID LAND AND FOR THE PURPOSES STATED HEREIN AND INCIDENTAL PURPOSES AS PROVIDED IN THE FOLLOWING:
INSTRUMENT: DEED
GRANTED TO: PACIFIC GAS AND ELECTRIC COMPANY, A CALIFORNIA CORPORATION
FOR: PIPE LINES
DATED: SEPTEMBER 21, 1966
RECORDED: NOVEMBER 16, 1966 IN BOOK 5238 OF OFFICIAL RECORDS, PAGE 741 UNDER RECORDER'S SERIAL NUMBER 9720AA
AFFECTS: A 30 FOOT STRIP ALONG THE NORTHWESTERLY LINE
UPON THE TERMS AND CONDITIONS CONTAINED THEREIN.
PLOTTED
6. AN EASEMENT AFFECTING THAT PORTION OF SAID LAND AND FOR THE PURPOSES STATED HEREIN AND INCIDENTAL PURPOSES AS PROVIDED IN THE FOLLOWING:
INSTRUMENT: DEED
GRANTED TO: PACIFIC GAS AND ELECTRIC COMPANY, A CALIFORNIA CORPORATION
FOR: PIPE LINE
DATED: OCTOBER 20, 1969
RECORDED: NOVEMBER 20, 1969 IN BOOK 5717 OF OFFICIAL RECORDS, PAGE 539 UNDER RECORDER'S SERIAL NUMBER 81251AC
AFFECTS: A 20-FOOT STRIP ALONG A PORTION OF THE NORTHEASTERLY LINE
UPON THE TERMS AND CONDITIONS CONTAINED THEREIN.
PLOTTED
7. AN EASEMENT AFFECTING THAT PORTION OF SAID LAND AND FOR THE PURPOSES STATED HEREIN AND INCIDENTAL PURPOSES AS PROVIDED IN THE FOLLOWING:
INSTRUMENT: DEED OF EASEMENT
GRANTED TO: COASTSIDE COUNTY WATER DISTRICT
FOR: WATER MAINS
RECORDED: APRIL 6, 1988 IN OFFICIAL RECORDS UNDER RECORDER'S SERIAL NUMBER 88041155
AFFECTS: AS DESCRIBED THEREIN
UPON THE TERMS AND CONDITIONS CONTAINED THEREIN.
PLOTTED
8. OIL, MINERAL, GAS RIGHTS AS RESERVED IN THE INSTRUMENT
ENTITLED: GRANT DEED
BY AND BETWEEN: CORPORATION OF THE PRESIDING BISHOP OF THE CHURCH OF JESUS CHRIST OF LATTER DAY SAINTS
RECORDED: APRIL 18, 1988 IN OFFICIAL RECORDS, UNDER RECORDER'S SERIAL NUMBER 88045683
NOT PLOTTED - BLANKET IN NATURE
9. ANY RIGHTS, EASEMENTS, INTERESTS OR CLAIMS WHICH MAY EXIST OR ARISE BY REASON OF OR REFLECTED BY THE FACTS SHOWN ON THE PLAT OF A SURVEY MADE BY MACLEOD AND ASSOCIATES, CIVIL ENGINEERING/LAND SURVEYING, ON AUGUST 28, 2004, DESIGNATED JOB NO. 2314-04, AS FOLLOWS:

- A) POND, SHED AND CATWALK IN THE NORTHWESTERLY PORTION OF PARCEL ONE
B) MANHOLE (PARCELS ONE AND TWO)
C) DIRT AND GRAVEL ROADS TRAVERSING PORTIONS OF PARCELS ONE AND TWO
D) FIRE HYDRANT 04' ENCROACHMENT (PARCEL ONE)
E) GUY ANCHOR 3.5' ENCROACHMENT (PARCEL ONE)
F) PG & E BOX WITH 3 GUARD POST, 1.9' ENCROACHMENT (PARCEL ONE)
G) GUARD POST 3.1' ENCROACHMENT (PARCEL ONE)
H) UTILITY POLE 1.2' ENCROACHMENT (PARCEL ONE)
I) UTILITY POLE 0.3' ENCROACHMENT (PARCEL ONE)
J) GUY ANCHOR 9.9' AND 10.2' ENCROACHMENTS (PARCEL ONE)
K) GUY ANCHOR 26.3' ENCROACHMENT (PARCEL ONE)
L) FENCE ANGLE POINT 0.5' ENCROACHMENT (PARCEL ONE)
M) GATE POST 0.3' ENCROACHMENT (PARCEL ONE)
N) STORM DRAIN LINES 8', 10', 12', 14' AND 16' (PARCELS ONE AND TWO)
O) ELECTRIC BOXES, UTILITY POLES, GUY ANCHORS, AREA DRAINS, TELEPHONE AND ELECTRIC LINES, WATER BOXES, CATCH BASINS, STORM DRAIN PUMPS AFFECTING PORTIONS OF PARCELS ONE AND TWO
P) ASPHALT CONCRETE PAVEMENT DRIVEWAY (PARCEL TWO)
Q) LIGHT POLE, PP AND GM (NOT EXPLAINED ON SURVEY) AFFECTING PARCEL TWO
R) GASLINE SIGNS (PARCEL TWO)
NOT A SURVEY MATTER

TERMS AND PROVISIONS AS CONTAINED IN AN INSTRUMENT.

- 1. ENTITLED: INDEMNIFICATION AGREEMENT
EXECUTED BY: CITY OF HALF MOON BAY, A MUNICIPAL CORPORATION
RECORDED: OCTOBER 18, 2004 IN OFFICIAL RECORDS UNDER RECORDER'S SERIAL NUMBER 2004-206679
NOTE: REFERENCE IS MADE TO SAID INSTRUMENT FOR FULL PARTICULARS.
NOT A SURVEY MATTER
2. ENTITLED: GRANT DEED
EXECUTED BY: PENINSULA OPEN SPACE TRUST, A CALIFORNIA NON-PROFIT PUBLIC BENEFIT CORPORATION AND THE CITY OF HALF MOON BAY, A MUNICIPAL CORPORATION
DATED: JANUARY 13, 2021
RECORDED: JANUARY 15, 2021 IN OFFICIAL RECORDS UNDER RECORDER'S SERIAL NUMBER 2021-007593
RETURNED TO ADDRESS: 501 MAIN STREET, HALF MOON BAY, CA 94019
NOT A SURVEY MATTER
3. ENTITLED: MEMORANDUM OF AGREEMENTS
EXECUTED BY: PENINSULA OPEN SPACE TRUST, A CALIFORNIA NON-PROFIT PUBLIC BENEFIT CORPORATION AND THE CITY OF HALF MOON BAY, A MUNICIPAL CORPORATION
DATED: JANUARY 13, 2021
RECORDED: JANUARY 15, 2021 IN OFFICIAL RECORDS UNDER RECORDER'S SERIAL NUMBER 2021-007594
RETURNED TO ADDRESS: 222 HIGH STREET, PALO ALTO, CA 94403
NOT A SURVEY MATTER
4. ENTITLED: CONSERVATION TRAIL EASEMENT
EXECUTED BY: PENINSULA OPEN SPACE TRUST, A CALIFORNIA NON-PROFIT PUBLIC BENEFIT CORPORATION AND THE CITY OF HALF MOON BAY, A MUNICIPAL CORPORATION
DATED: JANUARY 13, 2021
RECORDED: JANUARY 15, 2021 IN OFFICIAL RECORDS UNDER RECORDER'S SERIAL NUMBER 2021-007595
RETURNED TO ADDRESS: 222 HIGH STREET, PALO ALTO, CA 94403
PLOTTED
5. ENTITLED: CONSERVATION TRAIL EASEMENT
EXECUTED BY: PENINSULA OPEN SPACE TRUST, A CALIFORNIA NON-PROFIT PUBLIC BENEFIT CORPORATION AND THE CITY OF HALF MOON BAY, A MUNICIPAL CORPORATION
DATED: JANUARY 13, 2021
RECORDED: JANUARY 15, 2021 IN OFFICIAL RECORDS UNDER RECORDER'S SERIAL NUMBER 2021-007595
RETURNED TO ADDRESS: 222 HIGH STREET, PALO ALTO, CA 94403
PLOTTED

ALTA SURVEY NOTES

- 1. THE BOLDTYPE COMMENTS ARE ADDED BY THE PROFESSIONAL LAND SURVEYOR.
2. ALL DISTANCES AND DIMENSIONS ARE IN U.S. SURVEY FEET AND DECIMALS THEREOF.
3. DIMENSIONAL TIES TO IMPROVEMENTS ARE 90° TO THE PROPERTY LINE(S) UNLESS OTHERWISE NOTED.
4. "IN" AND "OUT" AS SHOWN ON THIS SURVEY INDICATE THE DISTANCE INSIDE OR OUTSIDE OF THE SUBJECT PROPERTY, RESPECTIVELY.
5. THE DATES OF THE FIELD SURVEY ARE AS FOLLOWS: AUGUST 4, 5, 7, & 10, 2020, AND MARCH 10, 2021.
6. THE SUBJECT PROPERTY HAS DIRECT VEHICULAR ACCESS TO AND FROM STONE PINE ROAD, A PUBLICLY DEDICATED RIGHT OF WAY, AND SAN MATEO ROAD - CALIFORNIA STATE ROUTE 92, A STATE HIGHWAY, AS SHOWN ON THE SURVEY HEREON WHERE INDICATED BY ARROW LABELED "SITE ACCESS."
7. IN REFERENCE TO ITEM 2 OF TABLE "A", THE ADDRESS OF THE SUBJECT PROPERTY IS AS FOLLOWS: 880 STONE PINE ROAD, HALF MOON BAY, CA (PROVIDED BY THE CLIENT).
8. IN REFERENCE TO ITEM 3 OF TABLE "A", THE SUBJECT PROPERTY HAS BEEN DETERMINED TO BE WITHIN FLOOD ZONES "X" AND "A", AS STATED ON THIS SHEET.
9. IN REFERENCE TO ITEM 4 OF TABLE "A", THE GROSS LAND AREA OF THE SUBJECT PROPERTY IS AS FOLLOWS: PTR PARCEL ONE 638,815+ SQ.FT. OR 14.67 ACRES; PTR PARCEL TWO 246,765+ SQ.FT. OR 5.66 ACRES.
10. IN REFERENCE TO ITEM 5 OF TABLE "A", VERTICAL RELIEF AS SHOWN ON SHEET 2 IS THE PRODUCT OF AN AERIAL SURVEY PERFORMED BY VERTICAL MAPPING RESOURCES OF MESA, ARIZONA ON AUGUST 6, 2020. THE CONTOUR INTERVAL IS 1 FOOT. THE VERTICAL DATUM AND BENCHMARK USED ARE STATED BELOW.
11. IN REFERENCE TO ITEMS 6(A) AND 6(B) OF TABLE "A", CURRENT ZONING CLASSIFICATION AS SHOWN ON THIS SHEET. SAID INFORMATION WAS OBTAINED FROM THAT CERTAIN "HALF MOON BAY ZONING MAP" DATED JUNE 2015 AND AVAILABLE ON THE CITY'S WEBSITE. NO ZONING REPORT OR LETTER WAS PROVIDED TO THE SURVEYOR BY THE CLIENT.
12. IN REFERENCE TO ITEMS 7(A), 7(B)(1), AND 7(C) OF TABLE "A", AS SHOWN ON THE SURVEY HEREON.
13. IN REFERENCE TO ITEM 8 OF TABLE "A", AS SHOWN ON THE SURVEY HEREON.
14. IN REFERENCE TO ITEM 9 OF TABLE "A", NO PARKING STALLS OF ANY KIND WERE OBSERVED AT THE TIME OF THE SURVEY.
15. IN REFERENCE TO ITEM 11 OF TABLE "A", SEE THE UTILITY NOTE BELOW.
16. IN REFERENCE TO ITEM 13 OF TABLE "A", AS SHOWN ON THE SURVEY HEREON.
17. IN REFERENCE TO ITEM 14 OF TABLE "A", THE WESTERLY CORNER OF THE SUBJECT PROPERTY IS LOCATED APPROXIMATELY 1300 FEET NORTHEASTERLY OF THE INTERSECTION OF SAN MATEO ROAD - CALIFORNIA STATE ROUTE 92 AND MAIN STREET.
18. IN REFERENCE TO ITEM 16 OF TABLE "A", NO EVIDENCE OF RECENT EARTH MOVING WORK AND BUILDING CONSTRUCTION WERE OBSERVED IN THE PROCESS OF CONDUCTING THE FIELD WORK.
19. IN REFERENCE TO ITEM 17 OF TABLE "A", NO EVIDENCE OF RECENT OR PROPOSED STREET RIGHT OF WAY CHANGES WERE OBSERVED IN THE PROCESS OF COMPLETING THE FIELD SURVEY, NOR PROVIDED TO THE UNDERSIGNED SURVEYOR.

UTILITY STATEMENT

UTILITIES SHOWN ON THIS SURVEY ARE BASED UPON SURFACE OBSERVATIONS. NO WARRANTIES ARE EXPRESSED OR IMPLIED CONCERNING THE EXISTENCE, SIZE, DEPTH, CONDITION, CAPACITY, OR LOCATION OF ANY UTILITY EXISTING ON THE SITE, WHETHER PRIVATE, MUNICIPAL, OR PUBLIC OWNED. CONTRACTOR(S) SHALL VERIFY ALL UTILITIES PRIOR TO ANY AND ALL CONSTRUCTION ACTIVITIES.

BENCHMARK STATEMENT

THE ELEVATIONS SHOWN ON THIS SURVEY ARE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVDS88) ELEVATIONS BASED UPON GPS OBSERVATIONS PERFORMED BY BKF ON AUGUST 4, 2020.

THE FOUND 2.5" BRASS DISK STAMPED "RCE 13776" IN MONUMENT WELL AT THE CENTER OF THE CUL-DE-SAC OF STONE PINE ROAD, PER (R2), WAS TAKEN AS THE SITE BENCHMARK FOR THIS SURVEY.

ELEVATION = 75.986

BASIS OF BEARINGS

THE BEARINGS SHOWN ARE BASED ON THE NORTH AMERICAN DATUM OF 1983 (NAD83), EPOCH 2011, ZONE 3 BASED UPON GPS OBSERVATIONS OF BKF POINT NO. 1, A SET COTTON SPINDLE, AND BKF POINT NO. 2, A SET HUB AND TACK AS SAID POINTS ARE SHOWN HEREON, PERFORMED BY BKF ON AUGUST 4, 2020.

THE BEARING OF SOUTH 42' 29' 30" WEST FROM SAID BKF POINT NO. 1 TO SAID BKF POINT NO. 2, AS SHOWN HEREON, WAS TAKEN AS THE BASIS OF BEARINGS FOR THIS MAP.

SURVEYORS STATEMENT

TO: CITY OF HALF MOON BAY, A MUNICIPAL CORPORATION
TO: OLD REPUBLIC NATIONAL TITLE INSURANCE COMPANY

THIS IS TO CERTIFY THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE 2016 MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/N.S.P.S. LAND TITLE SURVEYS, JOINTLY ESTABLISHED AND ADOPTED BY ALTA AND N.S.P.S. AND INCLUDES OPTIONAL ITEMS 2, 3, 4, 5, 6(A), 6(B), 7(A), 7(B)(1), 7(C), & 8, 11 (SURFACE UTILITIES ONLY), 13, 14, 16, 17, 19 AND 20 (\$1 MILLION PROFESSIONAL LIABILITY INSURANCE) OF TABLE A THEREOF.

THE FIELD WORK WAS COMPLETED ON MARCH 10, 2021.

DAVID C. JUNGMANN, P.L.S. 9267



03/18/2021
DATE

Table with columns: Revisions, No., Date, Description, Scale, Date, Drawing, Date, Date. Includes drawing number ALTA 2 OF 2.

Table with columns: REVISION, NUMBER, DATE, DESCRIPTION.

ISSUE: CONCEPTUAL DESIGN / PRICING PACKAGE
DATE: 06 / 09 / 2021
STAMP:

NOT FOR CONSTRUCTION

SHEET TITLE: TOPOGRAPHIC SURVEY (1 OF 2 - FOR REFERENCE ONLY)

SHEET NUMBER: X-002

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SUITE 200
REDWOOD CITY, CA 94065
(650) 482-6300
www.bkf.com

BKF
STATE OF CALIFORNIA

ALL T.A./N.P.S. LAND TITLE SURVEY
OF THE LANDS OF
CITY OF HALF MOON BAY, A MUNICIPAL CORPORATION
COUNTY OF SAN MATEO

LINE TABLE		RECORD LINE TABLE		
LINE NO.	DIRECTION	LENGTH	RECORD DIRECTION	RECORD LENGTH
L1	S47°25'02"W	36.52	(S46°33'28"W)(R2)	(36.53)(R2)
L2	S73°11'17"W	26.85	(S70°39'43"W)(R2)	(26.86)(R2)
L3	N87°28'52"W	38.62	(N88°20'26"W)(R2)	(38.63)(R2)
L4	S74°52'52"W	49.37	(S74°01'18"W)(R2)	(49.39)(R2)
L5	N81°09'28"W	50.08	(N82°01'02"W)(R2)	(50.10)(R2)
L6	S72°32'08"W	24.33	(S71°40'34"W)(R2)	(24.34)(R2)
L7	S39°14'12"W	85.57	(S38°22'38"W)(R2)	(85.60)(R2)
L8	S20°14'46"W	22.43	(S19°23'12"W)(R2)	(22.44)(R2)
L9	S30°07'13"E	22.83	(S30°58'47"E)(R2)	(22.84)(R2)
L10	S02°39'36"W	85.73	(S01°48'02"W)(R2)	(85.76)(R2)
L11	S11°24'28"W	57.62	(S10°32'54"W)(R2)	(57.64)(R2)
L12	S47°43'04"W	76.92	(S46°51'30"W)(R2)	(76.95)(R2)
L13	N68°00'29"W	12.29	(N68°52'03"W)(R2)	(12.22)(R2)
L14	N68°00'29"W	8.90	(N68°52'03"W)(R2)	(8.98)(R2)
L15	N24°18'13"W	12.34	(N25°09'47"W)(R2)	(12.34)(R2)
L16	N66°42'59"W	38.40	(N67°34'33"W)(R2)	(38.41)(R2)
L17	S42°15'35"W	42.60	(S41°24'01"W)(R2)	(42.61)(R2)
L18	S29°04'36"W	42.58	(S28°11'02"W)(R2)	(42.59)(R2)
L19	S75°58'13"W	28.14	(S75°06'39"W)(R2)	(28.15)(R2)
L20	S27°39'47"W	34.46	(S26°48'13"W)(R2)	(34.47)(R2)
L21	S26°43'24"E	145.40	(S27°34'58"E)(R2)	(145.45)(R2)
L22	S07°30'40"W	54.02	(S06°39'06"W)(R2)	(54.04)(R2)
L23	S27°45'40"W	36.27	(S21°54'06"W)(R2)	(36.28)(R2)
L24	S03°51'49"E	104.20	(S04°43'23"E)(R2)	(104.24)(R2)
L25	S37°46'25"W	61.71	(S36°54'51"W)(R2)	(61.73)(R2)
L26	S19°33'41"W	107.45	(S18°42'07"W)(R2)	(107.49)(R2)
L27	S56°13'06"W	40.18	(S55°21'32"W)(R2)	(40.19)(R2)
L28	S88°49'22"W	58.28	(S87°57'48"W)(R2)	(58.30)(R2)
L29	N17°07'56"W	56.88	(N17°59'30"W)(R2)	(56.90)(R2)
L30	N71°05'20"W	72.28	(N71°56'54"W)(R2)	(72.31)(R2)
L31	S66°47'43"W	39.70	(S65°56'09"W)(R2)	(39.71)(R2)
L32	S02°07'42"W	62.88	(S01°16'08"W)(R2)	(62.90)(R2)
L33	S58°53'58"W	25.72	(S58°02'24"W)(R2)	(25.73)(R2)
L34	N57°38'51"W	11.15	(N58°30'25"W)(R2)	(11.15)(R2)
L35	S36°00'41"W	15.01	(S35°09'07"W)(R2)	(15.02)(R2)
L36	S29°20'59"E	30.00	(S30°12'40"E)(R2)	(30.00)(R2)
L37	N60°39'01"E	31.63	(N59°47'20"E)(R2)	(31.50)(R2)
L38	N53°33'13"E	25.26	(N53°33'13"E)(R1)(R3)	(25.26)(R1)
L39	N58°52'19"E	47.99	(N58°52'19"E)(R1)(R3)	(R3: 14.628m) = 47.99
L40	N52°28'49"E	12.50	(S52°28'49"W)(R3)	(R3: 3.811m) = 12.50
L41	N57°32'14"E	57.76	(S57°32'14"W)(R3)	(R3: 17.604m) = 57.76
L42	N57°07'31"E	113.58	(N57°07'31"E)(R3)	(R3: 34.616m) = 113.58
L43	N58°44'09"E	49.57	(S58°44'09"W)(R3)	(R3: 15.108m) = 49.57
L44	N76°15'07"E	85.66	(S76°15'07"W)(R3)	(R3: 26.108m) = 85.66
L45	N78°26'58"E	56.56	(S78°26'58"W)(R3)	(R3: 17.237m) = 56.56
L46	N82°41'18"E	113.17	(S82°41'18"W)(R3)	(R3: 34.491m) = 113.17
L47	N73°38'04"E	98.77	(N73°38'04"E)(R3)	(R3: 30.104m) = 98.77
L48	N73°38'04"E	121.87	(N73°38'04"E)(R1)	(121.88)(R1)
L49	N77°53'28"E	259.68	(N77°53'28"E)(R1)	(259.69)(R1)
L50	N68°33'21"E	71.61	(N68°33'21"E)(R1)	(71.61)(R1)
L51	N61°25'06"E	52.50	(N61°25'06"E)(R1)	(52.50)(R1)

IN/OUT TABLE

NUMBER	DATE	DESCRIPTION
1		FC - 0.2' OUT
2		SGN 5.2' IN; FH 4.4' IN
3		FC 0.1' IN
4		EV 1.5' IN
5		EB 2.6' IN
6		FNC COR 6.9' IN
7		FC CROSSES PL
8		BW CROSSES PL
9		SGN 4.4' OUT
10		FNC COR 0.7' IN
11		GV 0.4' IN
12		BW 3.4' OUT
13		FNC CROSSES PL
14		FNC 1.3' IN
15		FNC CROSSES PL
16		FNC 1.0' OUT
17		FNC CROSSES PL
18		FNC COR 1.3' IN (DIRECT)
19		FNC COR 1.1' IN
20		EW CROSSES PL
21		GBOX 0.4' IN
22		EB 0.4' IN
23		EB CROSSES PL
24		AC CROSSES PL
25		FNC COR 8.7' IN
26		AC CROSSES PL
27		AC CROSSES PL
28		GV 7.9' OUT
29		AC CROSSES PL
30		BLDG COR 1.1' OUT
31		FNC CROSSES PL
32		FNC END 1.1' OUT
33		VG CROSSES PL
34		FNC END 1.0' OUT
35		BLD 3.7' OUT; SSMH 6.4' OUT
36		BLD 3.8' OUT; SSMH CENTER 6.1' OUT
37		AL 3.1' OUT; FNC END 0.4' OUT
38		GAC CLOSSED ON PL
39		FNC END 0.9' OUT
40		FNC CROSSES PL
41		FNC 0.9' IN
42		BLDG COR 4.9' OUT
43		BLDG COR 4.0' OUT
44		BLDG COR 3.4' OUT
45		BLDG COR 3.6' OUT
46		BLDG COR 3.0' OUT
47		BLDG COR 3.2' OUT
48		FNC CROSSES PL
49		AC COR 1.4' OUT
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51		GBOX ON PL

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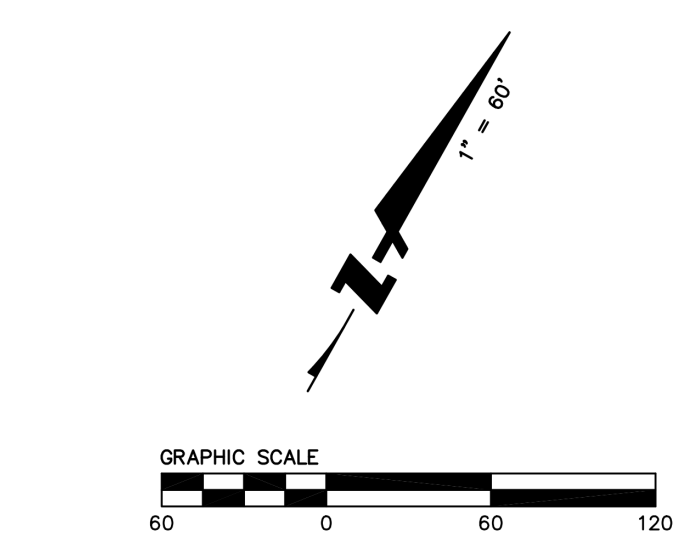
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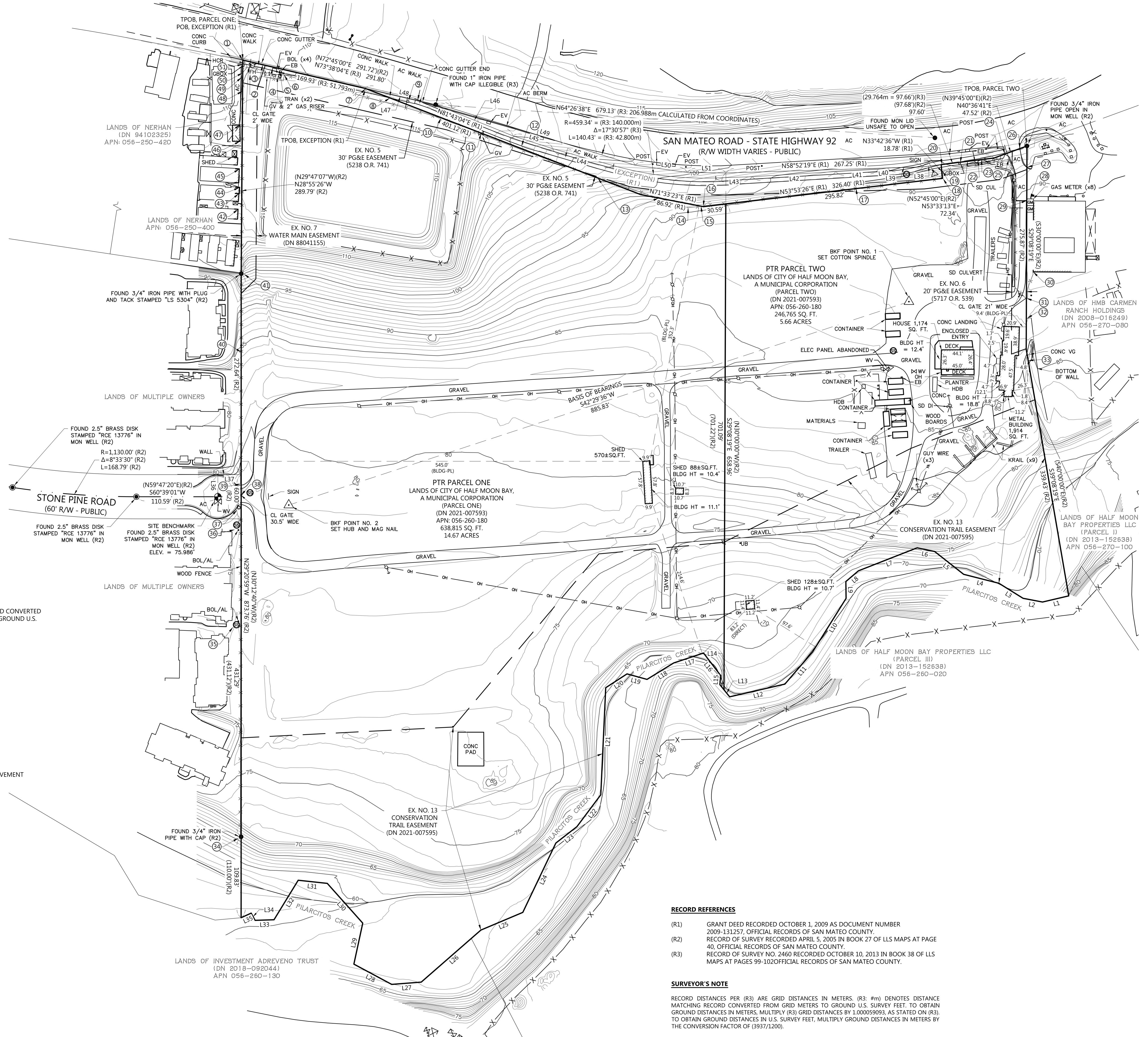
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 - FOUND MONUMENT AS NOTED
 - △ CONTROL POINT AS NOTED
 - ⊕ SITE BENCHMARK
 - ⊙ DENOTES REFERENCE TO IN/OUT TABLE
 - ⊕ FIRE HYDRANT
 - ⊕ GAS METER
 - ⊕ JOINT POLE
 - ⊕ SANITARY SEWER MANHOLE
 - ⊕ SIGN
 - ⊕ SITE LIGHT
 - ⊕ STORM DRAIN MANHOLE
 - ⊕ VALVE AS NOTED
 - AC ASPHALTIC CONCRETE
 - AL AREA LIGHT
 - APN ASSESSOR'S PARCEL NUMBER
 - BLDG BUILDING
 - BOL BOLLARD
 - BW BACK OF WALK
 - CATV CABLE TELEVISION
 - CL CENTERLINE
 - COR CORNER
 - CUL CULVERT
 - DI DRAIN INLET
 - DN DOCUMENT NUMBER
 - EB ELECTRIC BOX
 - EW EDGE OF PATH/WALK
 - EV ELECTRIC VAULT
 - EX EXCEPTION NUMBER
 - FC FACE OF CURB
 - FH FIRE HYDRANT
 - FNC FENCE
 - GAS GAS BOX
 - GM GAS METER
 - GV GAS VALVE
 - HCR HANDICAP RAMP
 - HDB HEADERBOARD
 - HT HEIGHT
 - LS LICENSED SURVEYOR
 - M METERS
 - MON MONUMENT
 - OH OVERHANG
 - OJ OFFICIAL RECORDS
 - PL PROPERTY LINE
 - POB POINT OF BEGINNING
 - (R#) DENOTES RECORD REFERENCE
 - (R3: #m) DENOTES DISTANCE MATCHING RECORD CONVERTED FROM GRID DISTANCES IN METERS TO GROUND U.S. SURVEY FEET
 - RCE REGISTERED CIVIL ENGINEER
 - R/W RIGHT-OF-WAY
 - SD STORM DRAIN
 - SQ FT SQUARE FEET
 - SMH SANITARY SEWER MANHOLE
 - TPOB TRUE POINT OF BEGINNING
 - TRAN TRANSFORMER
 - UB UTILITY BOX
 - VG VALLEY GUTTER
 - WV WATER VALVE

- LINETYPES**
- SUBJECT BOUNDARY LINE
 - LOT LINE
 - EASEMENT LINE
 - BUILDING STRUCTURE
 - EDGE OF CONCRETE OR PAVEMENT
 - FENCE LINE
 - MONUMENT LINE
 - OVERHEAD WIRES
 - TR/RADIAL LINE
 - TOP OF CURB



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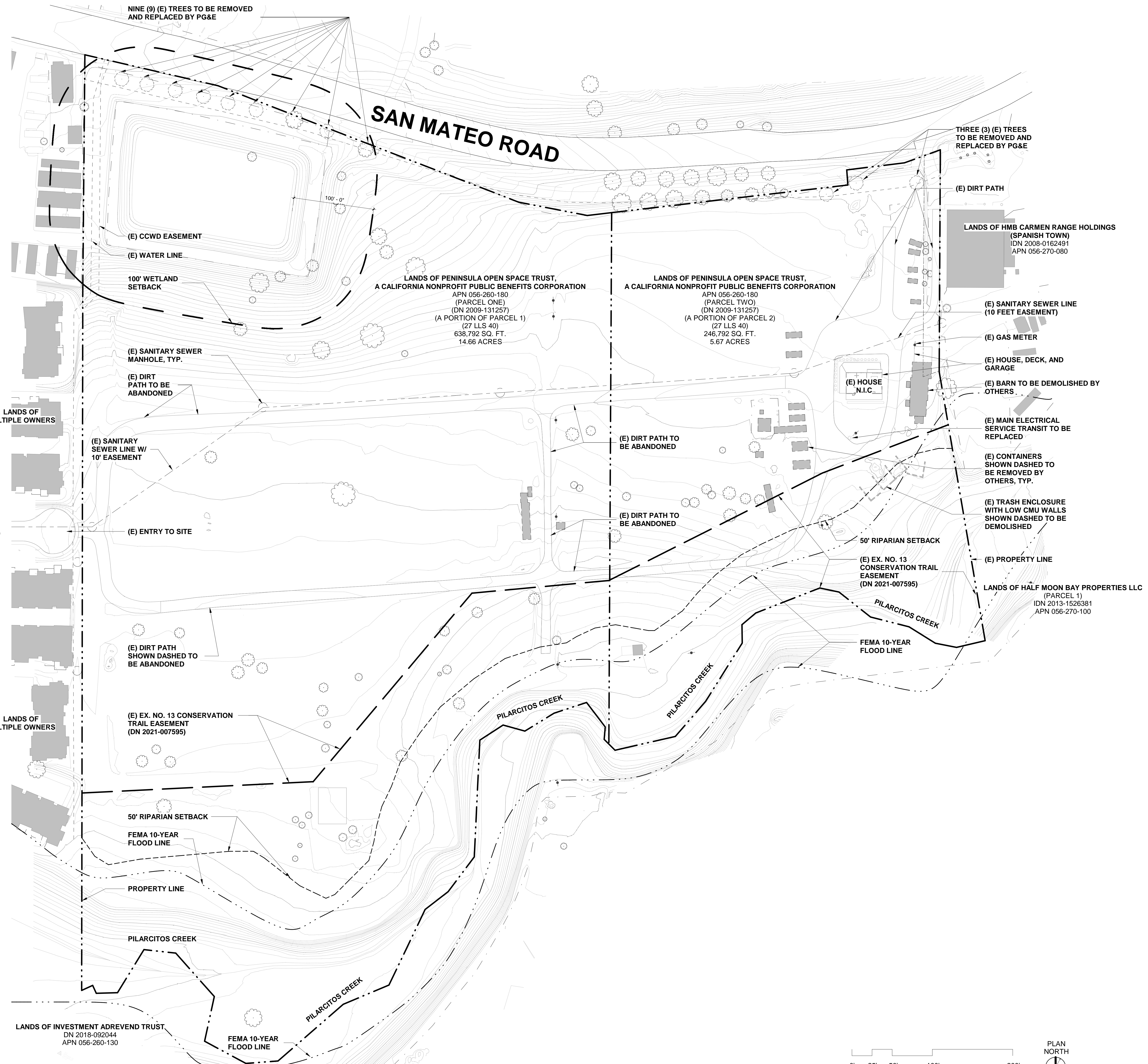
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- (R2) RECORD OF SURVEY RECORDED APRIL 5, 2005 IN BOOK 27 OF ULS MAPS AT PAGE 40, OFFICIAL RECORDS OF SAN MATEO COUNTY.
- (R3) RECORD OF SURVEY NO. 2460 RECORDED OCTOBER 10, 2013 IN BOOK 38 OF ULS MAPS AT PAGES 99-102, OFFICIAL RECORDS OF SAN MATEO COUNTY.

SURVEYOR'S NOTE

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Drawing Number: ALTA						
2 OF 2						



SHEET NOTES

1. VERIFY ALL CONDITIONS IN THE FIELD PRIOR TO THE START OF CONSTRUCTION. BRING DISCREPANCIES TO THE ATTENTION OF THE ARCHITECT PRIOR TO PROCEEDING WITH THE WORK.
2. ALL BUILDING AND SITE FEATURES TO REMAIN UNLESS OTHERWISE NOTED.



PROJECT:
CITY OF HALF MOON BAY

CORPORATION YARD
CONCEPTUAL DESIGN

PROJECT NUMBER:
202005

CLIENT:
CITY OF HALF MOON BAY
880 STONE PINE ROAD, HALF MOON BAY, CA 94019

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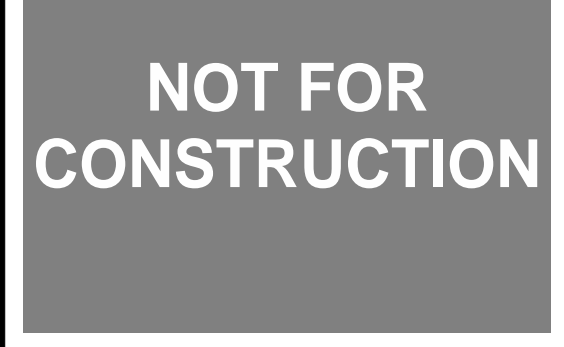
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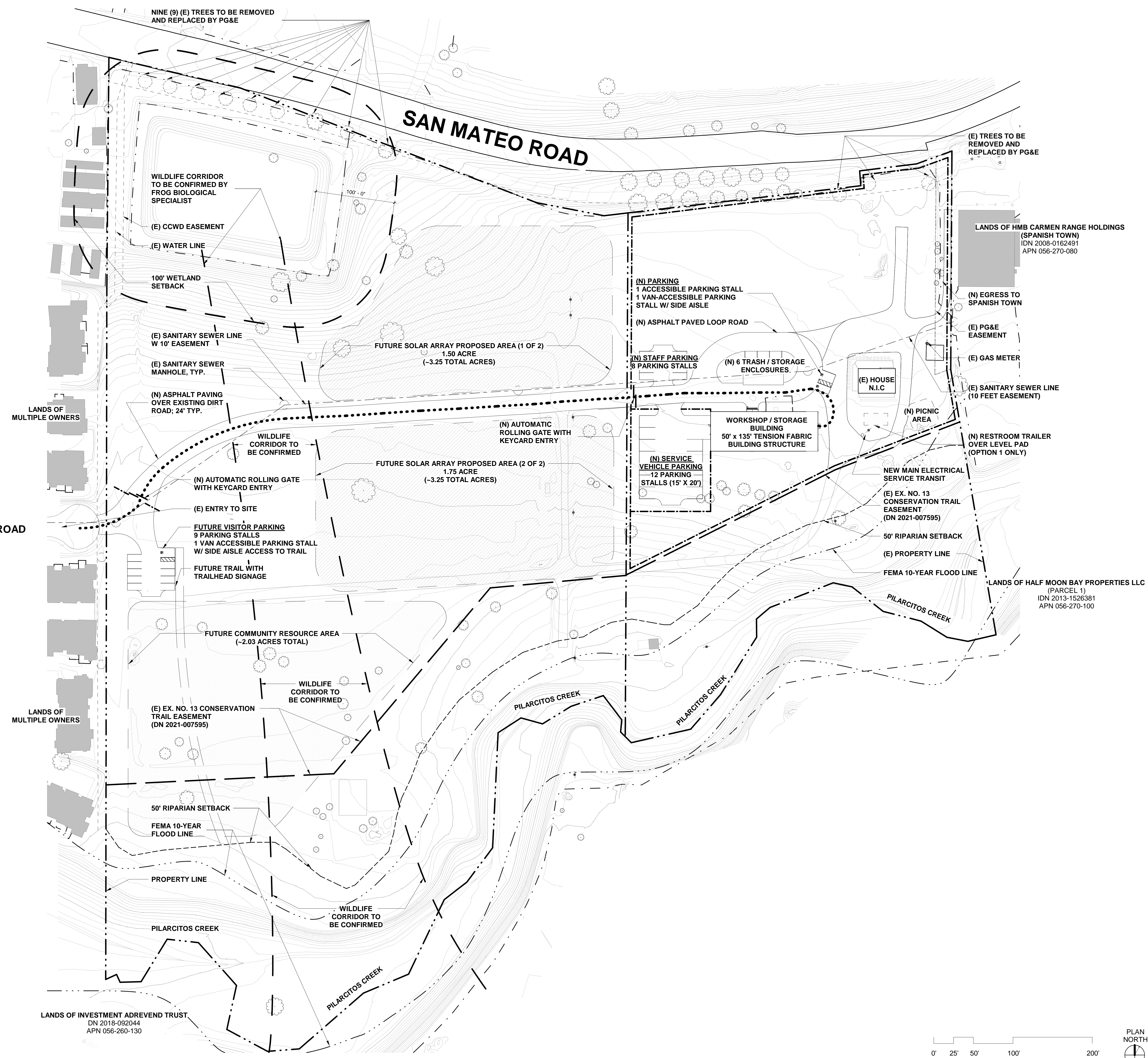
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 - . - . FENCE
 - — — PROPERTY LINE
 - WETLAND BUFFER
 - - - SEWER LINE
 - - - CCWD EASEMENT
 - - - (E) EX. NO. 13 CONSERVATION TRAIL EASEMENT
 - - - FLOOD LINE



1 DEMOLITION PLAN - SITE PLAN
1" = 50'-0"



- SHEET NOTES**
- VERIFY ALL CONDITIONS IN THE FIELD PRIOR TO THE START OF CONSTRUCTION. BRING DISCREPANCIES TO THE ATTENTION OF THE ARCHITECT PRIOR TO PROCEEDING WITH THE WORK.
 - ALL BUILDING AND SITE FEATURES TO REMAIN UNLESS OTHERWISE NOTED.

els
architecture+
urban design

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CORPORATION YARD
CONCEPTUAL DESIGN

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San Rafael, CA 94903

COST ESTIMATOR:
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1900 Powell St #470
Emeryville, CA 94608

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NUMBER	DATE	DESCRIPTION

- LEGEND**
- RIPARIAN SETBACK
 - FENCE
 - PROPERTY LINE
 - WETLAND BUFFER
 - SEWER LINE
 - CCWD EASEMENT
 - (E) EX. NO. 13 CONSERVATION TRAIL EASEMENT
 - ACCESSIBLE PATH OF TRAVEL
 - FLOOD LINE
 - ▨ SOLAR ARRAY AREA
 - ▭ COMMUNITY RESOURCE AREA

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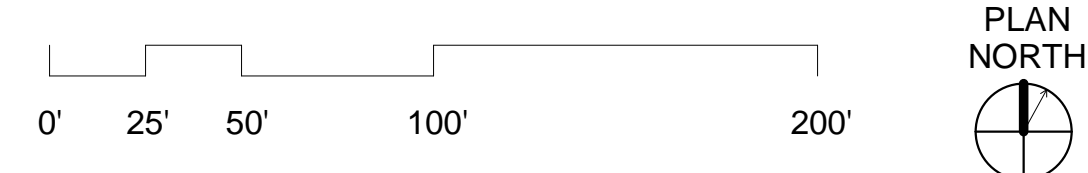
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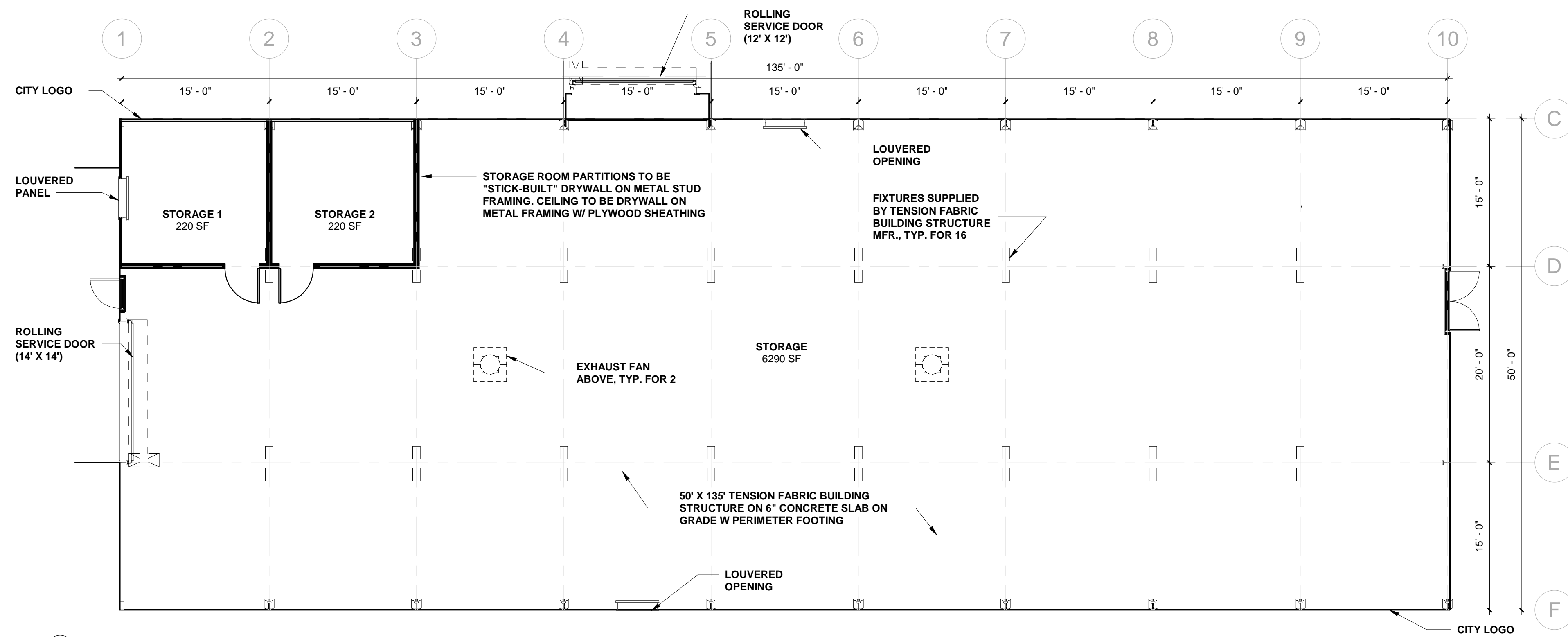
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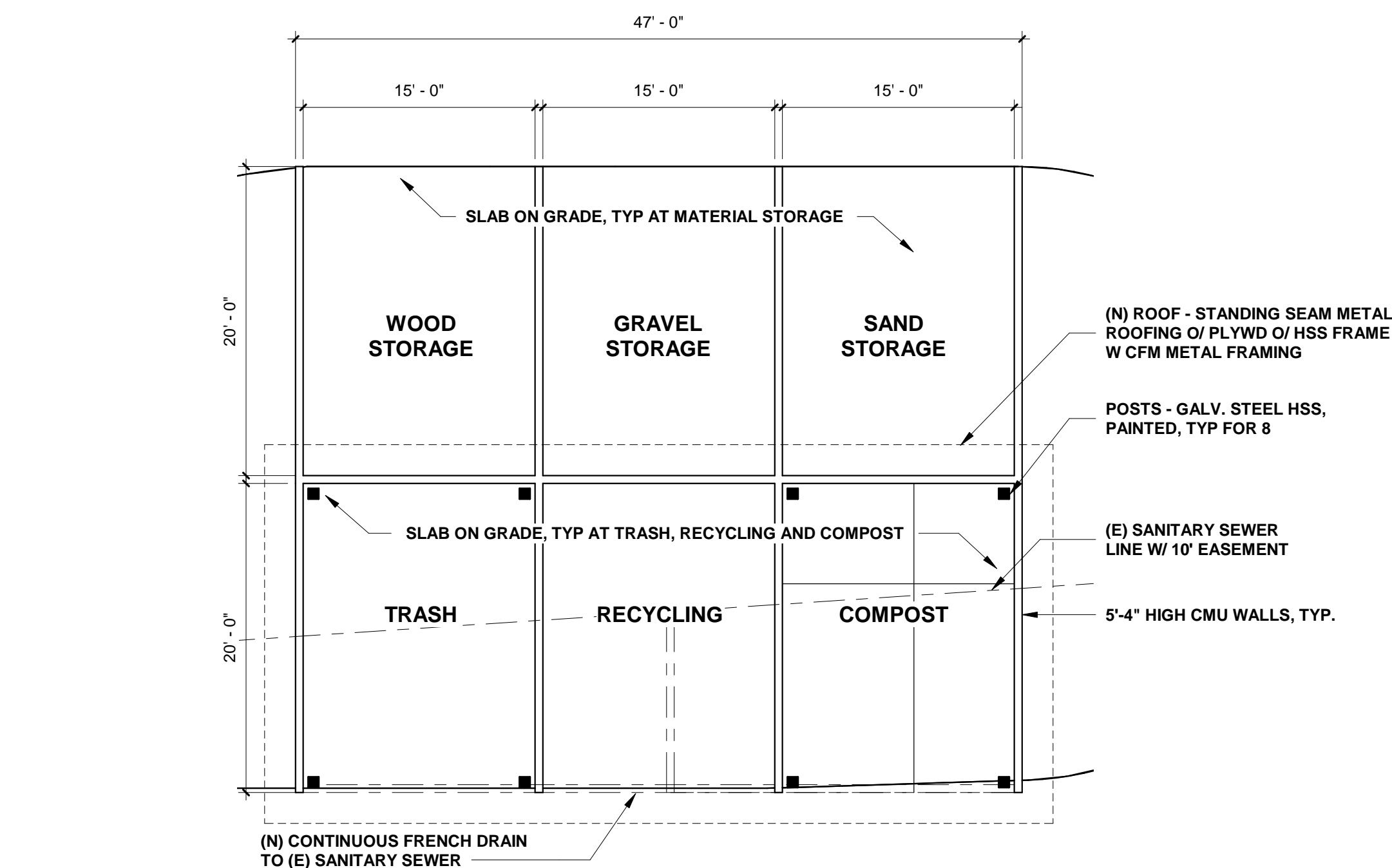
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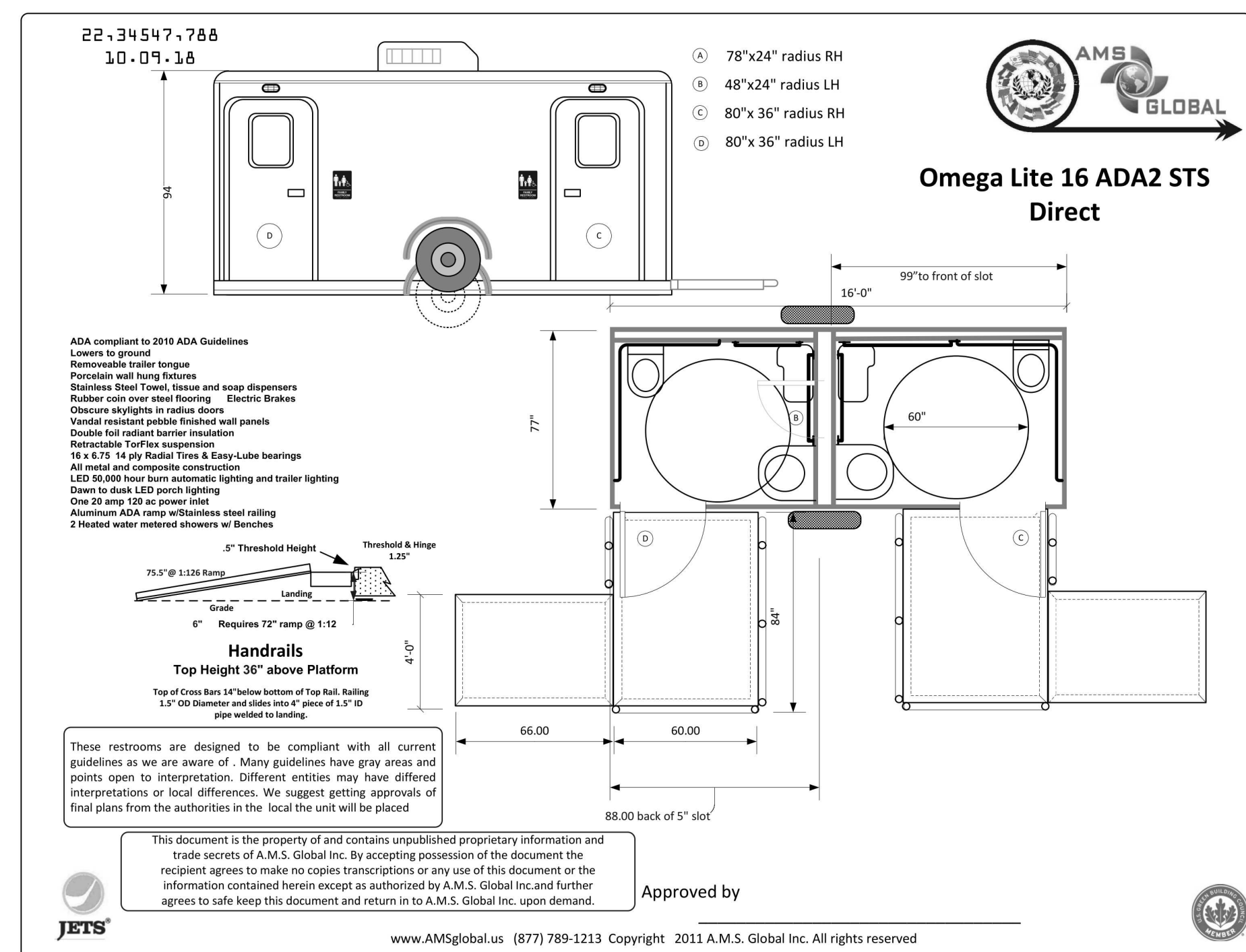




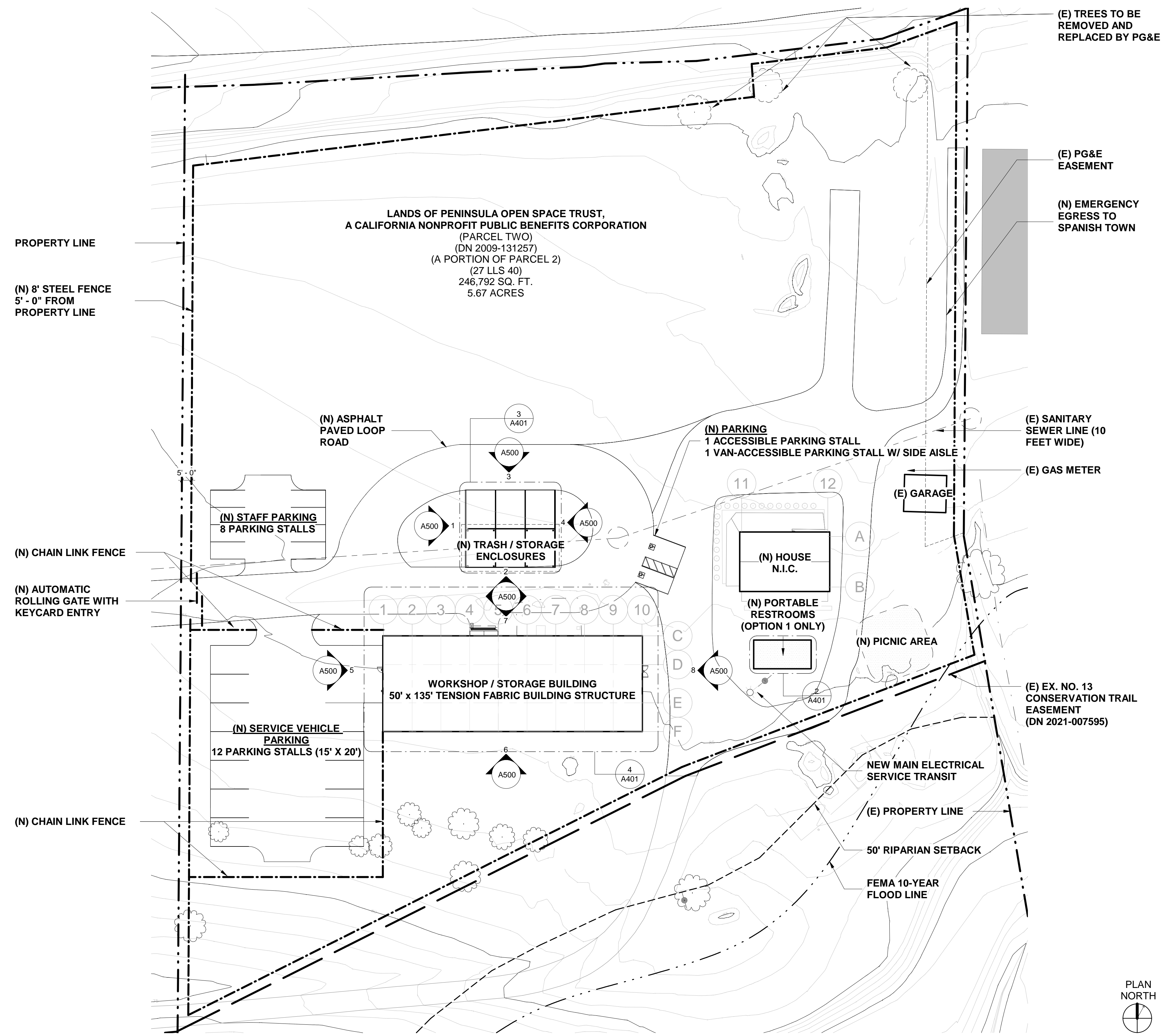
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1/8" = 1'-0"



3 FLOOR PLAN - MATERIAL STORAGE AND WASTE ENCLOSURE - OPTION 1
1/8" = 1'-0"



2 FLOOR PLAN AND ELEVATION - PORTABLE RESTROOM
N.T.S.



1 SITE PLAN - ENLARGED - OPTION 1
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REVISION		
NUMBER	DATE	DESCRIPTION

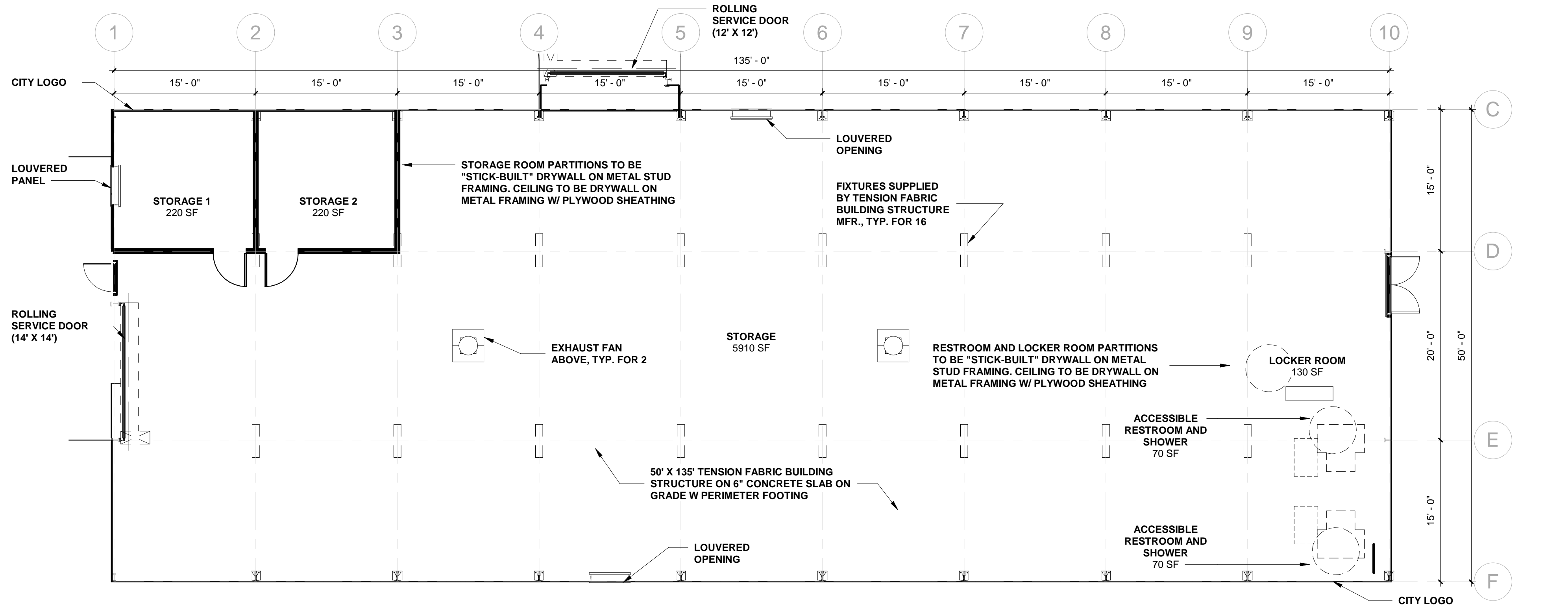
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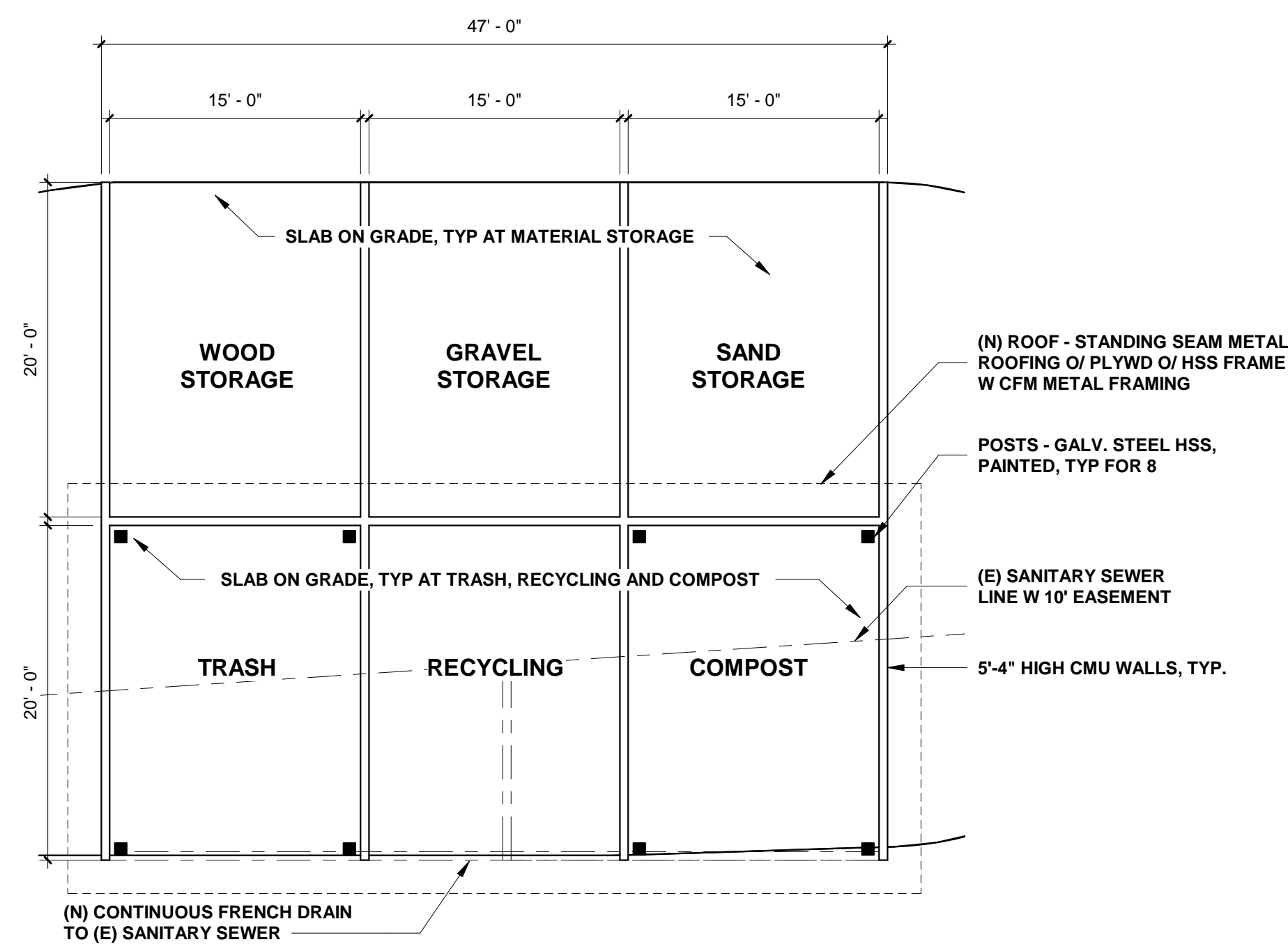
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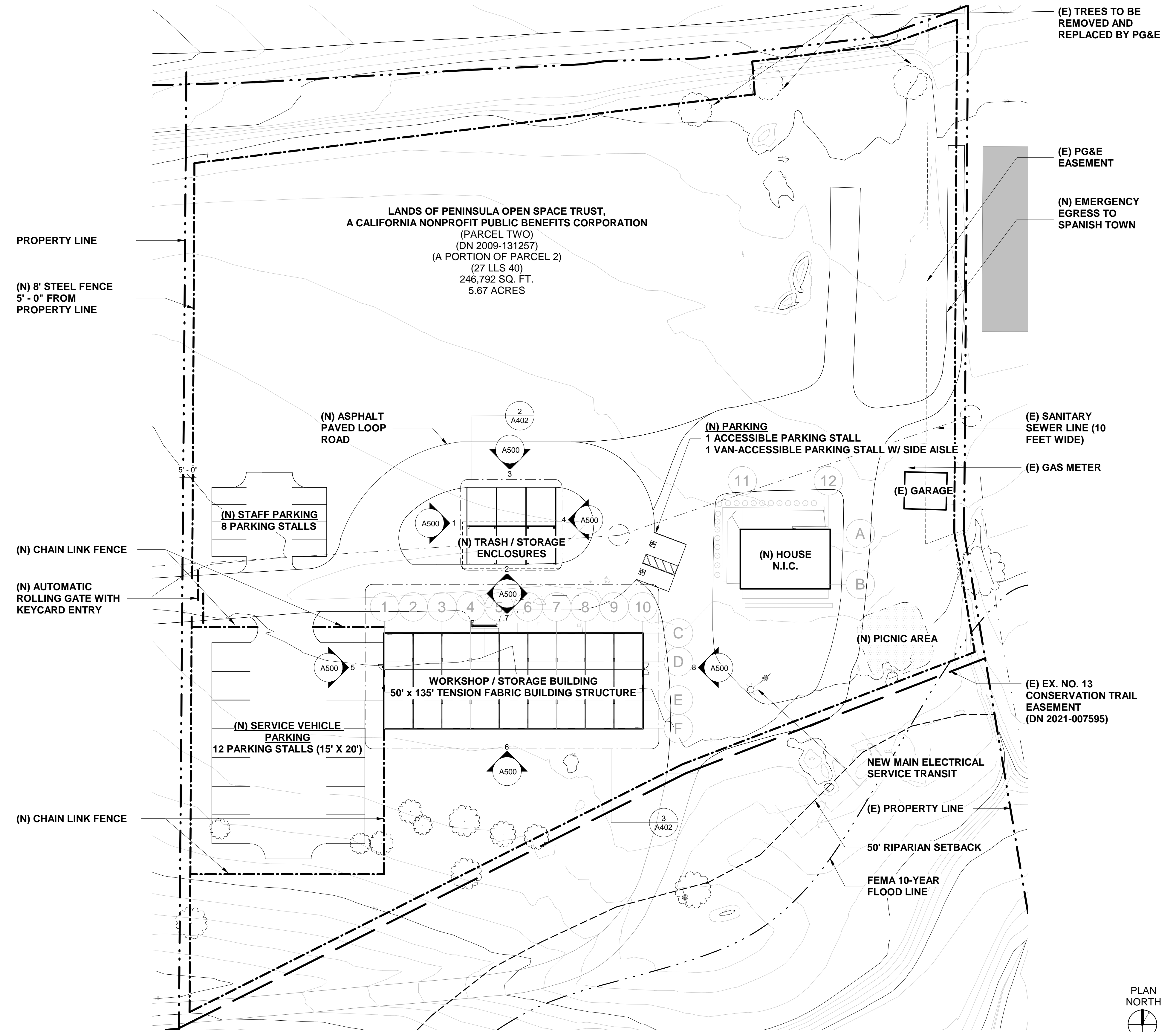




3 STRUCTURE FLOOR PLAN - OPTION 2
1/8" = 1'-0"



2 FLOOR PLAN - MATERIAL STORAGE AND WASTE ENCLOSURE - OPTION 2
1/8" = 1'-0"



1 SITE PLAN - ENLARGED - OPTION 2
1" = 30'-0"

REVISION		
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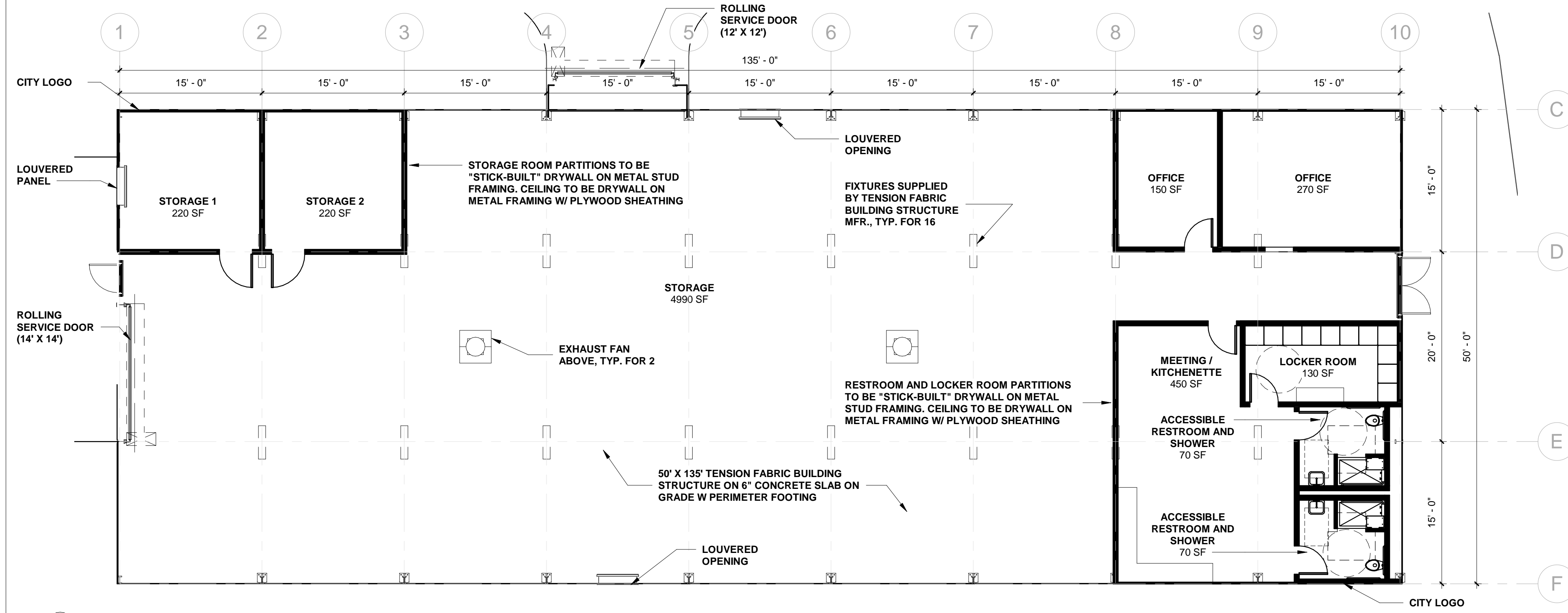
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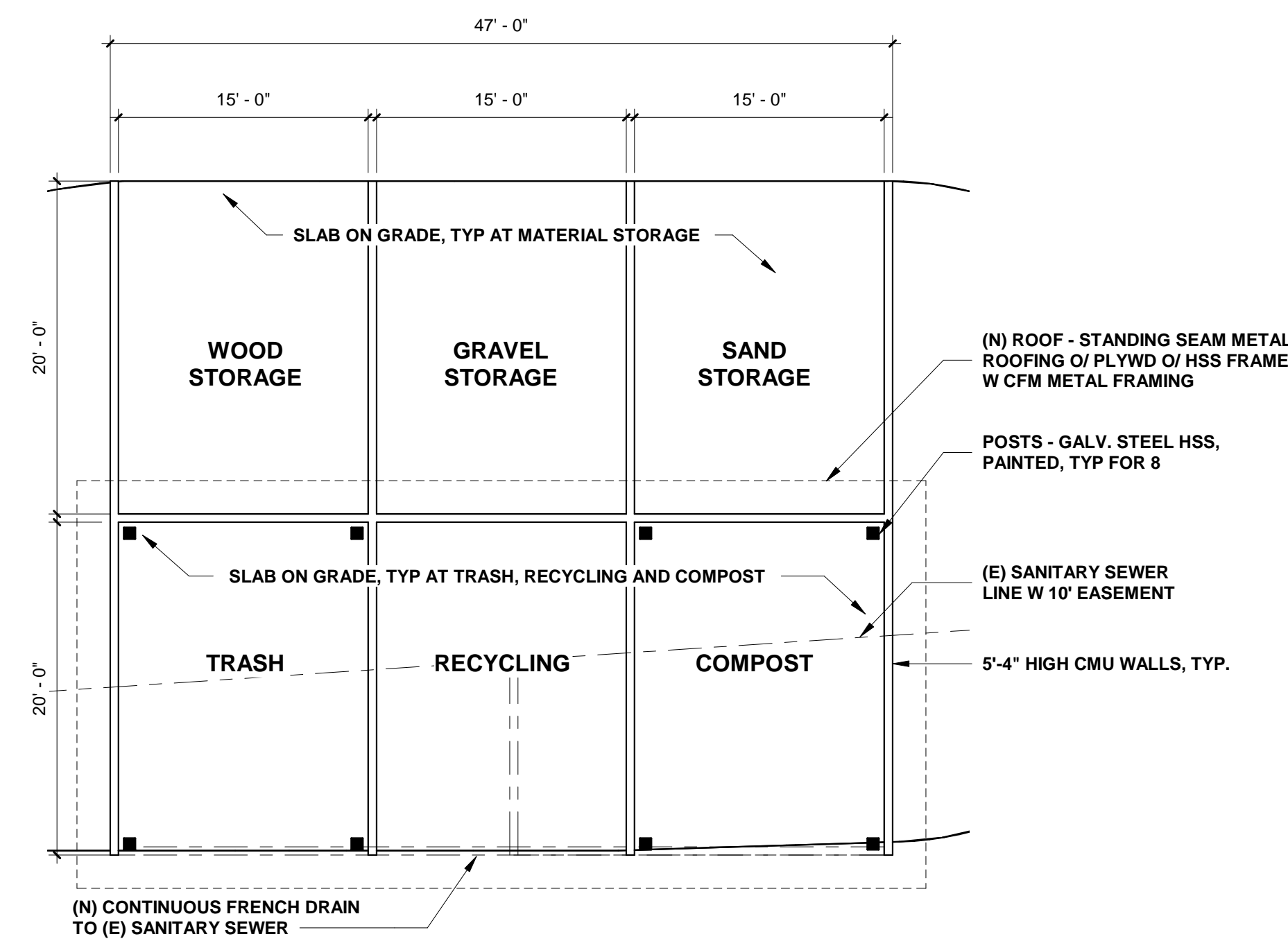
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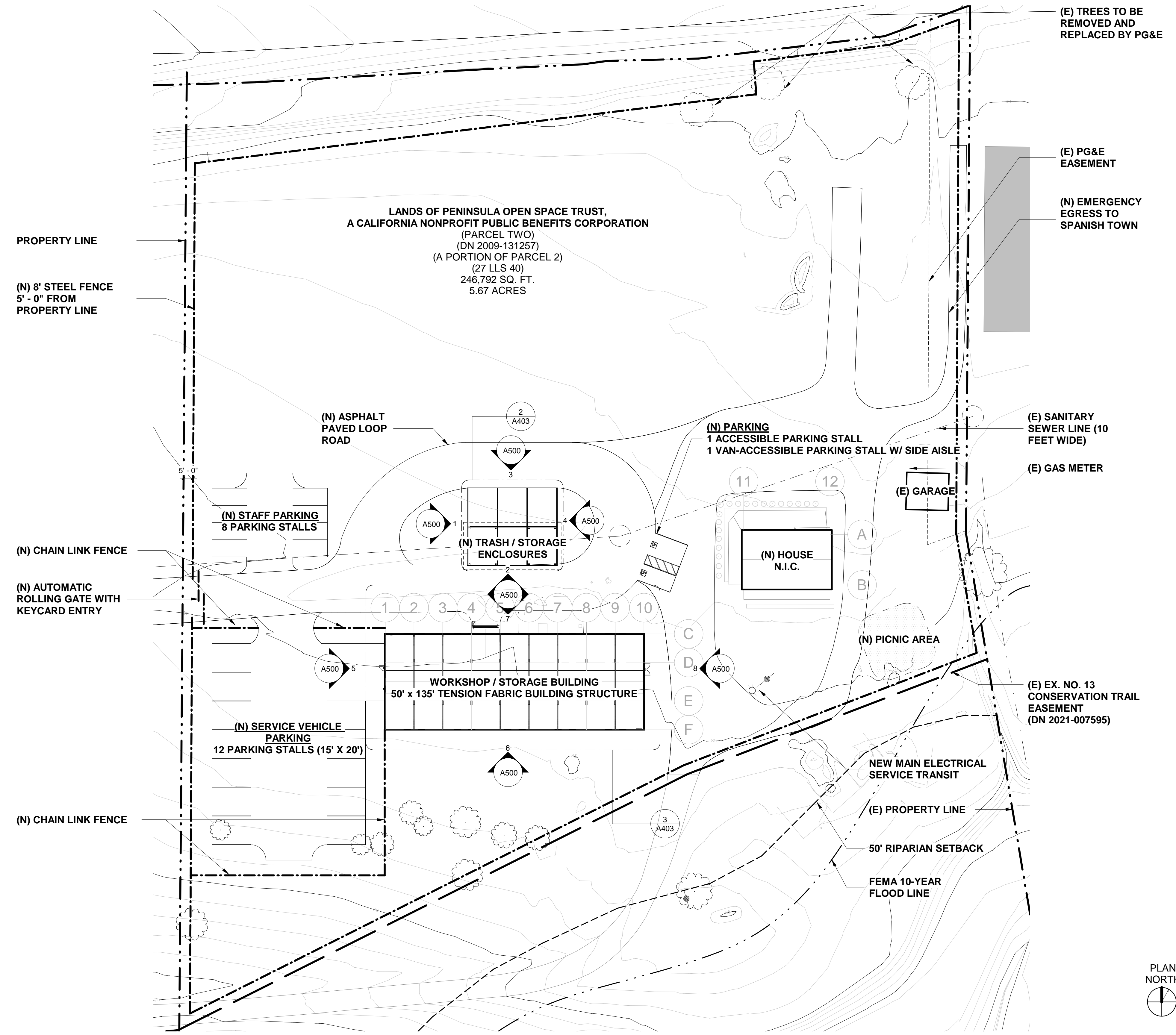




3 STRUCTURE FLOOR PLAN - OPTION 3
1/8" = 1'-0"



2 FLOOR PLAN - MATERIAL STORAGE AND WASTE ENCLOSURE - OPTION 3
1/8" = 1'-0"



1 SITE PLAN - ENLARGED - OPTION 3
1" = 30'-0"

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SHEET TITLE:
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SHEET NUMBER:
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CITY OF HALF MOON BAY

CORPORATION YARD
CONCEPTUAL DESIGN

PROJECT NUMBER:
202005

CLIENT:
CITY OF HALF MOON BAY
880 STONE PINE ROAD, HALF MOON BAY, CA 94019

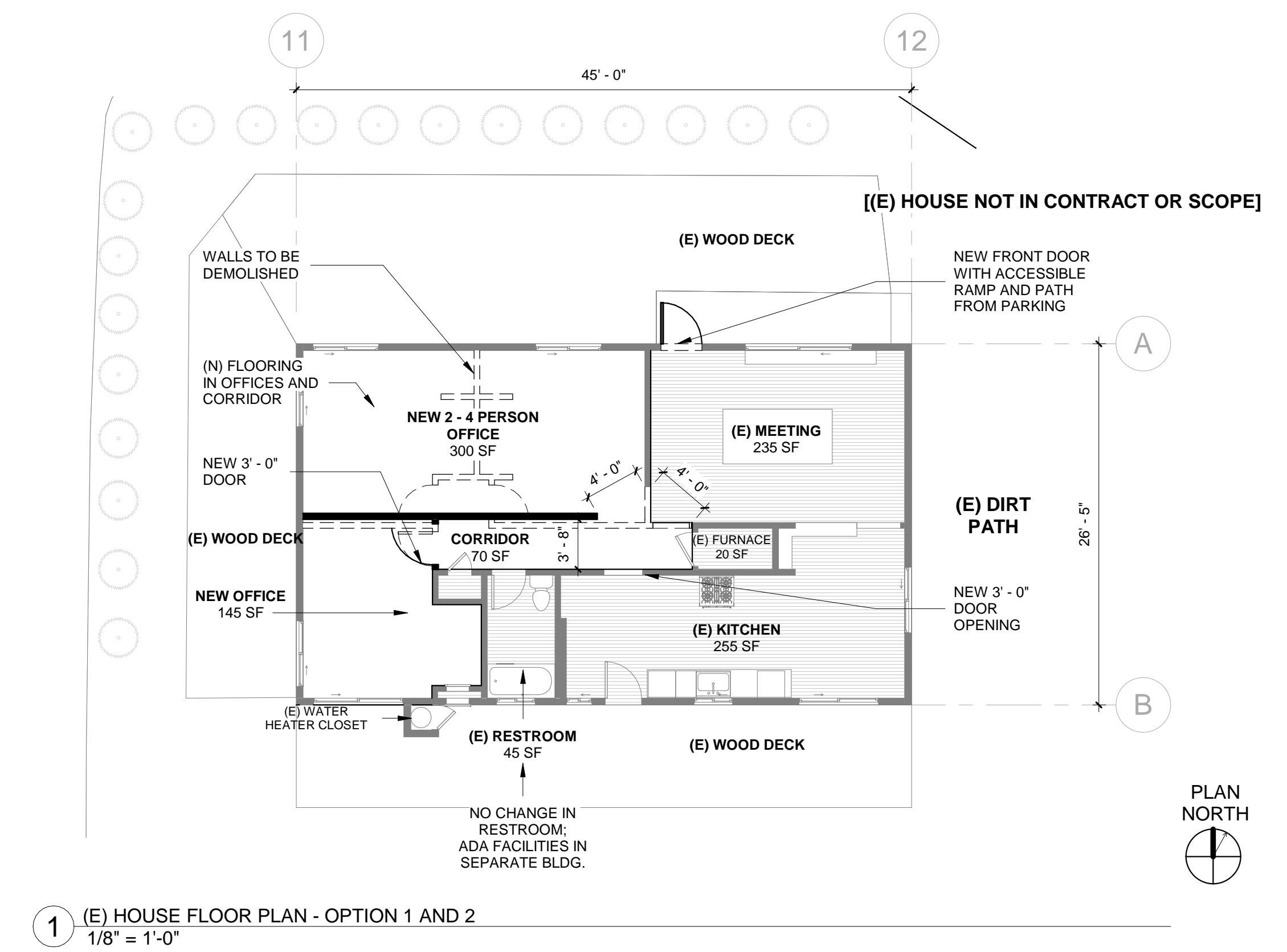
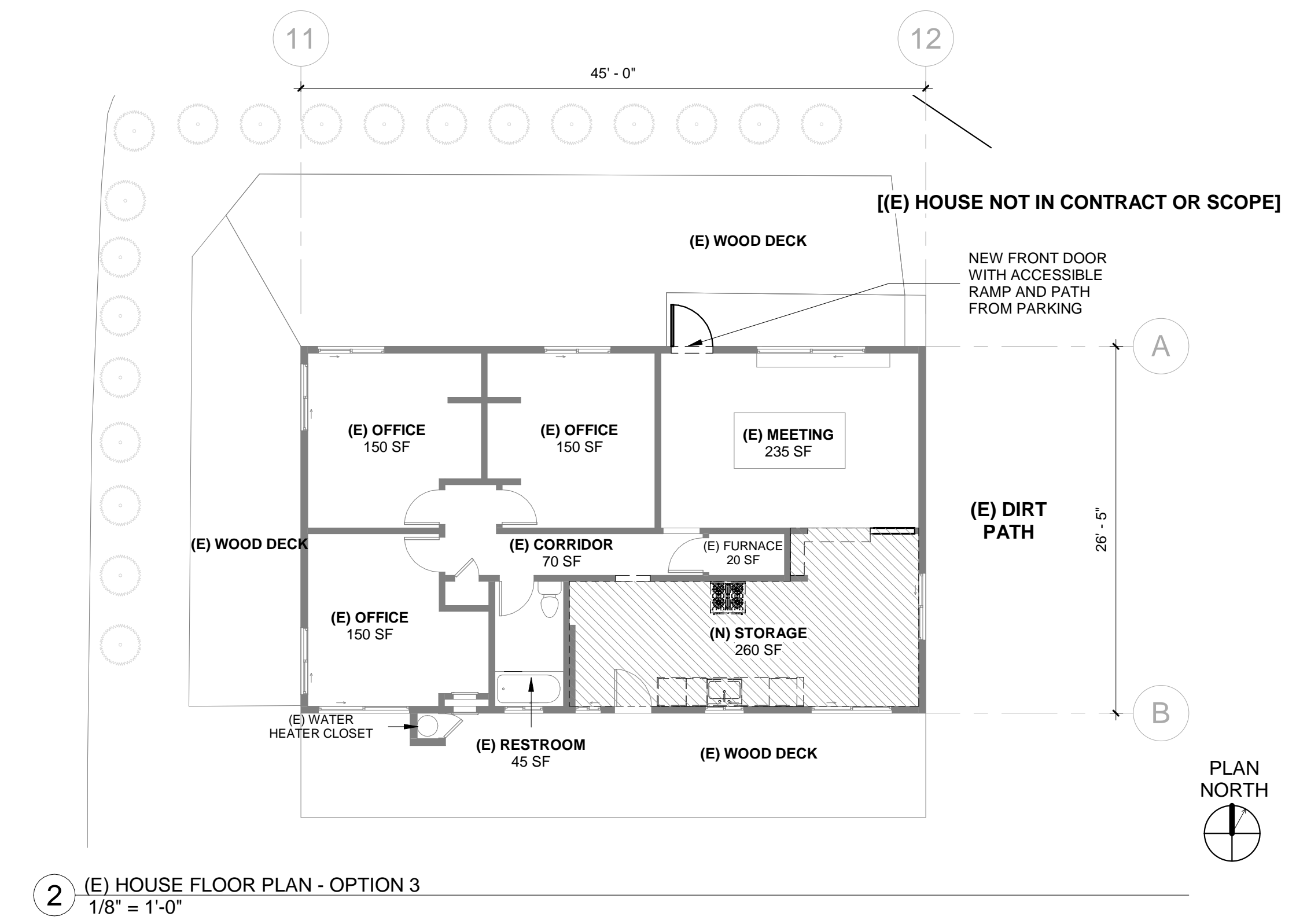
PROJECT TEAM:
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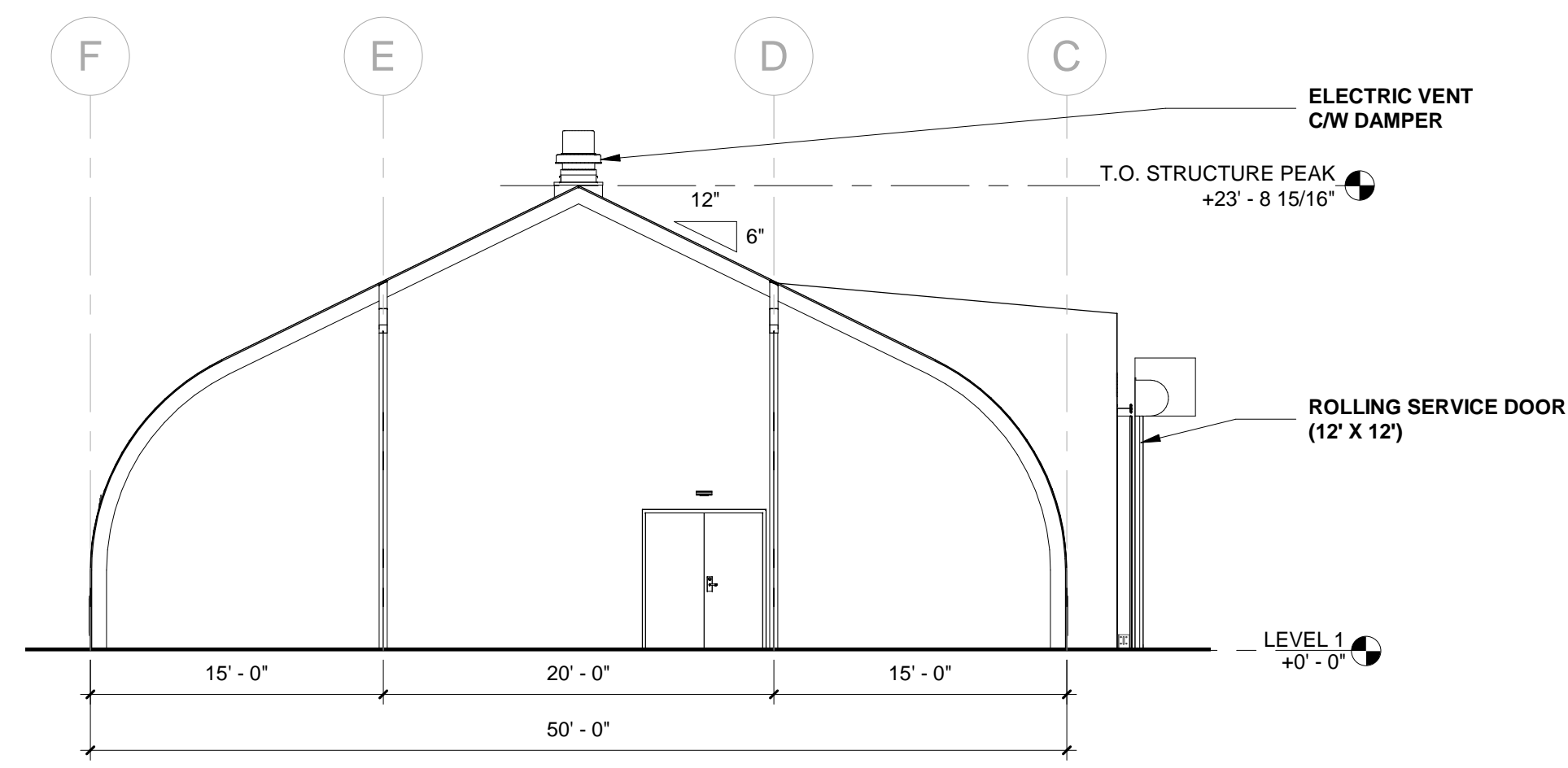
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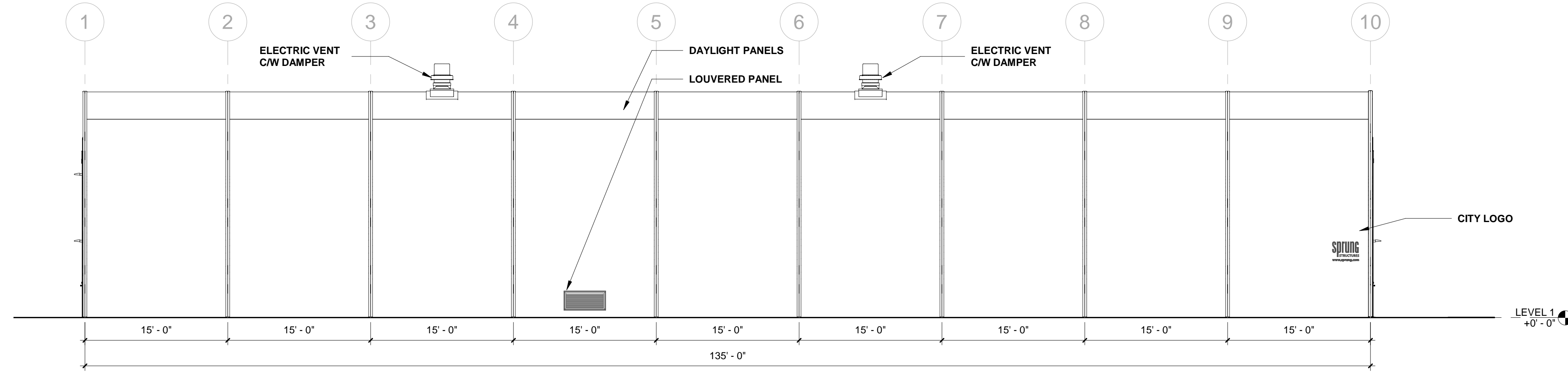
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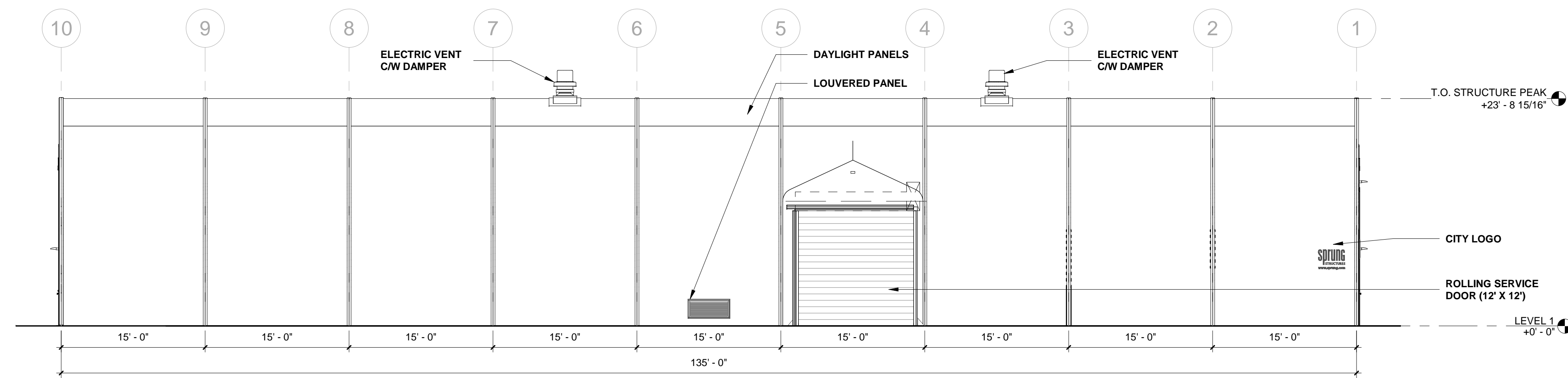
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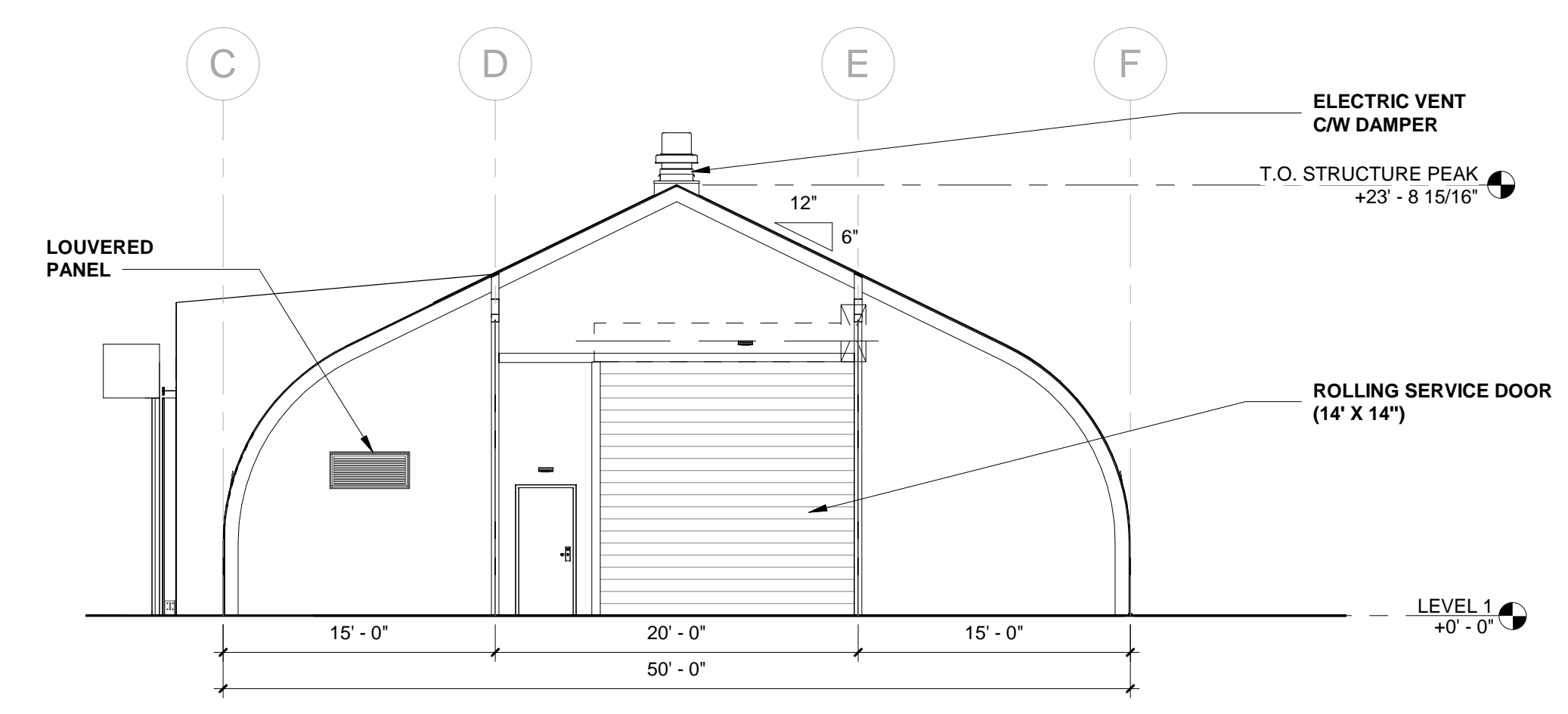
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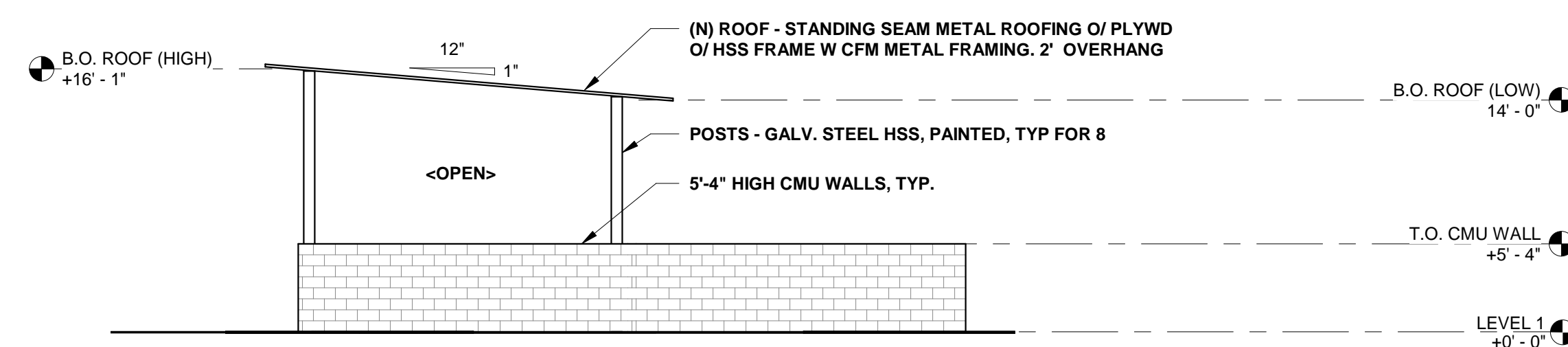
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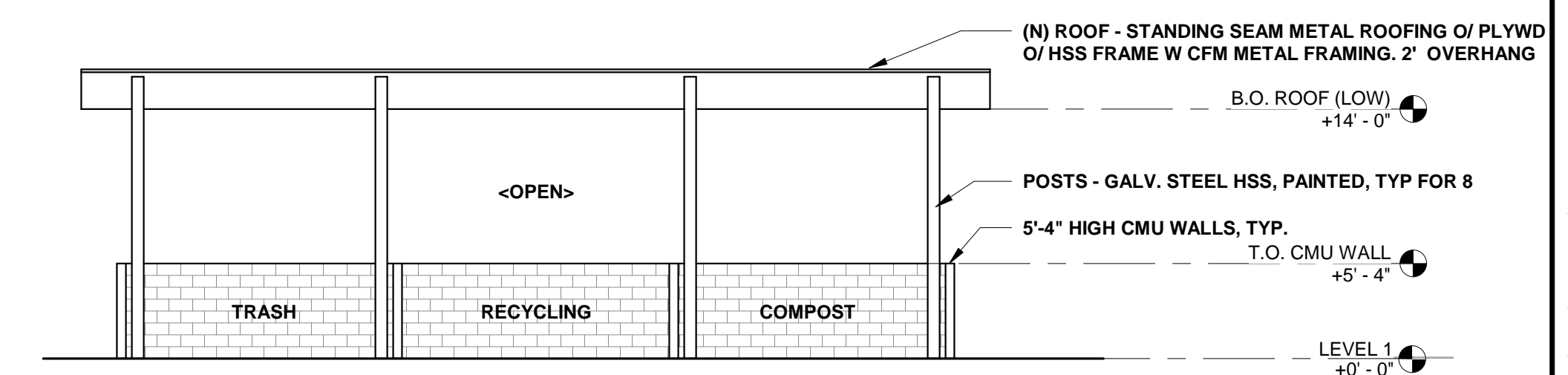
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1/8" = 1'-0"



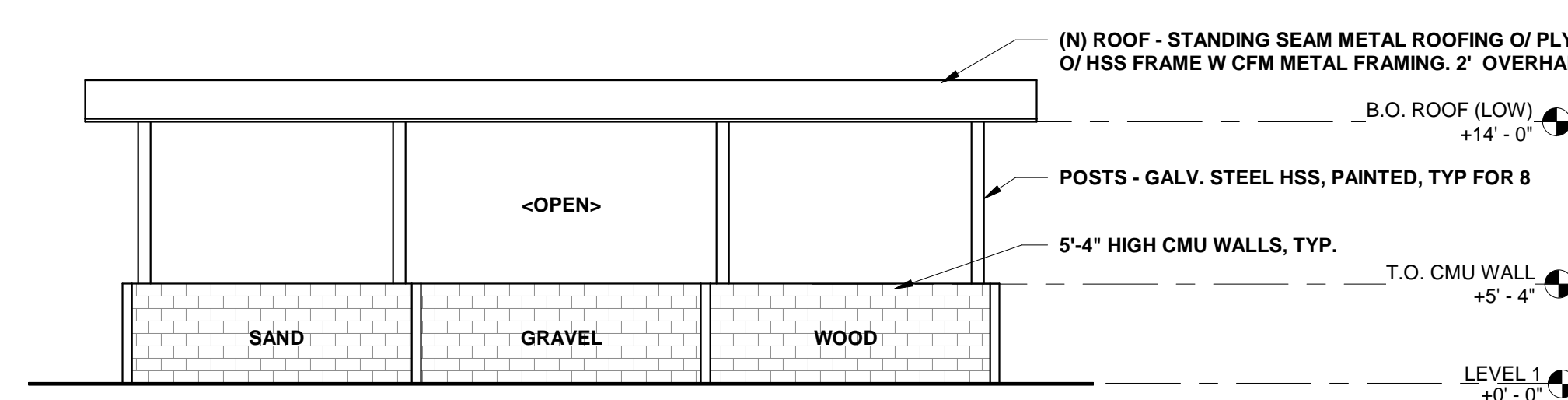
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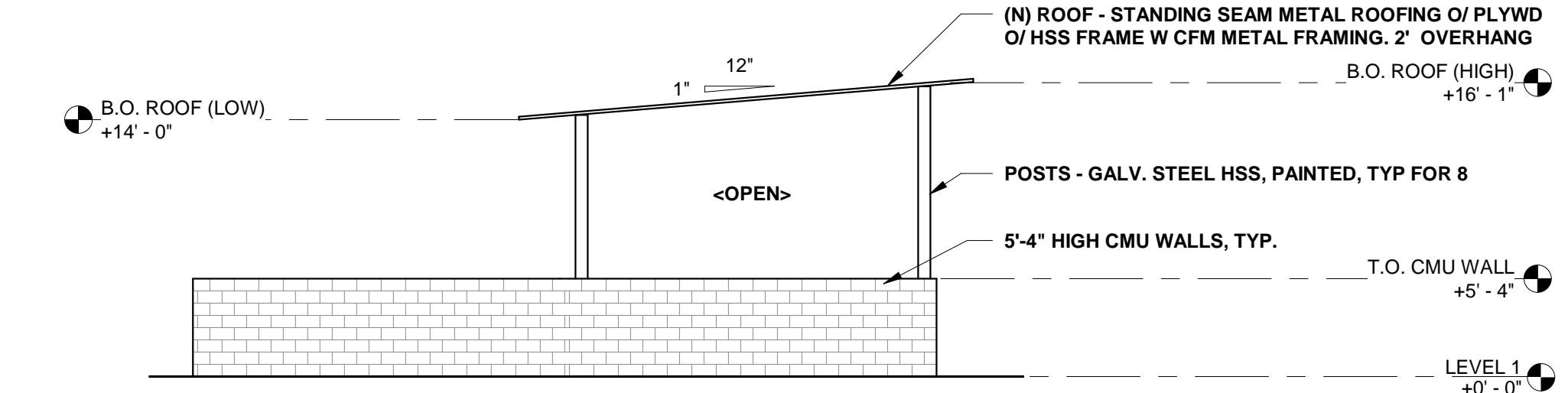
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1/8" = 1'-0"



2 STORAGE EXTERIOR ELEVATION - NORTH
1/8" = 1'-0"



3 STORAGE EXTERIOR ELEVATION - SOUTH
1/8" = 1'-0"



1 STORAGE EXTERIOR ELEVATION - EAST
1/8" = 1'-0"

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A500

COLORS ON THESE ELEVATIONS MAY VARY SIGNIFICANTLY DEPENDING ON PRINTER OR MONITOR. PLEASE REFER TO MEMBRANE SAMPLES FOR ACTUAL COLORS.



EXTERIOR VIEW RENDER







H. T. HARVEY & ASSOCIATES

Ecological Consultants

50 years of field notes, exploration, and excellence.



**880 Stone Pine Road Project
Biological Resources Report**

Project #4182-03

Prepared for:

John Doughty
City of Half Moon Bay
501 Main Street
Half Moon Bay, CA 94019

Prepared by:

H. T. Harvey & Associates

June 25, 2021

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Section 1. Introduction

This report describes the biological resources present on the site at 880 Stone Pine Road in Half Moon Bay, California, where the City of Half Moon Bay (City) is considering future development; the potential biological impacts of future development activities; and measures necessary to reduce these impacts to less-than-significant levels under the California Environmental Quality Act (CEQA).

1.1 Project Location

The project site is located at 880 Stone Pine Road in Half Moon Bay, San Mateo County (Figure 1). It is located within the *Half Moon Bay California* 7.5-minute USGS quadrangle. The site is located between State Route (SR) 92 and Pilarcitos Creek near downtown Half Moon Bay. The site was previously used as a plant nursery and is now a public works yard.

For the purposes of our description of existing biological resources and potential impacts from future development, we identified a Biological Study Area (BSA) of approximately 44 acres that included the 21-acre project site itself as well as surrounding areas within 200 feet of the project boundary (Figure 2). The purpose of providing this BSA was to conform to the City of Half Moon Bay's Local Coastal Program requirements under Policy 6-8.

1.2 Project Description

The City is considering developing the public works yard at 880 Stone Pine Road. A specific project description has not been proposed for the development, and therefore specific impact locations have not been defined. It is conceivable that future development activities may disturb the majority of the site, although the City does not intend to disturb Pilarcitos Creek, a perennial marsh in the northwest corner of the site, or any Environmentally Sensitive Habitat Area (ESHA) avoidance buffers required by the City's Local Coastal Program. The project could also include limited impacts to riparian habitat and the riparian buffer associated with Pilarcitos Creek allowed under the City's Local Coastal Program, notably the creation of paths, trails, or other environmentally related educational uses (J. Doughty, pers. comm.).



N:\Projects\3000\3125-01\04\Reports\Riparian and Wetland Mitigation



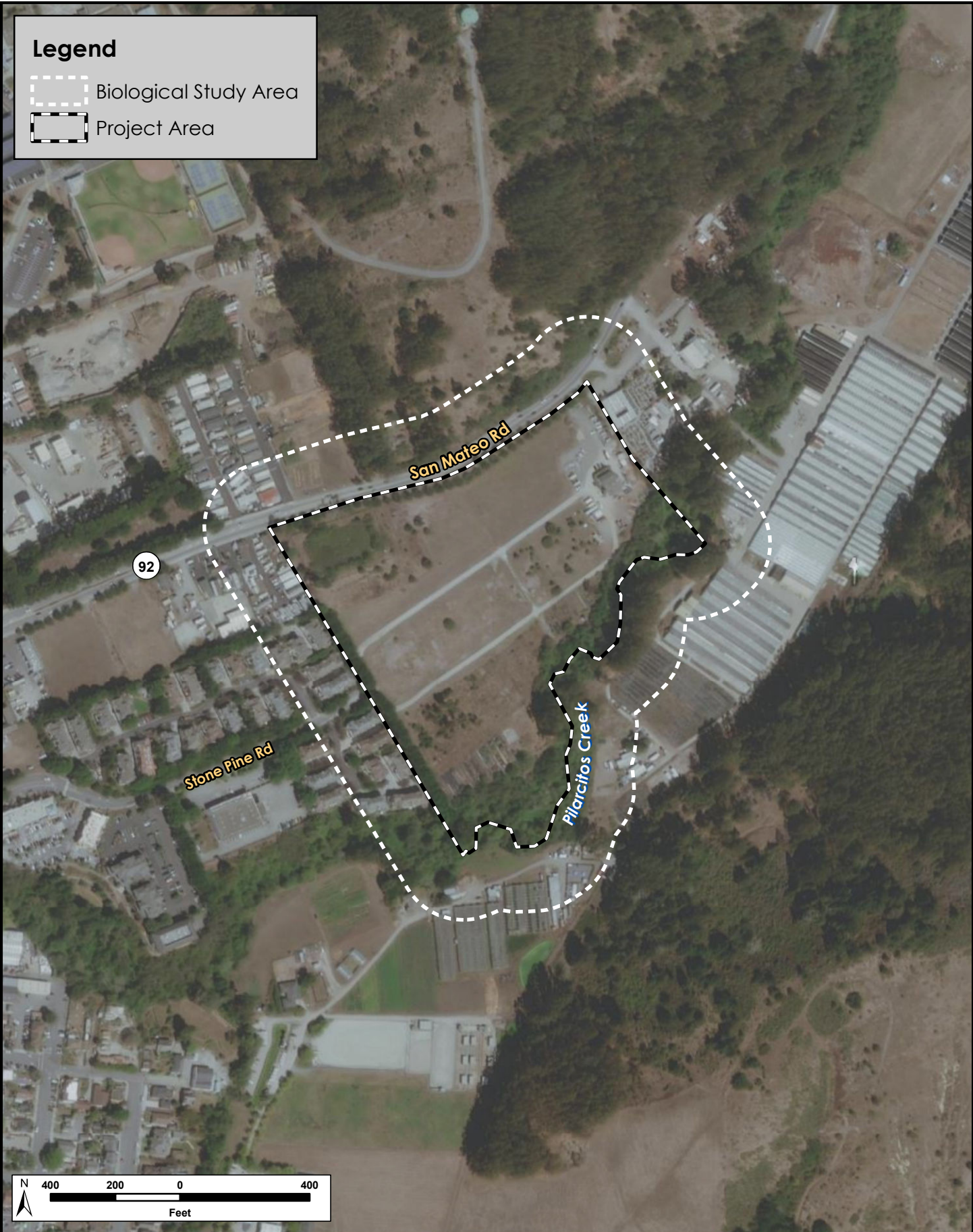
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Figure 1. Vicinity Map

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Figure 2. Biological Study Area

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Section 2. Methods

2.1 Background Review

Prior to conducting field work, H. T. Harvey & Associates ecologists reviewed available background information pertaining to the biological resources on and in the vicinity of the BSA. Information was compiled and subsequently compared against site conditions during field surveys. The following sources were consulted:

- California Natural Diversity Database (CNDDDB) record search for the *Half Moon Bay, California* U.S. Geological Survey (USGS) 7.5-minute quadrangle (where the BSA occurs) and the surrounding five quadrangles: *Montara Mountain, San Mateo, Woodside, San Gregorio, and La Honda* (CNDDDB 2021)
- eBird record search for the *Half Moon Bay, California* U.S. Geological Survey (USGS) 7.5-minute quadrangle (where the BSA occurs) and the surrounding five quadrangles: *Montara Mountain, San Mateo, Woodside, San Gregorio, and La Honda* (Cornell Lab of Ornithology 2021)
- CNPS Rare Plant Program Inventory of Rare and Endangered Plants of California for the 7-5-minute quadrangles listed above (CNPS 2021) for Ranks 1-4 and for San Mateo County for Rank 4 species, for which records are not always maintained at the quadrangle level
- USFWS Information for Planning and Consultation tool (USFWS 2021a)
- Aerial photographs obtained from Google Earth Pro (Google, Inc. 2021)
- U.S. Department of Agriculture Natural Resources Conservation Service (NRCS) Web Soil Survey for soil types (NRCS 2021)
- U.S. Fish and Wildlife Service (USFWS) National Wetlands Inventory for any existing aquatic features, including wetlands, streams, and sloughs (USFWS 2014)
- The Jepson Manual: Vascular Plants of California, Second Edition (Baldwin et al. 2012)
- Half Moon Bay Riparian and Wetland Mitigation Site, Preliminary Mitigation and Monitoring Plan (H. T. Harvey & Associates and RMC 2010)
- Administrative Draft, Half Moon Bay Community Park and Analysis Report, Biological Section (H. T. Harvey & Associates 2005)

For the purposes of this report, the vicinity of the BSA is defined as the area within a 5-mile (mi) radius of the BSA. A map of CNDDDB records of special-status plants and natural communities of concern, and a map of CNDDDB records of special-status animals, are included as Figures 3 and 4, respectively. These generalized maps show areas where special-status species are known to occur or have occurred historically.

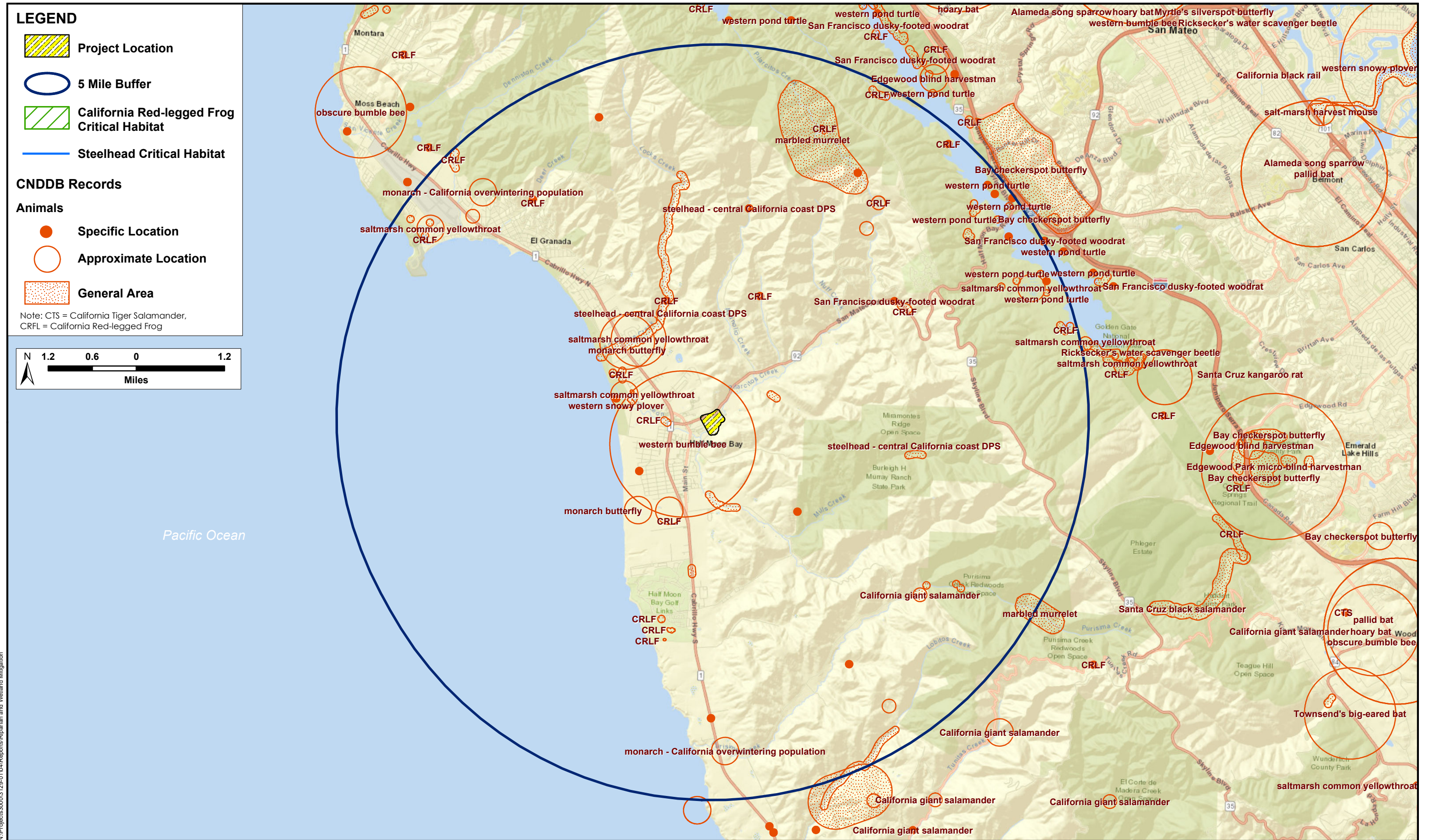


Figure 4. Special-Status Animal Species CNDDDB Records

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Following our site visits, we also reviewed the City's *Local Coastal Land Use Plan 2020 Comprehensive Update* (City of Half Moon Bay 2020) for information on biological resources and City land use policies related to coastal resources.

2.2 Site Visit

A reconnaissance-level field survey of the BSA was conducted by H. T. Harvey & Associates senior wildlife ecologist Jeff Wilkinson, Ph.D., and by H. T. Harvey & Associates plant and wetland ecologist David Gallagher, M.S., on June 8, 2018. The purpose of this survey was to (1) assess existing biotic habitats and plant and animal communities in the BSA, (2) assess the BSA for its potential to support special-status species and their habitats, and (3) preliminarily identify potential jurisdictional habitats within the BSA, such as Waters of the U.S./State.

On June 12, 2020, H. T. Harvey & Associates plant ecologist, Mark Bibbo, M.S., performed a technical delineation of wetlands and other waters in the study area, in accordance with the *Corps of Engineers 1987 Wetlands Delineation Manual* (Corps Manual; Environmental Laboratory 1987). Additionally, the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region (Version 2.0)* (Regional Supplement) (USACE 2010) was followed to document site conditions relative to hydrophytic vegetation, hydric soils, and wetland hydrology. Mr. Bibbo mapped the extent and distribution of wetlands and other waters of the U.S. that may be subject to regulation under Section 404 of the Clean Water Act (CWA) as well as waters of the state that may be subject to regulation under the Porter Cologne Water Quality Control Act, which is administered by the RWQCB. The study area was also surveyed for areas that meet the physical criteria of a wetland according to the California Coastal Commission (CCC), as well as aquatic and riparian habitat that may be subject to regulation under Sections 1600-1607 of the California Fish and Game Code, which is administered by CDFW.

H. T. Harvey & Associates mapped biotic habitats within the BSA using a combination of field observations, recorded via the Apple iPad geographic information systems (GIS) Kit Pro application and aerial imagery signatures. Habitat types were distinguished using natural community descriptions discussed in Holland (1986) and Sawyer et al. (2009). Plant species within each habitat were identified using Baldwin et al. (2012). Habitat acreages were calculated using GIS and aerial imagery interpretation.

Section 3. Regulatory Setting

Biological resources in the BSA are regulated by a number of federal, state, and local laws and ordinances, as described below.

3.1 Federal

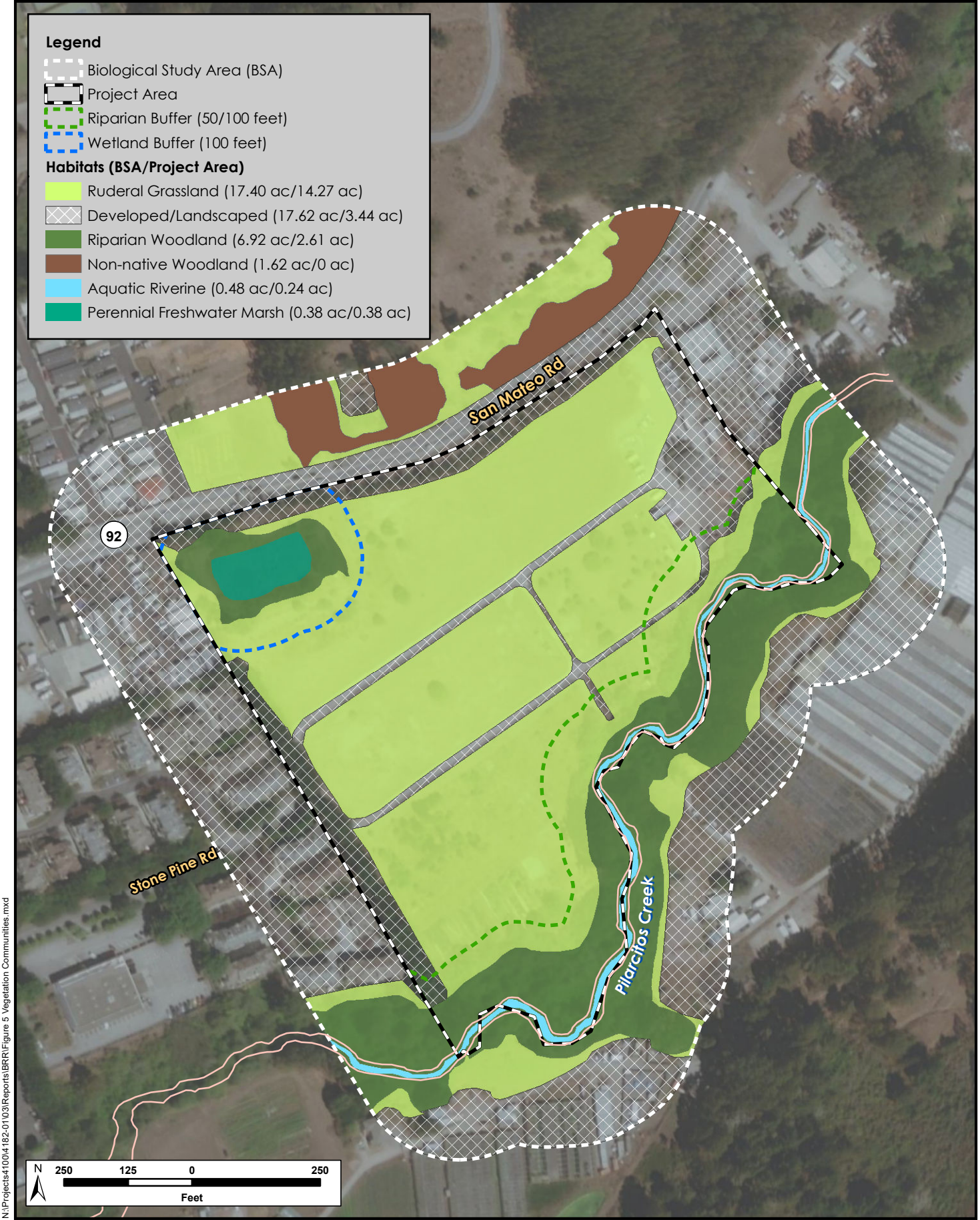
3.1.1 Clean Water Act

As part of its mandate under Section 404 of the CWA, the EPA regulates the discharge of dredged or fill material into “waters of the U.S.” Waters of the U.S. include territorial seas, tidal waters, and non-tidal waters in addition to wetlands and drainages that support wetland vegetation, exhibit ponding or scouring, show obvious signs of channeling, or have discernible banks and high-water marks. Wetlands are defined as those 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” (33 CFR 328.3(b)). The discharge of dredged or fill material into waters of the U.S. is prohibited under the CWA except when it follows Section 404 of the CWA. Enforcement authority for Section 404 was given to the USACE, which it accomplishes under its regulatory branch. The EPA has veto authority over the USACE’s administration of the Section 404 program and may override a USACE decision with respect to permitting.

The USACE has specific guidelines for determining the extent of its jurisdiction. The methods of delineating USACE jurisdiction are defined in the 1987 Wetlands Delineation Manual (Environmental Laboratory, 1987), and the Arid West Manual (USACE 2008). The methods of delineating USACE jurisdiction are defined in the manuals and require examination of three parameters (soil, hydrology, and vegetation).

Substantial impacts to waters of the U.S. may require an Individual Permit. Projects that only minimally affect waters of the U.S. may meet the conditions of one of the existing Nationwide Permits, if other conditions of the permit are satisfied. A water quality certification or waiver pursuant to Section 401 of the CWA is required for Section 404 permit actions. The State Water Resources Control Board (SWRCB) is the state agency (together with the Regional Water Quality Control Boards [RWQCBs]) charged with implementing water quality certification in California.

Project Applicability: Field surveys in 2018 and 2020 identified two biotic habitats which may be considered waters of the U.S./state and subject to jurisdiction by the USACE. Waters of the U.S./state include perennial aquatic riverine within the bed of Pilarcitos Creek, and a perennial freshwater marsh (Figure 5).



N:\Projects\41004\182-01\03\Reports\BRR\Figure 5 - Vegetation Communities.mxd



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Figure 5. Habitat Types/Land Uses
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There are several dilapidated concrete channels and culverts present within the BSA that were excavated in uplands and were once part of the irrigation infrastructure from previous plant nursery operations. At the time of the site visits, these culverts and channels were vegetated with upland plant species and there was no evidence of inundation or water movement; therefore, these culverts and channels likely to do not convey water and would not be considered Waters of the U.S./state.

It is anticipated that any project proposed within the BSA would not involve impacts to Pilarcitos Creek below the OHWM, and per direction from the City, no impacts to the perennial freshwater marsh are anticipated. Therefore, we do not expect the project to need a USACE Section 404 permit.

3.1.2 Federal Endangered Species Act

The Federal Endangered Species Act (FESA) protects federally listed wildlife species from harm or “take”, which is broadly defined as “to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, collect, or attempt to engage in any such conduct.” Take can also include habitat modification or degradation that directly results in death or injury of a listed wildlife species. An activity can be defined as “take” even if it is unintentional or accidental. Listed plant species are provided less protection than listed wildlife species. Listed plant species are legally protected from take under FESA only if they occur on federal lands.

The U.S. Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service (NMFS) have jurisdiction over federally listed, threatened, and endangered species under FESA. The USFWS also maintains lists of proposed and candidate species. Species on these lists are not legally protected under FESA, but may become listed in the near future and are often included in their review of a project.

Project Applicability: Pilarcitos Creek is designated as critical habitat for the federally threatened Central California Coast steelhead (*Oncorhynchus mykiss irideus*) Distinct Population Segment (NMFS 2005), and this species has been documented in Pilarcitos Creek (CDFW 2013, Center for Ecosystem Management and Restoration 2008, NMFS 2015). However, this segment of the creek does not support suitable spawning, rearing, or feeding habitat during most of the year due to the lack of channel complexity, appropriately-sized gravel, or connectivity with the adjacent floodplain, as well as high stream temperatures. Furthermore, the majority of habitat in the Pilarcitos Creek watershed is in poor condition (Phillip Williams & Associates 2008). Therefore, steelhead are expected to occur in the reach of Pilarcitos Creek within the BSA very infrequently and in low numbers during migration, if they are present at all. The federally endangered Central California Coast coho salmon (*Oncorhynchus kisutch*) may have historically occurred in Pilarcitos Creek, and the creek is designated habitat for this species (NMFS 1999). However, recent surveys and monitoring have not detected this species in the creek (CDFW 2013, Hager 2011 as cited in NMFS 2015), and this species is not currently known or expected to occur here. Because the project is not expected to impact the creek itself, we do not expect that FESA consultation with NMFS will be necessary for future project activities.

The federally threatened California red-legged frog (*Rana draytonii*) is known to occur in the BSA. California red-legged frog adults and juveniles were observed in the perennial freshwater marsh in the BSA in 2005 (H.

T. Harvey & Associates and RMC 2010). In addition, adults and larvae have been found in a breeding pond in the vicinity of Pilarcitos Creek about 1.3 mi northwest of the BSA as recently as 2016, and California red-legged frog adults were observed in Pilarcitos Creek about 0.5 mi west of the BSA in 2006 (CNDDDB 2021). The federally endangered San Francisco garter snake (*Thamnophis sirtalis tetrataenia*) has been recorded approximately 0.5 mi northwest of the BSA in Pilarcitos Creek and adjacent wetland areas (CNDDDB 2021). Suitable dispersal and foraging habitat for these two species occurs within the BSA. Implementation of avoidance and minimization measures will minimize the potential for the project to result in take of these species, though impacts to habitat and the possible need for relocation of individual red-legged frogs from the BSA (to avoid injury or mortality) could potentially constitute take, thus necessitating FESA consultation with the USFWS.

Six federally listed plant species are known to occur in the nine-quadrangle area encompassing the BSA (CNPS 2021, CNDDDB 2021): (1) San Mateo thornmint (*Acanthomintha duttonii*), endangered; (2) Crystal Springs fountain thistle (*Cirsium fontinale* var. *fontinale*), endangered; (3) San Mateo woolly sunflower (*Eriophyllum latilobum*), endangered; (4) Marin western flax (*Hesperolinon congestum*), threatened; (5) white-rayed pentachaeta (*Pentachaeta bellidiflora*), endangered; and (6) Hickman's cinquefoil (*Potentilla hickmanii*), endangered. While Hickman's cinquefoil can occur in perennial freshwater marshes, due to a lack of a suitable vegetation associations, the highly restricted range of this species, and it not being observed during surveys by qualified botanists in June 2018 and 2020, it is considered absent from the BSA. There is no suitable habitat for the remaining five species within the BSA, and therefore these five federally listed plant species are also considered absent from the BSA.

3.1.3 Magnuson-Stevens Fishery Conservation and Management Act

The Magnuson-Stevens Fishery Conservation and Management Act governs all fishery management activities that occur in federal waters within the United States' 200-nautical-mile limit. The Act establishes eight Regional Fishery Management Councils responsible for the preparation of fishery management plans (FMPs) to achieve the optimum yield from U.S. fisheries in their regions. These councils, with assistance from the NMFS, establish Essential Fish Habitat (EFH) in FMPs for all managed species. Federal agencies that fund, permit, or implement activities that may adversely affect EFH are required to consult with the NMFS regarding potential adverse effects of their actions on EFH, and respond in writing to recommendations by the NMFS.

Project Applicability: The Pacific Fishery Management Council (1999) identified Pilarcitos Creek as providing EFH for the coho salmon. However, as noted above, this species has not been recorded in the Pilarcitos Creek watershed during recent surveys (CDFW 2013, Hager 2011 as cited in NMFS 2015). As a result, this species is not currently known or expected to occur here, though NMFS may consider the creek to represent EFH based on the Pacific Fishery Management Council's description of EFH (1999).

3.1.4 Federal Migratory Bird Treaty Act

The federal Migratory Bird Treaty Act (MBTA), 16 U.S.C. Section 703, prohibits killing, possessing, or trading of migratory birds except in accordance with regulations prescribed by the Secretary of the Interior. The MBTA

protects whole birds, parts of birds, and bird eggs and nests, and prohibits the possession of all nests of protected bird species whether they are active or inactive. An active nest is defined as having eggs or young, as described in its June 14, 2018 memorandum “Destruction and Relocation of Migratory Bird Nest Contents.” Nest starts (nests that are under construction and do not yet contain eggs) and inactive nests are not protected from destruction.

Project Applicability: All native bird species that occur in the BSA are protected under the MBTA.

3.2 State

3.2.1 Clean Water Act Section 401/Porter-Cologne Water Quality Control Act

The SWRCB works in coordination with the nine RWQCBs to preserve, protect, enhance, and restore water quality. Each RWQCB makes decisions related to water quality for its region, and may approve, with or without conditions, or deny projects that could affect waters of the State. Their authority comes from the CWA and the State’s Porter-Cologne Water Quality Control Act (Porter-Cologne). Porter-Cologne broadly defines waters of the State as “any surface water or groundwater, including saline waters, within the boundaries of the state.” Because Porter-Cologne applies to any water, whereas the CWA applies only to certain waters, California’s jurisdictional reach overlaps and may exceed the boundaries of waters of the U.S. For example, Water Quality Order No. 2004-0004-DWQ states that “shallow” waters of the State include headwaters, wetlands, and riparian areas. Moreover, the San Francisco Bay Region RWQCB’s Assistant Executive Director, has stated that, in practice, the RWQCBs claim jurisdiction over riparian areas. Where riparian habitat is not present, such as may be the case at headwaters, jurisdiction is taken to the top of bank.

On April 2, 2019, the SWRCB adopted the State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State. In these new guidelines, riparian habitats are not explicitly described as waters of the state but instead as important buffer habitats to streams that conform to the State Wetland Definition. The Procedures for Discharges of Dredged or Fill Material to Waters of the State describe riparian habitat buffers as important resources that may be included in required mitigation packages for permits for impacts to waters of the state, as well as areas requiring permit authorization from the RWQCBs for impacts. The RWQCBs may impose mitigation requirements even if the USACE does not, and it should be noted that the State of California’s jurisdiction to regulate its water resources is much broader than that of the federal government. The SWRCB works in coordination with the RWQCBs to preserve, protect, enhance, and restore water quality. Each RWQCB makes decisions related to water quality for its jurisdiction and has the authority to approve, with or without conditions, or deny projects that could affect waters of the state under CWA Section 401 and Porter-Cologne.

Pursuant to the CWA, projects that are regulated by the USACE must also obtain a Section 401 Water Quality Certification permit from the RWQCB. This certification ensures that the proposed project will uphold state water quality standards. Because California’s jurisdiction to regulate its water resources is much broader than that of the federal government, proposed impacts on waters of the State require Water Quality Certification

even if the area occurs outside of USACE jurisdiction. Moreover, the RWQCB may impose mitigation requirements even if the USACE does not. Under the Porter-Cologne, the SWRCB and the nine regional boards also have the responsibility of granting CWA National Pollutant Discharge Elimination System (NPDES) permits and Waste Discharge Requirements for certain point-source and non-point discharges to waters. These regulations limit impacts on aquatic and riparian habitats from a variety of urban sources.

Project Applicability: Field surveys in 2018 and 2020 identified three biotic habitats which may be considered waters of the state and subject to jurisdiction by the RWQCB. Waters of the state include aquatic riverine, perennial freshwater marsh, and portions of riparian woodland, where riparian trees are rooted below the tops of the banks of Pilarcitos Creek or the perennial freshwater marsh impoundment (Figure 5). Although no impacts to Pilarcitos Creek or the perennial freshwater marsh are anticipated, Waste Discharge Requirements from the RWQCB would be needed if the project were to impact any riparian trees rooted below the tops of the banks of these waterbodies.

3.2.2 California Endangered Species Act

The California Endangered Species Act (CESA; California Fish and Game Code, Chapter 1.5, Sections 2050-2116) prohibits the take of any plant or animal listed or proposed for listing as rare (plants only), threatened, or endangered. In accordance with CESA, the CDFW has jurisdiction over state-listed species (Fish and Game Code 2070). The CDFW regulates activities that may result in “take” of individuals (i.e., “hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill”). Habitat degradation or modification is not expressly included in the definition of “take” under the California Fish and Game Code. The CDFW, however, has interpreted “take” to include the “killing of a member of a species which is the proximate result of habitat modification.”

Project Applicability: As noted previously, the Central California Coast coho salmon, which is state listed as endangered, is not expected to occur in the reach of Pilarcitos Creek within the BSA. The state endangered San Francisco garter snake is present within the vicinity of the BSA, and suitable habitat is present in the BSA. Implementation of avoidance and minimization measures will avoid take of these species as defined by CESA.

The Santa Cruz Mountains subpopulation of mountain lion (*Puma concolor*) – recently accepted by the California Fish and Game Commission as a candidate species, warranted for listing under CESA (California Fish and Game Commission 2020) – is known to occur year-round within the surrounding vicinity of the BSA (Santa Cruz Puma Project 2018). Movement records of multiple mountain lions fitted with GPS-enabled wildlife-tracking collars have shown individual lions moving through the surrounding area of the BSA over the past 10 years (Santa Cruz Puma Project 2018). The BSA does not provide suitable breeding and denning habitat due to the level and frequency of human disturbances that occur within or near the BSA. Thus, individual mountain lions are expected to occur within the BSA very infrequently, if at all, and then only as transients as they move across their extensive home ranges. As a result, no take of this species (as defined by CESA) will result from the project.

There are seven state endangered, threatened, or candidate plant species that occur within the project vicinity with the potential to occur in the BSA. They include San Mateo thorn-mint, Crystal Springs fountain thistle, San Mateo woolly sunflower, white-rayed pentachaeta, Hickman's cinquefoil, Marin western flax, and coast yellow leptosiphon (*Leptosiphon croceus*). One state rare plant species protected under the California Native Plant Protection Act, Dudley's lousewort (*Pedicularis dudleyi*), is known to occur in the project region. Of these eight state listed or state rare plants, no species are anticipated to occur within the BSA. As mentioned above, suitable serpentine and or coastal scrub and prairie habitats are not present for the six species that are also federally listed. Coast yellow leptosiphon is found only on coastal bluffs, which are not present in the BSA, and Dudley's lousewort is found in redwood forest and chaparral habitats that are absent from the BSA, while the grasslands on site are too disturbed to be able to support the species. Additionally, no individuals of any state listed or rare species were observed during the field surveys conducted by qualified botanists in June 2018 and 2020. Therefore, state-listed or state-rare plants are considered absent and will not be impacted by the project.

3.2.3 California Environmental Quality Act

CEQA is a state law that requires state and local agencies to document and consider the environmental implications of their actions and to refrain from approving projects with significant environmental effects if there are feasible alternatives or mitigation measures that can substantially lessen or avoid those effects. CEQA requires the full disclosure of the environmental effects of agency actions, such as approval of a general plan update or the projects covered by that plan, on resources such as air quality, water quality, cultural resources, and biological resources. The State Resources Agency promulgated guidelines for implementing CEQA are known as the State CEQA Guidelines.

Section 15380(b) of the State CEQA Guidelines provides that a species not listed on the federal or state lists of protected species may be considered rare if the species can be shown to meet certain specified criteria. These criteria have been modeled after the definitions in FESA and CESA and the section of the California Fish and Game Code dealing with rare or endangered plants and animals. This section was included in the guidelines primarily to deal with situations in which a public agency is reviewing a project that may have a significant effect on a species that has not yet been listed by either the USFWS or CDFW or species that are locally or regionally rare.

The CDFW has produced three lists (amphibians and reptiles, birds, and mammals) of "species of special concern" that serve as "watch lists". Species on these lists are of limited distribution or the extent of their habitats has been reduced substantially, such that threat to their populations may be imminent. Thus, their populations should be monitored. They may receive special attention during environmental review as potential rare species, but do not have specific statutory protection. All potentially rare or sensitive species, or habitats capable of supporting rare species, are considered for environmental review per the CEQA Section 15380(b).

The CNPS, a non-governmental conservation organization, has developed CRPRs for plant species of concern in California in the Inventory of Rare and Endangered Plants (CNPS 2017). The CRPRs include lichens, vascular, and non-vascular plants, and are defined as follows:

- CRPR 1A Plants considered extinct.
- CRPR 1B Plants rare, threatened, or endangered in California and elsewhere.
- CRPR 2A Plants considered extinct in California but more common elsewhere.
- CRPR 2B Plants rare, threatened, or endangered in California but more common elsewhere.
- CRPR 3 Plants about which more information is needed - review list.
- CRPR 4 Plants of limited distribution-watch list.

The CRPRs are further described by the following threat code extensions:

- .1—seriously endangered in California;
- .2—fairly endangered in California;
- .3—not very endangered in California.

Although the CNPS is not a regulatory agency and plants on these lists have no formal regulatory protection, plants appearing as CRPR 1B or 2 are, in general, considered to meet CEQA’s Section 15380 criteria, and adverse effects on these species may be considered significant. Impacts on plants that are listed by the CNPS as CRPR 3 or 4 are also considered during CEQA review, although because these species are typically not as rare as those of CRPR 1B or 2, impacts on them are less frequently considered significant.

Compliance with CEQA Guidelines Section 15065(a) requires consideration of natural communities of special concern, in addition to plant and wildlife species. Vegetation types of “special concern” are tracked in Rarefind (CNDDDB 2021). Further, the CDFW ranks sensitive vegetation alliances based on their global (G) and state (S) rankings analogous to those provided in the CNDDDB. Global rankings (G1–G5) of natural communities reflect the overall condition (rarity and endangerment) of a habitat throughout its range, whereas S rankings reflect the condition of a habitat within California. If an alliance is marked as a G1–G3, all the associations within it would also be of high priority. The CDFW provides the Vegetation Classification and Mapping Program’s currently accepted list of vegetation alliances and associations (CDFG 2010a).

Project Applicability: All potential impacts on biological resources will likely be considered during CEQA review of any proposed project. This Biological Resources Report assesses these impacts to facilitate project planning and CEQA review of a project by the City. Project impacts are discussed in Section 6 below.

3.2.4 California Fish and Game Code

Ephemeral and intermittent streams, rivers, creeks, dry washes, sloughs, blue line streams on USGS maps, and watercourses with subsurface flows fall under CDFW jurisdiction. Canals, aqueducts, irrigation ditches, and other means of water conveyance may also be considered streams if they support aquatic life, riparian vegetation, or stream-dependent terrestrial wildlife. A *stream* is defined in Title 14, California Code of

Regulations Section 1.72, as “a body of water that flows at least periodically or intermittently through a bed or channel having banks and that supports fish and other aquatic life. This includes watercourses having surface or subsurface flow that supports or has supported riparian vegetation.” Using this definition, the CDFW extends its jurisdiction to encompass riparian habitats that function as part of a watercourse. California Fish and Game Code Section 2786 defines *riparian habitat* as “lands which contain habitat which grows close to and which depends upon soil moisture from a nearby freshwater source.” The lateral extent of a stream and associated riparian habitat that would fall under the jurisdiction of the CDFW can be measured in several ways, depending on the particular situation and the type of fish or wildlife at risk. At minimum, the CDFW would claim jurisdiction over a stream’s bed and bank. In areas that lack a vegetated riparian corridor, CDFW jurisdiction would be the same as USACE jurisdiction. Where riparian habitat is present, the outer edge of riparian vegetation is generally used as the line of demarcation between riparian and upland habitats.

Pursuant to California Fish and Game Code Section 1603, the CDFW regulates any project proposed by any person that will “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.” California Fish and Game Code Section 1602 requires an entity to notify the CDFW of any proposed activity that may modify a river, stream, or lake. If the CDFW determines that proposed activities may substantially adversely affect fish and wildlife resources, a Lake and Streambed Alteration Agreement (LSAA) must be prepared. The LSAA sets reasonable conditions necessary to protect fish and wildlife, and must comply with CEQA. The applicant may then proceed with the activity in accordance with the final LSAA.

Specific sections of the California Fish and Game Code describe regulations pertaining to protection of certain wildlife species. For example, Code Section 2000 prohibits take of any bird, mammal, fish, reptile, or amphibian except as provided by other sections of the code.

The California Fish and Game Code Sections 3503, 3513, and 3800 (and other sections and subsections) protect native birds, including their nests and eggs, from all forms of take. Disturbance that causes nest abandonment and/or loss of reproductive effort is considered “take” by the CDFW. Raptors (i.e., eagles, hawks, and owls) and their nests are specifically protected in California under Code Section 3503.5. Section 3503.5 states that it is “unlawful to take, possess, or destroy any birds in the order 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.”

Bats and other non-game mammals are protected by California Fish and Game Code Section 4150, which states that all non-game mammals or parts thereof may not be taken or possessed except as provided otherwise in the code or in accordance with regulations adopted by the commission. Activities resulting in mortality of non-game mammals (e.g., destruction of an occupied nonbreeding bat roost, resulting in the death of bats), or disturbance that causes the loss of a maternity colony of bats (resulting in the death of young), may be considered “take” by the CDFW.

Project Applicability: Field surveys in 2018 and 2020 identified two biotic habitats which may be subject to CDFW jurisdiction under Sections 1600-1603 of the California Fish and Game Code. The habitats include the aquatic riverine habitat within the bed of Pilarcitos Creek, and riparian woodland adjacent to Pilarcitos Creek (Figure 5). Most native bird, mammal, and other wildlife species that occur in the BSA and in the immediate vicinity are protected by the California Fish and Game Code.

3.2.5 State Requirements to Control Construction-Phase and Post-construction Water Quality Impacts

3.2.5.1 Construction Phase

Projects in California must comply with state requirements to control the discharge of storm water pollutants under the National Pollutant Discharge Elimination System (NPDES) Statewide Storm Water Permit (SWRCB Order No. 2014-0077-DWQ, as amended) and the Statewide Construction General Permit (SWRCB Order No. 2009-0009-DWQ, as amended). Prior to the start of construction/demolition, a Notice of Intent must be filed with the SWRCB describing the project. A Storm Water Management Plan (SWMP) must be developed and maintained during the project and must include the use of best management practices (BMPs) to protect water quality until the site is stabilized.

Standard permit conditions under these permits require that the applicant utilize various measures, including on-site sediment control BMPs, damp street sweeping, temporary cover of disturbed land surfaces to control erosion during construction, and utilization of stabilized construction entrances and/or wash racks. Additionally, both the Construction General Permit and Statewide Storm Water Permit do not extend coverage to projects if stormwater discharge-related activities are likely to jeopardize the continued existence, or result in take of any federally listed endangered or threatened species.

Project Applicability: The project will comply with the NPDES Statewide Storm Water Permit and Statewide Construction Permit; thus, construction-phase activities would not result in detrimental water quality effects on biological/regulated resources.

3.2.5.2 Post-construction Phase

In many Bay Area counties, including San Mateo County, projects must also comply with the San Francisco Bay RWQCB's Municipal Regional Stormwater NPDES Permit (Water Board Order No. R2-2009-0074, as amended). These policies, which are in line with the Statewide Storm Water Permit measures, require that all projects implement BMPs and incorporate Low Impact Development practices into project design that will prevent stormwater runoff pollution, promote infiltration, and hold/slow down the volume of water coming from a site. In order to meet these permit and policy requirements, projects must incorporate features such as increased pervious surfaces, installing tree planters, grassy swales, and bioretention or detention basins.

Project Applicability: The project will comply with the Municipal Regional Stormwater NPDES Permit and the NPDES Statewide Storm Water Permit requirements. Therefore, post-construction activities would not result in detrimental water quality effects on biological/regulated resources.

3.2.6 California Coastal Act

The California Coastal Act of 1976, administered by the California Coastal Commission, was created to provide long-term protection of California's 1,100-mile coastline for the benefit of future generations. Integral to the Coastal Act are its policies which provide for protection and expansion of public access to the shoreline and recreational opportunities and resources; protection, enhancement and restoration of environmentally sensitive habitats, including intertidal and nearshore waters, wetlands, bays, estuaries, riparian habitat, certain woodlands and grasslands, streams, lakes and habitat for rare or endangered plants or animals; protection of productive agricultural lands, commercial fisheries and archaeological resources; protection of the scenic beauty of coastal landscapes and seascapes; practical establishment of urban-rural boundaries and directing new housing and other development into areas with adequate services to avoid wasteful urban sprawl and leapfrog development; environmentally sound expansion of existing industrial ports and electricity-generating power plants, as well as for the siting of coastal dependent industrial uses; and protection against loss of life and property from coastal hazards.

The following are definitions given for specific ecological features that fall within the purview of the California Coastal Act: §30121 defines a wetland as: lands within the coastal zone which may be covered periodically or permanently with shallow water and include saltwater marshes, freshwater marshes, open or closed brackish water marshes, swamps, mudflats, or fens; Commission Regulation §13577(b) elaborates: wetlands are lands where the water table is at near, or above the land surface long enough to promote the formation of hydric soils or to support the growth of hydrophytes, and shall also include those types of wetlands where vegetation is lacking and soil is poorly developed or absent as a result of frequent or drastic fluctuation of surface water levels, wave action, water flow, turbidity or high concentrations of salt or other substance in the substrate. Such wetlands can be recognized by the presence of surface water or saturated substrate at some time during each year and their location within, or adjacent to, vegetated wetlands or deep-water habitats...; §30107.5 defines an Environmentally Sensitive Habitat Area as any area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and which could be easily disturbed or degraded by human activities and developments.

Under the Coastal Act, local governments that lie in whole or in part within the Coastal Zone are required to prepare Local Coastal Programs (LCPs; Cal. Pub. Res. Code §30500). LCPs identify the location, type, densities, and other ground rules for future development in the coastal zone. Each LCP includes a land-use plan and its implementing measures. The Coastal Commission helps shape each LCP and then formally reviews them for consistency with Coastal Act standards. Once finalized, coastal permitting authority is transferred to the local government, with the exception of proposed development on the immediate shoreline, which stays with the Commission. In developing an LCP, a local government may choose to recognize specific botanical or wildlife resources as locally rare and that therefore garner protection.

Project Applicability: The entire BSA is within the Coastal Zone and subject to the City of Half Moon Bay Local Coastal Program. Projects approved by the City of Half Moon Bay under its LCP within Coastal Commission Appeals Jurisdiction are appealable to the Coastal Commission. The site is within the CCC Appeals Jurisdiction. See below for more details.

3.3 Local

3.3.1 City of Half Moon Bay Local Coastal Program Land Use Plan

Under the California Coastal Act, the California Coastal Commission (CCC) regulates development in the coastal zone, including land and water use. Any activities within the coastal zone that affect aquatic resources, including wetlands, require a coastal development permit from either the CCC or a certified Local Coastal Program (LCP; Division 20 of the Public Resources Code). The CCC is responsible for protecting coastal resources and assessing potential impacts on wetlands and other waters subject to regulation under the California Coastal Act (Sections 30330-30344). The BSA is within the jurisdiction of Half Moon Bay's LCP. The City recently updated its LCP (City of Half Moon Bay 2020); it was adopted by the City Council in October 2020 and certified by the CCC in April 2021. Projects approved by the city of Half Moon Bay under its LCP within the Coastal Commission Appeals Jurisdiction are appealable to the Coastal Commission. The site is within the CCC Appeals Jurisdiction.

City of Half Moon Bay Environmentally Sensitive Habitat Areas (ESHAs). The City of Half Moon Bay LCP Land Use Plan (2020) includes provisions for protection of Environmentally Sensitive Habitat Areas (ESHAs). More specifically, The Half Moon Bay LCP prohibits any land use or development that would have significant adverse impact on sensitive habitat areas. Development in areas adjacent to sensitive habitats shall be sited and designated to prevent impacts that could significantly degrade the sensitive habitats. Section 18.38 of the Half Moon Bay Municipal Code (City of Half Moon Bay 2021) defines sensitive habitats as any area in which plant or animal life or their habitats are either rare or especially valuable and any area that meets one of the following criteria:

- Habitats containing or supporting rare and endangered species as defined by the State Fish and Game Commission.
- All perennial and intermittent streams and their tributaries.
- Riparian areas.
- Wetlands, coastal tidelands and marshes, lakes and ponds and adjacent shore habitats.
- Coastal and offshore areas containing breeding or nesting sites and coastal areas used by migratory and resident water-associated birds for resting areas and feeding, including sea cliff faces.
- Areas used for scientific study and research concerning fish and wildlife, and existing game or wildlife refuges and reserves.

- Sand dunes.
- Marine habitats, including rocky intertidal zones.
- Sea cliffs.

Wetlands are broadly defined in Section 30121 of the California Coastal Act: “Lands within the coastal zone which may be covered periodically or permanently with shallow water and include saltwater marshes, freshwater marshes, open or closed brackish water marshes, swamps, mudflats, or fens.”

The Coastal Commission provides further specificity in their wetlands definitions to guide the process of wetland delineation. The CCC’s regulations (California Code of Regulations Title 14 (14 CCR)) establish a one parameter definition that only requires evidence of a single parameter (hydrology, hydric soils, or hydrophytic vegetation) to establish wetland conditions:

“Wetlands shall be defined as land where the water table is at, near, or above the land surface long enough to promote the formation of hydric soils or to support the growth of hydrophytes, and shall also include those types of wetlands where vegetation is lacking and soil is poorly developed or absent as a result of frequent or drastic fluctuations of surface water levels, wave action, water flow, turbidity or high concentrations of salt or other substance in the substrate. Such wetlands can be recognized by the presence of surface water or saturated substrate at some time during each year and their location within, or adjacent to, vegetated wetlands or deep-water habitats.”

In contrast to the single-parameter definition that requires evidence of only one of three wetland indicators (hydrophytic vegetation, hydric soils, or saturated substrate), the USACE uses a three parameter definition that requires evidence of all three wetland indicators in order to classify an area as wetland. As a result, more areas qualify as wetlands under the Coastal Act than under the federal Clean Water Act. The LCP is consistent with the Coastal Act, and therefore uses the single-parameter definition.

The City of Half Moon Bay LCP defines "Riparian Area and Corridor" as an association of primarily native riparian plant and animal species within or adjacent to a watercourse. The boundary of a riparian corridor is defined by the limit of riparian vegetation or top of bank, or other confining topography, whichever is greater. The limit of riparian vegetation is determined by the drip line of canopy trees or the limit of riparian shrubs or herbaceous vegetation. This vegetation is generally interconnected by surface or subsurface flow within the watercourse. Within these boundaries, the intent of the LCP is to protect the ecosystem and any wildlife species it supports as whole, including the understory and emergent vegetation, the soil microbiology, and the water itself.

The LCP includes many measures to protect riparian habitat in Chapter 6, and defines a buffer of 50 feet outward from the limit of riparian vegetation along perennial streams or 100 feet from top of bank, whichever is greater (6-17 (a)) (Figure 5).

Project Applicability: The BSA is within the jurisdiction of the Half Moon Bay LCP and within the Coastal Zone. In accordance with the Coastal Act, many different types of projects including subdivisions, road extensions, grading, design review, and conditional use permits may require a Coastal Development Permit (CDP) to ensure that development within the Coastal Zone is consistent with all Local Coastal Program policies and the public access and public recreation policies of the Coastal Act. Field surveys in 2018 and 2020 identified four potential ESHAs which may be subject to jurisdiction under the Half Moon Bay LCP. These potential ESHAs include a perennial aquatic riverine habitat in the bed of Pilarcitos Creek, a perennial freshwater marsh, riparian woodland associated with Pilarcitos Creek, and riparian woodland (based on species composition, not due to being adjacent to a stream) adjacent to the perennial freshwater marsh impoundment.

3.3.2 Half Moon Bay Protected Trees

The City of Half Moon Municipal Code contains regulations protecting heritage trees. According to Chapter 7.40 a “heritage tree” means:

- A tree located on public or private property, exclusive of eucalyptus, with a trunk diameter of twelve inches or more, or a circumference of at least thirty-eight inches measured at forty-eight inches above ground level.
- A tree or stand of trees so designated by resolution of the city council based on its finding of special historical, environmental or aesthetic value, including a resolution adopted under former Chapter 12.16 of the City of Half Moon Bay Zoning Code.
- A tree located within the public right-of-way along the entire length of Main Street or along Kelly Avenue between San Benito Street and Highway 1. (Ord. C-2013-02 §1, 2013; Ord. C-2-12 §5, 2012; Ord. C-10-11 §1(part), 2011)

The removal of one or more heritage trees or major pruning as described in Section 7.40.040 requires a permit pursuant to procedures established by the city manager and requires the payment of a fee established by the city council. Additionally, the removal of a heritage tree pursuant to a permit issued under this chapter shall be replaced on a one-for-one basis with a minimum size twenty-four-inch-box specimen tree of a species and in a location approved by the city manager or his or her designee (Ord. C-10-11 §1(part), 2011).

Project Applicability: The BSA potentially includes heritage trees. Species include planted Monterey cypress (*Hesperocyparis macrocarpa*) and planted Monterey pine (*Pinus radiata*), mainly along the western edge of the BSA. Over 100 trees are present on the site; determining the heritage status of individual trees based on trunk size was not within the scope of this report. During detailed design of the project, removal of trees protected by the City heritage tree ordinance will be avoided and minimized to the extent feasible. Where removal of trees cannot be avoided, the project proponent will comply with the standards of the City heritage tree ordinance, including the planting of replacement trees where feasible and approval from the City Manager.

Section 4. Environmental Setting

4.1 General Biological Study Area Description

The approximately 21-acre (ac) project site is the site of a former plant nursery. A man-made impoundment is located in the northwest corner of the site. Additionally, there is infrastructure present from former nursery operations, including several unused dilapidated buildings, areas with black ground plastic (adjacent to the riparian woodland along Pilarcitos Creek), several vaulted culverts, concrete-lined ditches, and irrigation pumps and pipes. During the June 2018 site visit, a large portion of the grassland had been recently mowed. Also, sections of the grassland were covered in wood chips. As such, the ground cloths and mulch inhibit vegetation growth. The BSA is bounded on the west by high-density development associated with the City of Half Moon Bay; on the north by SR 92, a heavily used road between Half Moon Bay and Interstate 280; on the east, between SR 92 and Pilarcitos Creek, and on both sides of Pilarcitos Creek, by various small agricultural parcels with associated infrastructure and development; and on the south by agricultural parcels along Pilarcitos Creek that opens to rural land, with the Miramontes Ridge Open Space Reserve to the southeast.

The climate at the BSA is coastal Mediterranean, with most rain falling in the winter and spring. Fog and cool temperatures are common in the summer. The mean annual precipitation for the Half Moon Bay area is 28.98 inches with the majority of the rainfall occurring between the months of November and April. (WorldClimate.com 2021). Elevations within the BSA range from approximately 60 ft) to 110 ft above sea level (WGS84) (Google, Inc. 2021).

4.2 Hydrology

Pilarcitos Creek, a 13.5-mile perennial stream that flows from the western slopes of the Santa Cruz Mountains through Pilarcitos Canyon and discharges into the Pacific Ocean, meanders through the southern edge of the BSA. The creek drains approximately 30 square miles and has numerous tributaries. The BSA is approximately 1.7 mi upstream from the mouth of the creek.

A manmade impoundment approximately 200 ft by 110 ft is located in the northwest corner of the BSA. The impoundment is a raised earthen embankment design and sits at an elevation of 114 ft (WGS84). Water was previously pumped into this impoundment from Pilarcitos Creek to be used by the nursery for its operations (H. T. Harvey & Associates and RMC 2010). The pump appears to be currently inactive. However, the impoundment continues to hold water and extensive emergent vegetation and is classified as perennial freshwater marsh habitat.

4.3 Soils

Based on a review of available soil survey maps for the area including those by the U.S. Department of Agriculture’s Natural Resources Conservation Service (NRCS), the BSA is generally comprised of coarse sandy loam soils adjacent to Pilarcitos Creek, such as the Farallone soil series, and grade to finer textured clay loams, such as the Tierra soil series, upslope to SR 92 (NRCS 2021a). Soils across the BSA are generally greater than 60 inches in depth with the exception of areas in the northeastern portion of the site containing Gazos (GoF3 and Gv) soils, which are less than 30 inches to a root-restrictive layer. The Farallone loam, nearly level, Gullied land, Gullied land (Gazos-Lobitos soil material), and Tierra clay loam, moderately steep, eroded soil series (totaling 12.3 acres) are listed as hydric in San Mateo County on the National Hydric Soils List (NRCS 2021b). There are eight major soil series within the BSA and are summarized in Table 1 below:

Table 1. Soils within the Project Site

Soil Series	Acreage	Hydric
Farallone loam, nearly level (FaA)	8.8	Yes
Tierra loam, steep, severely eroded (TeE3)	3.1	No
Farallone coarse sandy loam, moderately steep, eroded (FcD2)	4.5	No
Gazos and Lobitos soils, steep and very steep, severely eroded(GoF3)	1.3	No
Gullied land (alluvial soil material; Gu)	1.7	Yes
Tierra loam, sloping, eroded (TeC2)	1.1	Yes
Gullied land (Gazos-Lobitos soil material; Gv)	0.7	Yes
Tierra clay loam, moderately steep, eroded (TcD2)	0.1	No

4.4 Biotic Habitats

Reconnaissance-level surveys identified six habitat types/land uses in the BSA/project site (Figure 5): ruderal grassland, developed/landscaped, riparian woodland, perennial freshwater marsh, aquatic riverine, and non-native woodland. These habitat types are depicted in Figure 5, and the acreages of each habitat type within the larger BSA and in the project boundaries are provided in Table 2. These habitats are described in detail below, and plant species observed during the reconnaissance survey are listed in Appendix A.

Table 2. Habitat Types/Land Uses in the Biological Study Area and Project Site

Habitat Type	BSA	Project Site
Ruderal Grassland	17.40	14.27
Developed/Landscaped	17.62	3.44
Riparian Woodland	6.92	2.61
Non-native Woodland	1.62	0.00
Aquatic Riverine	0.48	0.24
Perennial Freshwater Marsh	0.38	0.38

4.4.1 California Annual Grassland

Vegetation. Ruderal (i.e., disturbed) annual grassland habitat occupies most of the BSA (Photo 1). At the time of the reconnaissance survey, this habitat was dominated by non-native grasses and forbs such as wild oat (*Avena* sp.), Italian rye grass (*Festuca perennis*), riggut brome (*Bromus diandrus*), Italian thistle (*Carduus pycnocephalus*), bristly ox-tongue (*Helminthotheca echioides*) and Chile tarweed (*Madia sativa*). Of these, Italian rye-grass and bristly ox-tongue are technically scored as facultative hydrophytes (Lichvar et al. 2016),



Photo 1. Ruderal grassland occurs in most of the BSA.

or plants that sometimes occur in wetlands and sometimes occur in uplands, and both can potentially indicate moist conditions. However, Italian rye-grass often dominates upland areas as well, especially along the coast where frequent fog occurs, without indicating wetlands, and bristly ox-tongue is an invasive weed that can simply indicate disturbance and infestation. Additionally, there were scattered small patches of other facultative hydrophytic vegetation, including curly dock (*Rumex crispus*), poison hemlock (*Conium maculatum*), and bird's foot trefoil (*Lotus corniculatus*), all occurring in upland habitat positions and intermixed with upland grassland species. Similarly, scattered arroyo willow (*Salix lasiolepis*) and red alder (*Alnus rubra*) occur in the grassland in upland areas, and likely were able to establish due to irrigation, as no indicators of hydric soils or wetland hydrology occur in these areas. Many of the non-native species present on site are ranked as moderately invasive by the California Invasive Plant Council (Cal-IPC 2021). For example, Italian thistle has substantial and apparent, but not severe ecological impacts on physical processes, plant and animal communities, and vegetation structure (Cal-IPC 2021).

Wildlife. Wildlife use of California annual grasslands in the BSA is limited by frequent human disturbance, an abundance of non-native and invasive species, and isolation of the grassland habitat remnants from more extensive grasslands. As a result, wildlife species associated with more extensive grasslands, such as the grasshopper sparrow (*Ammodramus savannarum*) and western meadowlark (*Sturnella neglecta*), are absent from the small patches of grassland in the BSA. Most of the bird species using this habitat during the breeding season most likely nest in nearby landscaped, freshwater marsh, or riparian areas, using the California annual grassland only for foraging. Such species include the mourning dove (*Zenaidura macroura*), lesser goldfinch (*Spinus psaltria*), dark-eyed junco (*Junco hyemalis*), American crow (*Corvus brachyrhynchos*), and Brewer's blackbird (*Euphagus cyanocephalus*). Similarly, a few species nesting on nearby buildings, such as the barn swallow (*Hirundo rustica*), rock pigeon (*Columba livia*), black phoebe (*Sayornis nigricans*), and European starling (*Sturnus vulgaris*), also forage on or over the California annual grassland habitat. Several other species of birds use the California annual grassland during the nonbreeding season. These species, which include the golden-crowned sparrow (*Zonotrichia*

atricapilla), savannah sparrow (*Passerculus sandwichensis*), and white-crowned sparrow (*Zonotrichia leucophrys*), forage on the ground or in herbaceous vegetation, primarily for seeds.

Few species of reptiles and amphibians occur in the California annual grassland in the BSA due to its disturbed nature and low habitat heterogeneity. Nevertheless, reptiles such as the western fence lizard (*Sceloporus occidentalis*) and gopher snake (*Pituophis melanoleucus*) occur in this habitat type, and amphibians such as the Pacific chorus frog (*Hyla regilla*) and western toad (*Anaxyrus boreas*), which might breed in the perennial freshwater marsh in the BSA, might also forage here. Small mammals expected to be present include the native western harvest mouse (*Reithrodontomys megalotis*) and nonnative house mouse (*Mus musculus*), Norway rat (*Rattus norvegicus*), and black rat (*Rattus rattus*). Small burrowing mammals, such as the Botta's pocket gopher (*Thomomys bottae*) and California ground squirrel (*Spermophilus beecheyi*), are likely present, and larger mammals, such as the striped skunk (*Mephitis mephitis*), Virginia opossum (*Didelphis virginiana*), raccoon (*Procyon lotor*), and black-tailed jackrabbit (*Lepus californicus*) are also likely to occur here.

4.4.2 Developed/Landscaped

Vegetation. Developed/landscaped habitat includes areas where permanent structures and/or pavement have been placed along with planted landscaping. Such landscaping includes native Monterey pine and Monterey cypress trees. However, these trees have been installed as part of a landscape plan and do not naturally occur on site. The developed/landscaped habitat type occurs along the northeastern edge of the BSA and consists of several buildings, Conex storage containers, and dirt parking areas. The buildings are in active use by the City of Half Moon Bay (Photo 2). Additionally, there are several unused dilapidated structures, including unused concrete channels and culverts present within the grassland and adjacent to the riparian habitat. The landscaping occurs along the west, east, and north perimeters of the BSA and is dominated by up to 200 planted Monterey cypress and Monterey pine trees.



Photo 2. Developed/landscaped habitat in the northeast corner of the BSA.

The buildings are in active use by the City of Half Moon Bay (Photo 2). Additionally, there are several unused dilapidated structures, including unused concrete channels and culverts present within the grassland and adjacent to the riparian habitat. The landscaping occurs along the west, east, and north perimeters of the BSA and is dominated by up to 200 planted Monterey cypress and Monterey pine trees.

Wildlife. The wildlife most often associated with developed/landscaped areas are those that are tolerant of periodic human disturbances, including introduced species such as the European starling, rock pigeon, house mouse, Norway rat, and black rat. Numerous common, native species are also able to utilize these habitats, especially the landscaped areas, including the western fence lizard, striped skunk, and a variety of birds, such as the American crow, Anna's hummingbird (*Calypte anna*), California towhee (*Melospiza crissalis*), bushtit (*Psaltriparus minimus*), and California scrub-jay (*Aphelocoma californica*). In addition, unused dilapidated structures present within the grassland and adjacent to the riparian habitat, may be attractive to other nesting and/or roosting bird species in the area, such as the black phoebe. Further, the several Monterey cypress and Monterey pine trees

along the around the west, east, and north perimeters of the BSA may provide suitable nesting habitat for raptors, such as red-tailed hawks (*Buteo jamaicensis*). An examination of trees and structures in the BSA did not detect any large cavities that might provide suitable bat roosting habitat. Therefore, large roosting or maternity colonies of bats are not expected to occur in the BSA.

4.4.3 Riparian Woodland

Vegetation. Riparian woodland habitat is found along Pilarcitos Creek and around the perennial freshwater marsh. Trees observed in the riparian woodland habitat along Pilarcitos Creek include arroyo willow, red willow (*Salix laevigata*), red alder, and blue gum (*Euclayptus globulus*). The understory is an impenetrable thicket of Himalayan blackberry (*Rubus armeniacus*), cape ivy (*Delairea odorata*), poison hemlock, common horsetail (*Equisetum arvense*), French broom (*Genista monspessulana*), hoary nettle (*Urtica dioica* ssp. *holosericea*), bristly ox-tongue, pampass grass (*Cortaderia jubata*), and Italian rye grass (Photo 3).



Photo 3. Riparian habitat along Pilarcitos Creek (in the background), which runs along the entire southern edge of the BSA.

The dominant tree in the riparian woodland surrounding the perennial freshwater marsh is arroyo willow (*Salix lasiolepis*). While this area is not adjacent to a flowing watercourse or associated with a bed and banks drainage, the species composition is similar to nearby riparian woodland along Pilarcitos Creek and most resembles a riparian woodland habitat as described in the City's LCP (2020). Species observed in the understory include poison hemlock, Italian rye grass, Himalayan blackberry, pampass grass, Italian thistle, and common velvetgrass (*Holcus lanatus*).

Many of these non-native forb species are ranked as highly or moderately invasive by the California Invasive Plant Council (Cal-IPC 2021). For example, cape ivy, pampas grass, French broom, and Himalayan blackberry are classified as highly invasive and have severe ecological impacts on physical processes, plant and animal communities, and vegetation structure. Their reproductive biology and other attributes are conducive to moderate to high rates of dispersal and establishment. Species such as poison hemlock, Italian thistle, and common velvetgrass are classified as moderately invasive and have substantial and apparent, but not severe ecological impacts on physical processes, plant and animal communities, and vegetation structure (Cal-IPC 2021).

Wildlife. The riparian woodland provides suitable nesting habitat for a variety of common, resident bird species such as the California scrub-jay, American robin (*Turdus migratorius*), American crow, lesser goldfinch, and bushtit. Numerous species of migratory birds also use this riparian woodland. These include species such as

the black-headed grosbeak (*Pheucticus melanocephalus*), Wilson’s warbler (*Cardellina pusilla*), and Swainson’s thrush (*Catharus ustulatus*) that breed in this habitat but migrate south for winter, and the ruby-crowned kinglet (*Regulus calendula*), Townsend’s warbler (*Setophaga townsendi*), and hermit thrush (*Catharus guttatus*) that occur here only in winter. The red-shouldered hawk (*Buteo lineatus*) and Cooper’s hawk (*Accipiter cooperii*) may use larger trees along the riparian woodland corridors for nesting. However, no old raptor nests were detected within the riparian woodland habitat during the reconnaissance survey.

Arboreal salamanders (*Aneides lugubris*), western fence lizards, and western skinks (*Eumeces skiltonianus*) are expected to occur in riparian habitat in the BSA. Additional wildlife species that are common within riparian woodland areas in urban settings include the striped skunk and raccoon, and the non-native Virginia opossum and eastern gray squirrel (*Sciurus carolinensis*), all of which may use the trees for roosting, foraging, and nesting opportunities. Individual bats may be attracted to riparian areas to roost in trees. However, examination of the trees along the banks of Pilarcitos Creek and in the BSA did not detect any large cavities that might provide suitable habitat for a large roosting or maternity colony of bats.

4.4.4 Perennial Freshwater Marsh

Vegetation. The perennial freshwater marsh occurs within an impoundment in the northwest corner of the BSA. The impoundment was constructed between 1987 and 1991 (Google Inc. 2021; NETR 2021), used for irrigation purposes, and was filled by an on-site water pump (Photo 4). At the time of the site visit, the water pump appeared non-functional and is not likely used to currently pump water into the marsh. Thus, the hydrology that feeds the marsh is likely a combination of a groundwater table and surface runoff. The marsh was ponded during the site visits at a depth of approximately 2 ft, and was dominated by common cattail (*Typha latifolia*). Based on the berms enclosing the impoundment, maximum ponding depth is approximately 4 ft, though without water being pumped into the basin it is likely that it does not pond at that depth currently. Other species observed include duckweed (*Lemna* sp.), rabbitsfoot grass (*Polypogon monspeliensis*), and tall flatsedge (*Cyperus eragrostis*). The marsh is surrounded by riparian woodland (see Section 4.4.3 above), and is fenced off from the rest of the parcel.



Photo 4. Dense cattail-dominated perennial freshwater marsh in the west side of the BSA. Riparian habitat surrounds the marsh.

Wildlife. Normally, the presence of a perennial freshwater marsh on a site would provide habitat for a diverse suite of wetland-associated wildlife species. However, the relatively small size, scarcity of open water, and dynamic ponding depth of the perennial freshwater marsh in the BSA preclude many wetland and aquatic

wildlife species from using these features. Waterbirds such as ducks, gulls, and terns are not expected to occur in this freshwater perennial marsh. Similarly, passerine birds associated with more extensive wetlands, such as the marsh wren (*Cistothorus palustris*), are not expected to nest here, although the San Francisco common yellowthroat (*Geothlypis trichas sinuosa*) could nest in this marsh. Amphibians such as the Pacific chorus frog, western toad, and the federally threatened California red-legged frog may breed here, and the federally and state endangered San Francisco garter snake may forage here. Terrestrial species that occur in adjacent habitats, such as house finches (*Haemorhous mexicanus*), bushtits, yellow-rumped warblers (*Setophaga coronata*), black phoebes, and sparrows, will forage occasionally in the freshwater wetland vegetation.

4.4.5 Aquatic Riverine

Vegetation. Within the BSA, Pilarcitos Creek is a perennial freshwater stream with a connection to groundwater. It flows overland through the southern portion of the BSA (Photo 5). It originates approximately 12 mi northeast of the BSA on the eastern flanks of Montara Mountain in the Santa Cruz Mountains, then flows south through Pilarcitos Canyon before turning westward to enter the BSA. The creek exits the BSA near the southwestern boundary and discharges into the Pacific Ocean approximately 1.7 mi downstream of the BSA. Within the BSA, Pilarcitos Creek flows through dense riparian woodland and provides unvegetated aquatic habitat. Pilarcitos Creek has been identified as a USGS blue-line stream course as well as a USFWS palustrine resource, and as of June of 2018 and 2019, was flowing up to 10 inches (in) deep within a 6-ft wide channel.

Wildlife. The aquatic habitat within Pilarcitos Creek supports native fish species such as the California roach (*Hesperoleucus symmetricus*), hardhead (*Mylopharodon conocephalus*), and threespine stickleback (*Gasterosteus aculeatus*). In addition, the federally threatened Central California Coast steelhead and California red-legged frog, and federally and state endangered San Francisco garter snake have been documented within Pilarcitos Creek (CDFW 2013, CNDDDB 2021). Pacific chorus frogs, California newts (*Taricha torosa*), western pond turtles (*Actinemys marmorata*), non-native bullfrogs (*Lithobates catesbeianus*) and crayfish (*Pacifastacus leniusculus*) may be present in the creek, and birds such as the green heron (*Butorides virescens*), and belted kingfisher (*Ceryle alcyon*) likely forage in the creek. Bats forage aerially on insects over Pilarcitos Creek. During the reconnaissance survey, two unidentified species of bat were observed foraging amongst the trees along the edge of the channel, just upstream from the BSA.



Photo 5. Pilarcitos Creek, which runs through the BSA along the southern boundary.

Section 5. Special-Status Species and Sensitive Habitats

CEQA requires assessment of the effects of a project on species that are protected by state, federal, or local governments as “threatened, rare, or endangered”; such species are typically described as “special-status species”. For the purpose of the environmental review of the project, special-status species have been defined as described below. Impacts on these species are regulated by some of the federal, state, and local laws and ordinances described in Section 3.0 above.

For purposes of this analysis, “special-status” plants are considered plant species that are:

- Listed under FESA as threatened, endangered, proposed threatened, proposed endangered, or a candidate species.
- Listed under CESA as threatened, endangered, rare, or a candidate species.
- Listed by the CNPS as CRPR 1A, 1B, 2, 3, or 4.

For purposes of this analysis, “special-status” animals are considered animal species that are:

- Listed under FESA as threatened, endangered, proposed threatened, proposed endangered, or a candidate species.
- Listed under CESA as threatened, endangered, or a candidate threatened or endangered species.
- Designated by the CDFW as a California species of special concern.
- Listed in the California Fish and Game Code as fully protected species (fully protected birds are provided in Section 3511, mammals in Section 4700, reptiles and amphibians in Section 5050, and fish in Section 5515).

Information concerning threatened, endangered, and other special-status species that potentially occur in the BSA was collected from several sources and reviewed by H. T. Harvey & Associates biologists as described in Section 2.1 above. Figure 3 depicts CNDDDB records of special-status plant species in the general vicinity of the BSA and Figure 4 depicts CNDDDB records of special-status animal species. These generalized maps show areas where special-status species are known to occur or have occurred historically.

5.1 Special-Status Plant Species

A list of 73 special-status plant species thought to have some potential for occurrence within the BSA was compiled using the CNPS rare plant inventory (CNPS 2021) and CNDDDB records (CNDDDB 2021). Analysis of the documented habitat requirements and occurrence records of these plants, and our plant ecologist’s knowledge of sensitive species considered, allowed us to reject 72 of the 73 species as not having a reasonable potential to occur within the BSA for at least one of the following reasons: (1) lack of suitable habitat types; (2) absence of specific microhabitat or edaphic requirements, such as serpentine soils; (3) the species is presumed

extirpated or is not expected to occur in the Project vicinity due to range; and/or (4) the site is too disturbed to be expected to support the species. As the BSA is largely composed of historically manipulated agricultural land, as well as areas with little habitat value (developed land cover), the BSA does not have the capacity to support most special-status plants. Additionally, large sections of the BSA appear to be covered with wood chips as well as regularly mowed. The CNDDDB shows records for the CNPS-ranked species coastal marsh milk-vetch (*Astragalus pycnostachyus* var. *pycnostachyus*), Kellogg's horkelia (*Horkelia uneate* subsp. *sericea*), Choris's popcorn-flower (*Plagiobothrys chorisianus* var. *chorisianus*), Kings Mountain manzanita (*Arctostaphylos regismontana*), Anderson's manzanita (*Arctostaphylos andersonii*), Franciscan onion (*Allium peninsulare* var. *franciscanum*), western leatherwood (*Dirca occidentalis*), and Crystal Springs lessingia (*Lessingia arachnoidea*) occurring within 5 miles of the BSA. However, no suitable salt marsh habitat (coastal marsh milk-vetch), coastal prairie habitat (Choris's popcorn-flower), scrub or chaparral habitat or sandy soils (manzanita species and Kellogg's horkelia), or serpentine soils (Franciscan onion, Crystal Springs lessingia) occur within the BSA, and the site is too disturbed to support western leatherwood, which was also not observed on site during reconnaissance surveys. Therefore, despite nearby records, all of these species are considered absent from the BSA.

Appendix B lists these plants along with the basis for the determination of absence. Suitable habitat and edaphic requirements were determined to be present in the BSA for one plant species, Harlequin lotus (*Hosackia gracilis*), which is discussed in detail below.

Harlequin lotus, CNPS List: 4.2. Harlequin lotus is a perennial rhizomatous herb in the legume (Fabaceae) family that occurs in wetlands, wet roadside ditches, and mesic areas in many plant communities (CNPS 2021); therefore, this species could occur within the perennial freshwater marsh and surrounding riparian woodland, the riparian woodland along Pilarcitos Creek, the ephemeral ditch, and possibly mesic areas within the California annual grassland. However, it was not observed during the field-level reconnaissance survey conducted in June 2018 at the height of its bloom period. It has a CRPR of 4.2 (i.e., watch list for plants of limited distribution or are infrequent throughout a broader area in California; moderately threatened in California). It is known mainly from coastal areas as far north as Del Norte County and as far south as San Luis Obispo County. It is threatened by development, grazing, feral pigs, habitat alteration, and competition. This species is thought to be a larval food plant of the federally endangered lotis blue butterfly (*Lycæides argyrognomon* ssp. *lotis*). Within San Mateo County, recent recorded occurrences are from coastal prairie and coastal scrub habitats within Año Nuevo State Park as well as McNee Ranch State Park., near Montara. The blooming period for this species extends from March through July. Although this species was not observed during its blooming period during reconnaissance surveys, the dense riparian woodland provides at least marginally suitable habitat on the lower banks. A focused survey would be necessary to definitively confirm presence of absence, though such a survey is necessary only if an LCP-compatible use is proposed within the riparian corridor.

5.2 Special-Status Animal Species

The legal status and likelihood of occurrence in the BSA of special-status animal species known to occur, or potentially occurring, in the region of the BSA are presented in Appendix C. Most of the special-status species

listed in Appendix C are not expected to occur in the BSA because it lacks suitable habitat, is outside the known range of the species, and/or is isolated from the nearest known extant populations by development or otherwise unsuitable habitat. Animal species not expected to occur in the BSA for these reasons include the Bay checkerspot butterfly (*Euphydryas editha bayensis*), mission blue butterfly (*Plebejus icarioides missionensis*), Myrtle's silverspot butterfly (*Speyeria zerene myrtilae*), San Bruno elfin butterfly (*Callophrys mossii bayensis*), Crotch bumble bee (*Bombus crotchii*), western bumble bee (*Bombus occidentalis*), Delta smelt (*Hypomesus transpacificus*), longfin smelt (*Spirinchus thaleichthys*), tidewater goby (*Eucyclogobius newberryi*), California giant salamander (*Dicamptodon ensatus*), California tiger salamander (*Ambystoma californiense*), foothill yellow-legged frog (*Rana boylei*), Santa Cruz black salamander (*Aneides niger*), American badger (*Taxidea taxus*), salt marsh harvest mouse (*Reithrodontomys raviventris*), Alameda song sparrow (*Melospiza melodia pusillula*), bank swallow (*Riparia riparia*), burrowing owl (*Athene cunicularia*), and marbled murrelet (*Brachyramphus marmoratus*).

Six special-status animal species have the potential to occur in the BSA only as visitors, migrants, or transients, but are not expected to reside or breed, or occur in large numbers, or otherwise make substantial use of the BSA. These species include the monarch butterfly (*Danaus plexippus*), pallid bat (*Antrozous pallidus*), Townsend's big-eared bat (*Corynorhinus townsendii*), American peregrine falcon (*Falco peregrinus anatum*), northern harrier (*Circus cyaneus*), and mountain lion.

Expanded descriptions are provided below for seven species that could potentially breed in the BSA or for which additional information is necessary due to the species' frequency or regularity of occurrence in the BSA.

5.2.1 Federal and State Endangered and Threatened Species

Central California Coast Steelhead (*Oncorhynchus mykiss irideus*). Federal Listing Status: Threatened; State Listing Status: None. The Central California Coast (CCC) steelhead DPS was listed as a threatened species on August 18, 1997 (NMFS 1997), and the threatened status was reaffirmed on January 5, 2006 (NMFS 2006). Critical habitat was designated for the CCC steelhead DPS on September 2, 2005 (NMFS 2005), and a final recovery plan was published in October 2016. Similar to CCC coho salmon, steelhead populations in many areas have declined due to degradation of spawning habitat, introduction of barriers to upstream migration, over-harvesting by recreational fisheries, and reduction in winter flows due to damming and spring flows due to water diversions (NMFS 1997). In addition, non-native fish species, such as striped bass (*Morone saxatilis*), common carp (*Cyprinus carpio*), and white catfish (*Ameiurus catus*), may pose risks to native steelhead populations through predation, competition, and habitat modification. Increasing predation pressure at river mouths and in the ocean from the growing California sea lion population is also posing significant risk to CCC steelhead.

Steelhead are found along the entire Pacific Coast of the United States. The CCC steelhead DPS includes all naturally spawned populations of steelhead in coastal streams from the Russian River (inclusive) to Aptos Creek (inclusive), and the drainages of San Francisco, San Pablo, and Suisun Bays eastward to Chipps Island at the confluence of the Sacramento and San Joaquin Rivers; and tributary streams to Suisun Marsh including Suisun

Creek, Green Valley Creek, and an unnamed tributary to Cordelia Slough (commonly referred to as Red Top Creek), exclusive of the Sacramento-San Joaquin River Basin of the California Central Valley.

Steelhead in the CCC DPS are winter-spawning steelhead, maturing in the ocean and spawning shortly after entering freshwater. Winter steelhead enter rivers and streams in the late fall and winter months when higher flows and associated lower water temperatures occur. Adult female steelhead will prepare a redd (or nest) in a gravel-bottomed, fast-flowing, well-oxygenated rivers and streams. Preferred streams typically support dense canopy cover that provides shade, woody debris, and organic matter, and are usually free of rooted or aquatic vegetation. The length of the incubation period is dependent on water temperature. Fry emerge from the gravel, and rear along the stream margins, moving gradually into pools and riffles as they grow larger. Young juveniles feed primarily on aquatic invertebrate drift.

In California, juveniles usually live in freshwater for 2 years (Barnhart 1986) with a range of one to 3 years (Shapovalov and Taft 1954, Busby et al. 1996) then smolt and migrate to the sea; because of this multi-year rearing time period, steelhead can only spawn in tributaries that maintain suitable temperature and other water quality parameters year-round. Most downstream smolt migration takes place between February and June. Fukushima and Lesh (1998) report the peak timing of steelhead smolt outmigration in Central California occurs in March, April, and May, while Barnhart (1986) reports most steelhead smolts in California enter the sea in March and April.

In a recent survey of coastal drainages south of San Francisco Bay, steelhead populations were either extinct or reduced in size from historical levels in at least half of the 168 surveyed mainstem streams and primary tributaries (Titus et al. in prep). In addition, only 14 percent of the streams had steelhead present where there was no discernible, significant change from historical production levels. Steelhead in most tributaries to San Francisco and San Pablo bays have been virtually extirpated (McEwan and Jackson 1996).

CCC Steelhead are known to occur in Pilarcitos Creek (CDFW 2013, CNDDDB 2021); however, passage upstream is impeded at multiple culverts, and the Pilarcitos Creek Watershed Assessment Plan identified the majority of habitat in the watershed to be in “poor” condition (Phillip Williams & Associates 2008). Opportunities to protect and restore fish passage and habitat connectivity within the watershed, such as road crossing improvements, have been developed and are being implemented under the watershed assessment plan. This effort could improve habitat conditions and increase the local presence of adult and juvenile CCC steelhead.

Habitat conditions in the BSA are suitable to support freshwater migration of adult and juvenile CCC steelhead. The BSA does not support suitable habitat for spawning, rearing, or feeding during most times of the year due to the lack of channel complexity, gravels, or connectivity with an adjacent floodplain. As a result, steelhead are only present in the section of Pilarcitos Creek in the BSA during upstream and downstream migration, which occurs late fall into spring.

Designated critical habitat for CCC steelhead includes aquatic habitat within the BSA (NMFS 2005). One of the primary constituent elements (PCEs) of critical habitat essential to the conservation of the species is present within the BSA. This PCE consists of freshwater migration corridors free of obstruction with water quantity and quality conditions and natural cover such as submerged and overhanging large wood, aquatic vegetation, large rocks and boulders, side channels, and undercut banks supporting juvenile and adult mobility and survival. These features are essential to conservation because without them juveniles cannot use the variety of habitats that allow them to avoid high flows, avoid predators, successfully compete, begin the behavioral and physiological changes needed for life in the ocean, and reach the ocean in a timely manner. Similarly, these features are essential for adults because they allow fish in a nonfeeding condition to successfully swim upstream, avoid predators, and reach spawning areas on limited energy stores. PCEs for CCC steelhead that do not occur in the BSA include freshwater spawning and rearing, as well as estuarine and marine habitats.

California Red-legged Frog (*Rana draytonii*). Federal Listing Status: Threatened; State Listing Status: Species of Special Concern. California red-legged frogs inhabit perennial freshwater pools, streams, and ponds throughout the Central California Coast Range as well as isolated portions of the western slopes of the Sierra Nevada (Fellers 2005). Their preferred breeding habitat consists of deep perennial pools with emergent vegetation for attaching egg clusters (Fellers 2005), as well as shallow benches to act as nurseries for juveniles (Jennings and Hayes 1994). Nonbreeding frogs may be found adjacent to streams and ponds in grasslands and woodlands, and may travel up to 2 mi from their breeding locations across a variety of upland habitats (Bulger et al. 2003, Fellers and Kleeman 2007).

The historical distribution of California red-legged frogs extended from the city of Redding in the Central Valley and Point Reyes National Seashore along the coast, south to Baja California, Mexico. The species' current distribution includes isolated locations in the Sierra Nevada and the San Francisco Bay area, and along the central coast (USFWS 2002). The California red-legged frog was listed as threatened in June 1996 (USFWS 1996) based largely on a significant range reduction and continued threats to surviving populations (Miller 1994). Revised critical habitat was designated in March 2010 (USFWS 2010a). No critical habitat for this species overlaps the BSA, but critical habitat Unit SNM-1 (San Mateo) is located approximately 0.08 mi southeast of the BSA (Figure 5; USFWS 2010a).

California red-legged frog adults and larvae have been found in a breeding pond in the vicinity of Pilarcitos Creek about 1.3 mi northwest of the BSA as recently as 2016, California red-legged frog adults were observed in Pilarcitos Creek about 0.5 mi west of the BSA in 2006, and California red-legged frog adults and juveniles were observed in the perennial freshwater marsh in the BSA in 2005 (H. T. Harvey & Associates and RMC 2010, CNDDDB 2021). Due to the presence of juvenile frogs, it is likely there was active breeding in the perennial freshwater marsh during the observations. Since these observations, no recent species-specific surveys of this species have been conducted in the BSA.

If still present, California red-legged frog use of the site would be foraging and dispersal in Pilarcitos Creek and foraging, dispersal, and possibly breeding in the perennial freshwater marsh. The use of this species of the BSA

outside of these habitats would be for upland dispersal in the annual grassland between the perennial freshwater marsh and the creek, but they may disperse elsewhere as well. It is therefore possible that California red-legged frogs could disperse throughout the entire BSA. Frogs are most likely to disperse in the spring and early summer when juveniles would leave the pond, and adults may move to and from the perennial freshwater marsh during warm winter rains. During the wet season, frogs may be found in upland areas around the creek and marsh. They are generally considered to forage up to 300 feet from aquatic habitat.

San Francisco Garter Snake (*Thamnophis sirtalis tetrataenia*). Federal Listing Status: Endangered; State Listing Status: Endangered. The historical distribution of the San Francisco garter snake included wetland areas on the San Francisco peninsula from the San Francisco County line south along the eastern and western foothills of the Santa Cruz Mountains to at least Upper Crystal Springs Reservoir and Año Nuevo Point in San Mateo County, and Waddell Creek in Santa Cruz County. Today, the San Francisco garter snake is restricted to San Mateo County and has been found in creeks in Half Moon Bay (H. T. Harvey & Associates 1999).

The San Francisco garter snake is a medium-sized snake that occurs in a number of aquatic and terrestrial habitats throughout their range. Juveniles and adults have been observed in natural lagoons, dune ponds, pools in or next to streams, streams, marshlands, sag ponds, and springs, as well as human-created stock ponds, canals, golf course ponds, irrigation ponds, sand and gravel pits (containing water), and large reservoirs (USFWS 1985). The presence of adjacent upland areas with abundant small mammal burrows is also important as hibernation sites for snakes during the winter (Larsen 1994). The most abundant populations of snakes are found in natural sag ponds or artificial waterways that have been allowed to develop a dense cover of vegetation such as willows, bulrushes, cattails, and tules and have dense populations of Pacific tree frogs (Barry 1993, 1994).

San Francisco garter snakes are most active from March to September although they can be observed during any month of the year (Barry 1994, Larsen 1994). Adults mate during the spring (March-April) and fall (September-November), with the latter breeding period characterized by reproductive aggregations of several males and one female. Neonates, which are normally 7-8 inches in total length, are usually born alive in litters of 1-35 (average 16) during late July to early August, although litters can be born as late as early September.

The San Francisco garter snake population in San Mateo County has been severely reduced throughout most of its range due to habitat loss and development; however, the Project region still supports an extant population of the species. San Francisco garter snakes have been documented within the region of the BSA as recently as 2008. Exact CNDDDB locations of San Francisco garter snakes are suppressed because of concern about illegal collection of the species. However, there are two CNDDDB records for the Half Moon Bay USGS quadrangle, both associated with Pilarcitos Creek, the closest one at approximately 0.5 mi downstream of the BSA in 2004 (CNNDDB 2021). Because the primary prey species of the snake is the California red-legged frog, an established population of California red-legged frogs in the perennial freshwater marsh would elevate the likelihood that

the snake could occur in the BSA. Nevertheless, it is difficult to estimate or determine the likelihood of the snake occurring in the BSA in the absence of detailed surveys or further confirmed observations nearby.

San Francisco garter snakes can move into upland habitats during summer to prey on amphibians aestivating in small mammal burrows (Barry 1993). They could potentially forage on amphibians in Pilarcitos Creek and the perennial freshwater marsh and disperse and/or aestivate throughout the BSA. The San Francisco garter snake is therefore considered potentially present throughout the BSA.

5.2.2 California Species of Special Concern

Western Pond Turtle (*Actinemys marmorata*). Federal Listing Status: None; State Listing Status: Species of Special Concern. The western pond turtle occurs in ponds, streams, and other wetland habitats in the Pacific slope drainages of California and northern Baja California, Mexico (Bury and Germano 2008). The central California population was historically present in most drainages on the Pacific slope (Jennings and Hayes 1994), but streambed alterations and other sources of habitat destruction, exacerbated by frequent drought events, have caused substantial population declines throughout most of the species' range (Stebbins 2003). Ponds or slack-water pools with suitable basking sites (such as logs) are an important habitat component for this species, and western pond turtles do not occur commonly along high-gradient streams. Females lay eggs in upland habitats, in clay or silty soils in unshaded (often south-facing) areas up to 0.25 mi from aquatic habitat (Jennings and Hayes 1994). Juveniles feed and grow in shallow aquatic habitats (often creeks) with emergent vegetation and ample invertebrate prey. Nesting habitat is typically found within 600 ft of aquatic habitat (Jennings and Hayes 1994), but if no suitable nesting habitat can be found close by, adults may travel overland considerable distances to nest. Threats to the western pond turtle include impacts to nesting habitat from agricultural and grazing activities, human development of habitat, and increased predation pressure from native and nonnative predators as a result of human-induced landscape changes.

The reach of Pilarcitos Creek within and adjacent to the BSA is degraded due to surrounding development; however, suitable basking and foraging habitat for pond turtles is present in these areas. However, suitable nesting habitat for pond turtles is not present in the BSA in upland areas adjacent to Pilarcitos Creek, because the riparian habitat is too dense for nest construction and the adjacent upland grassland habitat is degraded and frequently disturbed due to the human usage of the area. In addition, the nearest CNDDB recorded observations are over 4 mi from the BSA in the area of the Crystal Springs Reservoir (CNDDB 2021). Thus, there is some potential for pond turtles to be present in the BSA, though they are likely present in low numbers and/or infrequently as dispersers but not as resident turtles prone to breeding and nesting in the upland habitats adjacent to the creek. The perennial freshwater marsh is too shallow, with emergent vegetation too thick, to be considered suitable aquatic foraging habitat for this species.

San Francisco Dusky-footed Woodrat (*Neotoma fuscipes annectens*). Federal Listing Status: None; State Listing Status: Species of Special Concern. The San Francisco dusky-footed woodrat occurs in a variety of woodland and scrub habitats from the San Francisco Peninsula south to the Pajaro River in Monterey County (Hall 1981, Zeiner et al. 1990b). Woodrats prefer riparian and oak woodland forests with dense

understory cover, or thick chaparral habitat (Lee and Tietje 2005). Although woodrats are locally common in many areas, habitat conversion and increased urbanization, as well as increasing populations of introduced predators, such as domestic cats (*Felis catus*), pose substantial threats to this subspecies (H. T. Harvey & Associates 2008). Dusky-footed woodrats build large, complex nests of sticks and other woody debris, which may be maintained by a series of occupants for several years (Carraway and Verts 1991). Woodrats also are very adept at making use of human-made structures, and can nest in electrical boxes, pipes, wooden pallets, and even portable storage containers. Woodrat nest densities increase with canopy density and with the presence of poison oak (Carraway and Verts 1991). Although the San Francisco dusky-footed woodrat is described as a generalist omnivore, individuals may specialize on local plants that are available for forage (Haynie et al. 2007). The breeding season for the dusky-footed woodrat begins in February and sometimes continues through September, with females bearing a single brood of one to four young per year (Carraway and Verts 1991).

A San Francisco dusky-footed woodrat nest was observed near Pilarcitos Creek over 3 mi east-northeast of the BSA in 2007 (CNDDDB 2021). The riparian forest in the BSA provides suitable habitat for dusky-footed woodrats. Although no nests were observed in the riparian woodland habitat in the BSA during the reconnaissance survey, this species could potentially nest and forage in, and disperse through, the riparian habitat along Pilarcitos Creek and around the freshwater marsh.

San Francisco Common Yellowthroat (*Geothlypis trichas sinuosa*). Federal Listing Status: None; State Listing Status: Species of Special Concern. The San Francisco common yellowthroat inhabits emergent vegetation and nests in fresh and brackish marshes and moist floodplain vegetation around the San Francisco Bay. Common yellowthroats will use small and isolated patches of habitat as long as groundwater is close enough to the surface to encourage the establishment of dense stands of rushes (*Scirpus* and *Juncus* spp.), cattails, willows, and other emergent vegetation (Nur et al. 1997, Gardali and Evens 2008). Ideal habitat, however, is composed of extensive, thick riparian, marsh, or herbaceous floodplain vegetation in perpetually moist areas, where few or no brown-headed cowbirds are present (Menges 1998). San Francisco common yellowthroats nest primarily in fresh and brackish marshes, although they will also nest in salt marsh habitats that support tall vegetation (Guzy and Ritchison 1999). This subspecies builds open-cup nests low in the vegetation, and nests from mid-March through late July (Guzy and Ritchison 1999, Gardali and Evens 2008).

The San Francisco common yellowthroat is one of approximately 12 subspecies of common yellowthroat recognized in North America, two of which occur in the region of the BSA: the California Species of Special Concern, *G. t. sinuosa*, and the widespread subspecies, *G. t. arizela*. Common yellowthroats nesting in the BSA are likely of the special-status *sinuosa* subspecies, but intergrades between the two subspecies may also occur in this area (SFBBO 2012). Because subspecies cannot be reliably distinguished in the field, determination of the presence of the San Francisco common yellowthroat can be achieved only by locating birds that are actively nesting within the breeding range known for the subspecies.

Nesting San Francisco common yellowthroats have been recorded in the vicinity of the BSA (Sequoia Audubon Society 2001), and observations of individuals have been recorded within the Pilarcitos Creek riparian habitat

less than a mile west of the BSA as recently as 2017 (Cornell Lab of Ornithology 2021). The species may nest in taller vegetation within the perennial freshwater marsh in the BSA, and possibly in riparian habitat along Pilarcitos Creek and around the marsh.

Yellow Warbler (*Setophaga petechia*). **Federal Listing Status: None; State Listing Status: Species of Special Concern.** In California, the yellow occupies wooded riparian habitats (Heath 2008). This species prefers riparian corridors with an overstory of mature cottonwoods and sycamores, a midstory of box elder and willow, and a substantial shrub understory (Bousman 2007), particularly in areas with more open space adjacent to the riparian habitat. Yellow warblers construct open-cup nests in upright forks of shrubs or trees in dense willow thickets or other dense vegetation (Lowther et al. 1999).

The yellow warbler is an uncommon to rare breeder in wooded riparian habitats, occurring primarily in association with alders and willows, in San Mateo County. Riparian woodlands in the County provide suitable nesting and foraging habitat for this species, but the species is scarce and local, being particularly scarce as a breeder on the immediate coast (Sequoia Audubon Society 2001). Nevertheless, it is possible that one or two pairs could potentially breed in riparian habitat in the BSA along Pilarcitos Creek and around the marsh. Otherwise, this species is expected to occur as a common migrant in the BSA during the spring and fall.

5.2.3 State Fully Protected Species

White-tailed Kite (*Elanus leucurus*). **Federal Listing Status: None; State Listing Status: Fully Protected.** In California, white-tailed kites can be found in the Central Valley and along the coast in grasslands, agricultural fields, cismontane woodlands, and other open habitats (Zeiner et al. 1990a, Dunk 1995, Erichsen et al. 1996). White-tailed kites are year-round residents of the state, establishing nesting territories that encompass open areas with healthy prey populations and snags, shrubs, trees, or other substrates for nesting (Dunk 1995). Nonbreeding birds typically remain in the same area over the winter, although some movements do occur (Polite 1990). The presence of white-tailed kites is closely tied to the presence of prey species, particularly voles, and prey base may be the most important factor in determining habitat quality for white-tailed kites (Dunk and Cooper 1994, Skonieczny and Dunk 1997). Although the species recovered after population declines during the early 20th century, its populations may be exhibiting new declines because of recent increases in habitat loss and disturbance (Dunk 1995, Erichsen et al. 1996).

White-tailed kites are common residents in the vicinity of the BSA where open grassland, ruderal, or agricultural habitats are present. Large trees on and adjacent to the BSA provide suitable nesting sites. The open habitats (e.g., ruderal grasslands and agricultural areas) on and adjacent to the BSA provide potential foraging opportunities for this species. Although the developed nature and high levels of human disturbance within the BSA make it less attractive to nesting kites, an individual was observed in the vicinity of the perennial freshwater marsh in 2014 (Cornell Lab of Ornithology 2021), and this species could potentially nest and forage in the BSA.

5.3 Sensitive Natural Communities, Habitats, and Vegetation Alliances

Natural communities have been considered part of the Natural Heritage Conservation triad, along with plants and animals of conservation significance, since the state inception of the Natural Heritage Program in 1979. The CDFW determines the level of rarity and imperilment of vegetation types, and tracks sensitive communities in its Rarefind database (CNDDDB 2021). Global rankings (G) of natural communities reflect the overall condition (rarity and endangerment) of a habitat throughout its range, whereas state (S) rankings reflect the condition of a habitat within California. Natural communities are defined using NatureServe's standard heritage program methodology as follows (CDFG 2007):

- G1/S1: Less than 6 viable occurrences or less than 2,000 ac.
- G2/S2: Between 6 and 20 occurrences or 2,000 to 10,000 ac.
- G3/S3: Between 21 and 100 occurrences or 10,000 to 50,000 ac.
- G4/S4: The community is apparently secure, but factors and threats exist to cause some concern.
- G5/S4: The community is demonstrably secure to ineradicable due to being common throughout the world (for global rank) or the state of California (for state rank).

State rankings are further described by the following threat code extensions:

- S1.1: Very threatened
- S1.2: Threatened
- S1.3: No current threats known

In addition to tracking sensitive natural communities, the CDFW also ranks vegetation alliances, defined by repeating patterns of plants across a landscape that reflect climate, soil, water, disturbance, and other environmental factors (Sawyer et al. 2009). If an alliance is marked G1-G3, all the vegetation associations within it will also be of high priority (CDFG 2007). The CDFW provides the Vegetation Classification and Mapping Program's (VegCAMP) currently accepted list of vegetation alliances and associations (CDFG 2010a).

Impacts on CDFW sensitive natural communities, vegetation alliances/associations, or any such community identified in local or regional plans, policies, and regulations, must be considered and evaluated under CEQA (Title 14, Division 6, Chapter 3, Appendix G of the California Code of Regulations). Furthermore, aquatic, wetland and riparian habitats are also protected under applicable federal, state, or local regulations, and are generally subject to regulation, protection, or consideration by the USACE, RWQCB, CDFW, USFWS, and/or the Half Moon Bay LCP.

Sensitive Natural Communities. There are no CDFW-classified sensitive natural communities within the BSA, However, there are two sensitive natural communities identified in the CNDDDB within five miles of the BSA:

- **Northern maritime chaparral.** Northern maritime chaparral is characterized by a dense, nearly impenetrable shrub cover composed of several species. Characteristic species include chamise (*Adenostoma fasciculatum*), buckbrush (*Ceanothus cuneatus*) as well as other *Ceanothus* species, black sage (*Salvia mellifera*), and several species of manzanitas (*Manzanita* sp.). Northern maritime chaparral is not present within the BSA because none of the characteristic plant species that make up this community are present.
- **Northern coastal salt marsh.** Northern coastal salt marsh is characterized is wetland community dominated by herbaceous to sub-shrub salt-tolerant hydrophytes that typically forms a dense mat of vegetation up to three feet high. Characteristic species include pickleweed (*Salicornia* sp.), cordgrass (*Spartina* sp.), and salt grass (*Distichlis spicata*). Northern coastal salt marsh is not present within the BSA because none of the characteristic plant species that make up this community are present.

Sensitive Vegetation Alliances. There is one CDFW classified sensitive vegetation alliances within the BSA. Impacts to these plant communities may be considered significant under CEQA. Sensitive plant communities identified by CDFW within the BSA include the red willow-arroyo willow vegetation alliance, which is found within the riparian woodland along Pilarcitos Creek (Figure 3). This plant community has been identified by CDFW as “G4 S3”, which means that it is rare and threatened throughout its range in California but is apparently secure throughout its range outside of California. This vegetation alliance occurs within the riparian woodland in the BSA.

Waters of the U.S./State. Pilarcitos Creek (aquatic riverine) and the perennial freshwater marsh would be considered waters of the U.S./state. Any impacts on verified waters of the U.S./state within the BSA would require a Section 404 permit from the USACE and Section 401 Water Quality Certification from the San Francisco RWQCB. Additionally, the RWQCB would also consider the riparian woodland above the OHWMs of the stream and surrounding the marsh, out to the dripline of all trees rooted within the top of bank, as important, regulated buffers to waters of the State (Figure 5). Also, Pilarcitos Creek and the full extent of its riparian canopy would be subject to lake and streambed jurisdiction administered by CDFW under Section 1600 et seq. of State Fish and Game Code (see Section 5.4).

Environmentally Sensitive Habitat Areas. The BSA contains several ESHAs or sensitive coastal resource areas:

- **Perennial freshwater stream.** Pilarcitos Creek is a perennial freshwater stream and is classified as a sensitive habitat by the Half Moon Bay LCP and is also subject to lake and streambed jurisdiction under Section 1600 et seq. of State Fish and Game Code (see Section 5.4).

- **Riparian woodland.** The riparian woodland along Pilarcitos Creek and surrounding the perennial freshwater marsh is classified as sensitive habitat by the Half Moon Bay LCP and the riparian canopy along Pilarcitos Creek is also subject to riparian jurisdiction under Section 1600 et seq. of State Fish and Game Code.
- **Perennial freshwater marsh.** The perennial freshwater marsh is classified as a sensitive wetland habitat by the Half Moon Bay LCP.
- **Potential one-parameter wetlands.** Throughout the California annual grassland habitat there are scattered patches of hydrophytic vegetation, including curly dock, poison hemlock, and bird’s foot trefoil. Both curly dock and bird’s foot trefoil are classified as *facultative* species (commonly occurs as either a hydrophyte or non-hydrophyte); poison hemlock is classified as a *facultative wetland* species (usually a hydrophyte but occasionally found in uplands) (Lichvar et al. 2016). CCC’s regulations (California Code of Regulations Title 14 (14 CCR)) establish a one parameter definition that only requires evidence of a single parameter (hydrology, hydric soils, or hydrophytic vegetation) to establish wetland conditions. However, these species grow in both wetlands as hydrophytes and uplands as non-hydrophytes; therefore, these species may not be reliable indicators of wetlands. A formal delineation and analysis was conducted in in June 2020 and determined that none of the areas of scattered hydrophytic vegetation occurred in wetland landscape positions, some areas clearly indicated disturbance rather than wetland conditions (e.g., poison hemlock), all occurred intermixed with upland species, and none of these areas indicated the presence of a hydrophytic vegetation community, hydric soils, or wetland hydrology (H. T. Harvey & Associates 2020). Therefore, no one-parameter CCC wetlands outside of the riverine, wetland, or riparian habitats above were identified within the BSA.
- **Wild strawberry habitat.** Wild strawberry habitat is also included as a sensitive habitat in the Zoning Code and Local Coastal Program and is defined as “any undeveloped areas within one half mile of the coast” (City of Half Moon Bay 2021). The BSA is approximately 1.2 mi from the coast and therefore does not meet the definition of wild strawberry habitat due to its distance from the coast. Additionally, no strawberry plants were observed during the reconnaissance-level field survey in June 2018.
- **Bluffs, cliffs, and sea cliffs.** As defined in Section 18.38.060 of the City Code, a bluff or cliff is a scarp or a steep face of rock, decomposed rock, sediment or soil resulting from erosion, faulting, or folding of the land mass with a vertical relief of ten feet or more. A sea cliff is defined as a cliff whose toe is subject to marine erosion. There is no bluff, cliff, or sea cliff habitat present within the BSA.

Critical Habitat. Pilarcitos Creek is designated as critical habitat for the federally Threatened Central California Coast steelhead Distinct Population Segment. Critical habitat for the Central California Coast steelhead DPS was designated on September 2, 2005 and includes all river reaches and estuarine areas accessible to listed steelhead in coastal river basins from the Russian River in Sonoma County to Aptos Creek in Santa Cruz County. The San Mateo Hydrologic Unit includes the coastal streams in San Mateo County from San Pedro Creek near Pacifica to Butano Creek near Año Nuevo and the Santa Clara Hydrologic Unit includes South Bay creeks from San Francisquito Creek in Palo Alto eastward to Coyote Creek (NMFS 2005).

5.4 Non-Native and Invasive Species

Several non-native, invasive plant species occur in the BSA in the California annual grassland and riparian woodland habitat. Of these, pampas grass, cape ivy, French broom and Himalayan blackberry have the potential to cause the most severe ecological impacts, as these species can invade and degrade the margins of sensitive wetland habitat, and are rated high by the Cal-IPC (Cal-IPC 2021). In addition, creeping capeweed (*Arctotheca prostrata*), riggut brome, Italian thistle, poison hemlock, silverleaf cotoneaster (*Cotoneaster pannosus*), dogtail grass (*Cynosurus echinatus*), Italian rye grass, bristly ox-tongue, common velvetgrass, Mediterranean hoary mustard (*Hirschfeldia incana*), meadow barley (*Hordeum murinum*), common sheep sorrel (*Rumex acetosella*), and field hedge parsley (*Torilis arvensis*) were observed in the BSA, are rated as limited to moderate and can have substantial and apparent ecological impacts if they spread into native, sensitive habitats (Cal-IPC 2021).

Section 6. Impacts and Mitigation Measures

CEQA and the State CEQA Guidelines provide guidance in evaluating impacts of projects on biological resources and determining which impacts will be significant. The Act defines “significant effect on the environment” as “a substantial adverse change in the physical conditions which exist in the area affected by the proposed project.”

Appendix G of State CEQA Guidelines provides a checklist of other potential impacts to consider when analyzing the significance of project effects. The impacts listed in Appendix G (Chapter IV) may or may not be significant, depending on the level of the impact. For biological resources, these impacts include whether the project would:

- A. “have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service”
- B. “have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service”
- C. “Have a substantial adverse effect on 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”
- 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”

6.1 Approach to the Analysis

As described in Section 1.1, specific project activities and locations have not been defined. However, no disturbance of Pilarcitos Creek or the perennial freshwater marsh in the northwest corner of the BSA, or use of the riparian habitat or buffer associated with Pilarcitos Creek beyond existing allowed use under the City’s LCP, is anticipated. Allowed uses include 1) education and research, 2) consumptive uses as provided for in the Fish and Game Code and Title 14 of the California Administrative Code, 3) fish and wildlife management activities, 4) trails and scenic overlooks on public land(s), and 5) necessary water supply projects. Also, when no feasible or practicable alternative exists, other uses may include 1) stream-dependent aquaculture provide

that non-stream-dependent facilities locate outside of corridor, 2) flood control projects where no other method for protecting existing structures in the flood plain is feasible and where such protection is necessary for public safety or to protect existing development, 3) bridges when supports are not in significant conflict with corridor resources, 4) pipelines and storm water runoff facilities, 5) improvement, repair or maintenance of roadways or road crossings, and 6) agricultural uses, provided no existing riparian vegetation is removed, and no soil is allowed to enter stream channels.

The only allowed uses in riparian habitat and the associated buffer being considered by the City for this project will be path, trail, or other environmental related educational uses (J. Doughty, pers. comm.). Therefore, the following impact analysis was prepared assuming project development could occur in any portion of the BSA, except for Pilarcitos Creek and the perennial freshwater marsh in the northwest corner of the BSA, but with possible limited disturbance within the riparian habitat/buffers associated with the perennial freshwater marsh and/or Pilarcitos Creek from allowed uses.

6.2 Impacts on Special-Status Species: 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 CDFW or USFWS

6.2.1 Impacts on Common Plant and Animal Species (Less than Significant)

The common (non-special-status) plant and animal species that occur in the BSA could experience a direct loss of habitat due to project activities, which could potentially result in the mortality, injury, disturbance, and displacement of individuals of some of these species. The plant species observed in the BSA during the reconnaissance surveys (Appendix A) are not regulated under state or federal laws or listed species by the CNPS. All native plant species found in the BSA are regionally abundant and common in California. As such, impacts on these species from project activities do not constitute a significant impact and require no compensatory mitigation.

The common animal species that occur in the BSA are regionally abundant, and can be found in habitats throughout the City of Half Moon Bay and San Mateo County. For instance, the common ants, bees, wasps, flies, butterflies, and spiders in the BSA are found in abundance in vegetated areas in the region such as yards, parks, riparian areas, and grasslands. Non-special-status amphibians, such as western toads and arboreal salamanders, are found along streams, ponds, and lakes in the region, and the common reptiles that occur in the BSA, such as western fence lizards and western skinks, are abundant in the grasslands of San Mateo County.

Implementation of the project would result in the loss of a small amount of nesting and foraging habitat for common native birds, which would result in a decline in the number of species and pairs of birds that currently nest and/or forage in the BSA. However, the terrestrial habitats in the BSA (i.e., California annual grassland,

developed, ephemeral drainage, perennial freshwater marsh, and riparian forest) represent a very small proportion of the habitats that support these species regionally. For instance, residences, yards, and parks throughout the City of Half Moon Bay provide habitat for the common “backyard” species of birds that occur in the BSA (e.g., American robin) and riparian-associated birds (e.g., bushtits and lesser goldfinch) inhabit riparian habitat adjacent to the numerous streams flowing through the county. Thus, the habitats in the BSA represent only a very small proportion of suitable habitats available to these species regionally. Even more importantly, because the project would retain all trees associated with Pilarcitos Creek, birds are expected to continue to nest and forage there once project construction is completed. Although overall fewer pairs of birds might nest and forage in the BSA following project development, the temporary disturbance of habitat does not rise to the level of a *substantial* impact under CEQA for any of these species.

All of the native terrestrial mammals in the BSA (e.g., striped skunks and raccoons) are also abundant in the county, inhabiting grasslands and woodlands throughout the region. Because these species are regionally abundant, are present in widely available habitats in the region, and may continue to be present in the BSA following construction, any project would impact only a small proportion of their regional populations. Such loss of regionally abundant common wildlife species does not achieve the threshold of a *substantial* reduction in the regional habitat of these species, and thus these impacts are less than significant under CEQA.

Several of the common wildlife species that occur in the BSA are not native to California. These include non-native mammals such as the Virginia opossum, Norway rat, and house mouse. Many of these non-native species have been introduced to the natural areas in the region, or have invaded natural and developed areas because they thrive in the presence of humans. These non-native species influence natural ecosystems in many ways, such as by competing with native species for food, territories, and other resources; altering habitats; transmitting diseases; and preying upon native species. Due to these factors, these non-native species act to reduce the abundance and diversity of native species that occur in areas in the region, including the BSA. Therefore, impacts on these non-native species resulting from a project do not constitute an adverse effect under CEQA.

6.2.2 Impacts on Special-Status Plants (Less than Significant with Mitigation)

One plant species, harlequin lotus, categorized by the CNPS as a CRPR 4.2, has the potential to occur within the more mesic areas of the riparian habitat along Pilarcitos Creek (Figure 5, Section 5.1, Appendix B). If present, project development may affect harlequin lotus due to disturbance of individuals within the populations and disturbance or destruction of suitable habitat. Direct impacts could include grading or filling areas supporting these species, trampling or crushing of plants, and soil compaction. Indirect impacts could include increased mobilization of dust onto plants, which can affect their photosynthesis and respiration, or changes to hydrology supporting these plants within adjacent wetlands due to grading or construction in nearby habitats.

Harlequin lotus has a limited distribution in California. The statewide population includes at least 357 extant occurrences (CNPS 2021), and of these, approximately 37 occur within San Mateo County. Given that San Mateo County is at the southern limits of its documented range and Harlequin lotus is threatened by

development, grazing, feral pigs, habitat alteration, and competition from non-native species, conservation of existing populations of this species could be essential for preserving its genetic resources and ensuring its persistence in the County.

If this species is present and impacts occur to 10% or less of its population (by individuals or occupied area) within the BSA, such a low level of impacts would not be expected to cause the extirpation of such a population, as long as the remaining plants were avoided and protected by a no-disturbance buffer. However, due to the regional rarity of this species, impacts to more than 10% of a population of this species could contribute to a reduction in these species' range or genetic resources, which would be considered significant under CEQA. Implementation of the following mitigation measures will reduce impacts on harlequin lotus to a less-than-significant level.

Mitigation Measure 1. Pre-Activity Surveys for Harlequin Lotus. Prior to initial ground disturbance within any riparian habitat related to the project, and during the appropriate blooming period (March-July), a focused survey for harlequin lotus will be conducted within suitable habitat in the impact footprint and a 50-ft buffer around the impact footprint. This buffer may be increased by the qualified plant ecologist depending on site-specific conditions and activities planned in the area (i.e., if the plant ecologist determines that project activities could have greater indirect impacts), but must be at least 50 ft wide. Situations for which a greater buffer may be required include proximity to proposed activities expected to generate large volumes of dust, such as grading; potential for project activities to alter hydrology supporting the habitat for the species in question; or proximity to proposed structures that may shade areas farther than 50 ft away. Surveys are to be conducted in a year with near-average or above-average precipitation, or a reference population must be assessed to confirm that the plant would have been detectable during the survey year. The purpose of the survey will be to assess the presence or absence of the harlequin lotus. If this species is not found in the impact area or the identified buffer, then no further mitigation will be warranted. If harlequin lotus is found in the impact area or identified buffer, then Mitigation Measures 2 and 3 will be implemented.

Mitigation Measure 2. Avoidance Buffers. To the extent feasible, and in consultation with a qualified plant ecologist, the project proponent will design and construct the project to avoid completely impacts on harlequin lotus within the project site or within the identified buffer of the impact area. Avoided special-harlequin lotus plant populations will be protected by establishing and observing the identified buffer between plant populations and the impact area. All such populations located in the impact area or the identified buffer, and their associated designated avoidance areas, will be clearly depicted on any construction plans. In addition, prior to initial ground disturbance or vegetation removal, the limits of the identified buffer around harlequin lotus to be avoided will be flagged or fenced. The flagging will be maintained intact and in good condition throughout project-related construction activities.

If complete avoidance is not feasible and more than 10% of a population (by occupied area or individuals) would be impacted as determined by a qualified plant ecologist, Mitigation Measure 3 will be implemented.

Mitigation Measure 3. Preserve Off-Site Populations of Special-Status Plant Species. If avoidance of harlequin lotus is not feasible and more than 10% of the population would be impacted, compensatory mitigation will be provided via the preservation, enhancement, and management of occupied habitat for the species, for example avoided portions of the impacted population. If too large of a proportion of an on-site population is impacted to provide this mitigation on-site, off-site habitat occupied by the affected species will be preserved and managed in perpetuity at a minimum 1:1 mitigation ratio (at least one plant preserved for each plant affected, and at least one occupied acre preserved for each occupied acre affected), for any impact over the 10% significance threshold.

Areas proposed to be preserved as compensatory mitigation for special-status plant impacts must contain verified extant populations of harlequin lotus that would be impacted. Mitigation areas will be managed in perpetuity to encourage persistence and even expansion of the preserved target species. Mitigation lands cannot be located on land that is currently held publicly for resource protection unless substantial enhancement of habitat quality will be achieved by the mitigation activities. The mitigation habitat will be of equal or greater habitat quality compared to the impacted areas, as determined by a qualified plant ecologist, in terms of soil features, extent of disturbance, vegetation structure, and dominant species composition, and will contain at least as many individuals of the species as are impacted by project activities. The permanent protection and management of mitigation lands will be ensured through an appropriate mechanism, such as a conservation easement or fee title purchase. A habitat mitigation and monitoring plan (HMMP) will be developed and implemented for the mitigation lands. That plan will include, at a minimum, the following information:

- a summary of habitat impacts and the proposed mitigation;
- a description of the location and boundaries of the mitigation site and description of existing site conditions;
- a description of measures to be undertaken to enhance (e.g., through focused management that may include removal of invasive species in adjacent suitable but currently unoccupied habitat) the mitigation site for the focal special-status species;
- a description of measures to transplant individual plants or seeds from the impact area to the mitigation site, if appropriate (which will be determined by a qualified plant or restoration ecologist);
- proposed management activities to maintain high-quality habitat conditions for the focal species;
- a description of habitat and species monitoring measures on the mitigation site, including specific, objective final and performance criteria, monitoring methods, data analysis, reporting requirements, monitoring schedule, etc. At a minimum, performance criteria will include demonstration that any plant population fluctuations over the monitoring period do not indicate a downward trajectory in terms of reduction in numbers and/or occupied area for the preserved mitigation population that can be attributed to management (i.e., that are not the result of local weather patterns, as determined by monitoring of a nearby reference population, or other factors unrelated to management); and

- contingency measures for mitigation elements that do not meet performance criteria.

The HMMP will be prepared by a qualified plant or restoration ecologist. Approval of the HMMP by the City will be required before the project impact occurs.

6.2.3 Impacts on the California Red-legged Frog and San Francisco Garter Snake (Less than Significant with Mitigation)

Individuals of the California red-legged frog are known to have occurred in Pilarcitos Creek, and in the perennial freshwater marsh in the BSA. Also, San Francisco garter snake is considered potentially present in Pilarcitos Creek, and may disperse to the perennial fresh water marsh in the BSA to forage due to the presence of California red-legged frog in the marsh. Therefore, impacts on these species are considered similar and thus will be discussed together. Direct impacts on the California red-legged frog and San Francisco garter snake could potentially occur due to project development immediately adjacent to the marsh habitat or within the riparian habitat associated with Pilarcitos Creek. If individuals of these species are present during construction activities, they may be crushed or injured by personnel or equipment. In addition, individuals may be crushed in their refugia by the passage of heavy equipment or trapped and suffocated. An increase in native and non-native predators attracted to the Project site due to trash left on the work site might result in increased mortality of individuals of these species. Due to the rarity of both species, project-related impacts on individual California red-legged frogs and San Francisco garter snakes would be significant.

The project may also result in the permanent loss or temporary disturbance of the riparian habitat associated with Pilarcitos Creek and buffers along the creek and around the marsh because of development activities. The marsh potentially provides breeding habitat for the California red-legged frog and foraging habitat for the San Francisco garter snake, and the riparian habitat provides foraging habitat for both species. Due to the potential presence of breeding and foraging habitat in the perennial freshwater marsh, and foraging habitat in the riparian habitat at the marsh and Pilarcitos Creek, the remaining annual grassland habitat is considered upland dispersal habitat for both the frog and snake. Project development of this annual grassland would permanently impact this upland dispersal habitat for both the frog and snake and could isolate a breeding population of California red-legged frog currently in the perennial freshwater marsh habitat from other nearby habitat for the species, such as Pilarcitos Creek. Therefore, the effects of even temporary habitat loss could substantially affect regional populations of these species, a significant impact. Implementation of Mitigation Measures 4 through 23 will reduce project impacts on both the California red-legged frog and San Francisco garter snake due to habitat loss and impacts on individuals to a less-than-significant level. In addition, implementation of these mitigation measures will ensure that take of individuals (e.g., handling, injury, or mortality) of the state fully protected San Francisco garter snake, which is prohibited by the California Fish and Game Code for construction projects such as this, will be avoided.

Mitigation Measure 4. Avoidance of California Red-legged Frog and San Francisco Garter Snake Foraging Habitat, and California Red-legged Frog and San Francisco Garter Snake Dispersal Habitat.

To the extent feasible, the project proponent will design and construct the project to avoid completely impacts

on the marsh, riparian, and annual grassland habitats in the BSA. The avoided California red-legged frog and San Francisco garter snake habitat will be protected by establishing and observing an identified buffer between the habitat and the impact area following the LCP (City of Half Moon Bay 2020). Specifically, the buffer will be fifty ft outward from the limit of riparian vegetation along Pilarcitos Creek and the marsh. The identified buffer will be clearly depicted on any construction plans. In addition, prior to initial ground disturbance or vegetation removal, the limits of the identified buffer around the marsh, associated riparian habitat, and annual grassland to be avoided will be flagged or fenced. The flagging will be maintained intact and in good condition throughout project-related construction activities.

If complete avoidance is not feasible, Mitigation Measure 5 will be implemented.

Mitigation Measure 5. Preserve Onsite and/or Offsite Breeding, Foraging, and Dispersal Habitat for California Red-legged Frog and San Francisco Garter Snake. If avoidance of the marsh, riparian, and/or annual grassland habitats and associated buffers in the BSA are not feasible, compensatory mitigation will be provided via the preservation, enhancement, and management of potential California red-legged frog breeding and foraging habitat and San Francisco garter snake foraging habitat (for impacting the marsh and riparian habitats) and upland dispersal habitat (for impacting the upland grassland habitat). To compensate for impacts on the California red-legged frog and San Francisco garter snake, onsite and/or offsite habitat occupied by the frog and snake will be preserved and managed in perpetuity at a minimum 3:1 mitigation ratio for California red-legged frog breeding and foraging habitat and San Francisco garter snake foraging habitat (i.e., marsh and riparian habitats), and 1:1 mitigation ratio for upland dispersal habitat (annual grassland habitat and buffers associated with riparian habitat) for both species.

If the marsh habitat and associated riparian habitat are avoided, but the upland grassland between Pilarcitos Creek and the marsh is impacted to the extent that the marsh habitat and riparian habitat surrounding the marsh becomes isolated from Pilarcitos Creek, and frogs and snakes cannot disperse unencumbered between the creek and marsh, then a minimum 3:1 mitigation ratio for the acreage of the entire isolated marsh and riparian habitat around the marsh will be provided to compensate for loss of breeding and foraging habitat for California red-legged frog and foraging habitat for San Francisco garter snake. This higher mitigation ratio is required because the marsh and associated riparian habitat will be cut off from, and not available as breeding and foraging habitat for, the larger meta-populations of the California red-legged frog and San Francisco garter snake in the region that are using Pilarcitos Creek as a dispersal corridor. If, however, a designated portion of the upland habitat between Pilarcitos Creek and the marsh at a minimum of 50 ft in width is avoided, or if impacted, landscaped so that frogs and snakes can still freely disperse between the creek and marsh, then no mitigation ratio is required for the marsh habitat and associated riparian habitat since they will not be isolated. A minimum 1:1 mitigation ratio for upland dispersal habitat will still be required as compensation for the annual grassland within the BSA to be impacted.

Mitigation Measure 6. Obtain Agency Approval of Qualified Biologist. The qualifications of a biologist(s) experienced with the California red-legged frog and San Francisco garter snake, and who will provide

preconstruction surveys and monitoring for the project during construction, will be submitted to the USFWS and CDFW for review and written approval at least thirty (30) calendar days prior to the start of project activities.

Mitigation Measure 7. Install Wildlife Exclusion Barrier. A temporary wildlife exclusion barrier installation plan will be submitted to the USFWS and CDFW for approval. Prior to any ground disturbance in the impact area, the agency-approved temporary wildlife exclusion barrier will be installed along the limits of disturbance. An agency-approved biologist will inspect the area prior to installation of the barrier. The barrier will be designed to allow the California red-legged frog and San Francisco garter snake to leave the impact area and prevent them from entering the impact area, and will remain in place until all development activities have been completed. This barrier will be inspected daily and maintained and repaired as necessary to ensure that it is functional and is not a hazard to California red-legged frogs or San Francisco garter snakes on the outer side of the barrier.

Mitigation Measure 8. Conduct Preconstruction Survey. No more than twenty-four (24) hours prior to the date of initial ground disturbance, a preconstruction survey for the California red-legged frog and San Francisco garter snake will be conducted by an agency-approved biologist within the impact area. The survey will consist of walking the limits of impact to ascertain the possible presence of the species. The agency-approved biologist will investigate all potential areas that could be used by the California red-legged frog and San Francisco garter snake for feeding, breeding, sheltering, movement, and other essential behaviors. This includes an adequate examination of mammal burrows.

Mitigation Measure 9. Worker Environmental Awareness Program. All construction personnel will participate in a worker environmental awareness program. These personnel will be informed about the possible presence of all special-status species and habitats associated with the species identified here to be potentially present in the BSA and that unlawful take of the animal or destruction of its habitat is a violation of FESA and CESA. Prior to construction activities, the agency-approved biologist will instruct all construction personnel about (1) the description and status of the species; (2) the importance of their associated habitats; and (3) a list of measures being taken to reduce impacts on these species during project construction and implementation. A fact sheet conveying this information will be prepared for distribution to the construction crew and anyone else who enters the project site.

Mitigation Measure 10. Construction Monitoring. An agency-approved biologist will be onsite during all Project construction activities that may result in take of any special-status species. The agency-approved biologist will be given the authority to freely communicate verbally, by telephone, electronic mail, or in writing at any time with construction personnel, any other person(s) at the project site, otherwise associated with the project, the USFWS, the CDFW, or their designated agents. The agency-approved biologist will have oversight over implementation of all the conservation measures and will have the authority and responsibility to stop project activities if they determine any of the associated requirements are not being fulfilled. If the agency-

approved biologist exercises this authority, the USFWS and CDFW will be notified by telephone and electronic mail within twenty-four (24) hours.

Mitigation Measure 11. Vegetation Removal. All riparian vegetation that needs to be removed will be removed under the close supervision of an agency-approved biologist, who will survey for California red-legged frogs or San Francisco garter snakes immediately prior to and periodically during the vegetation removal.

Mitigation Measure 12. Prohibition of Firearms and Pets. No firearms will be allowed on the project site, except for Federal, state, local law enforcement, or security guards. No pets will be allowed on the project site.

Mitigation Measure 13. Pipe Inspection. All construction pipes, culverts, or similar structures that are stored at a construction site for one or more overnight periods will be either securely capped prior to storage or thoroughly inspected by the agency-approved biologist and/or the construction foreman/manager for animals before the pipe is subsequently buried, capped, or otherwise used or moved in any way. If a California red-legged frog or San Francisco garter snake is discovered inside a pipe or culvert by the agency-approved biologist or construction foreman/manager, the protocol in Mitigation Measure 15 will be followed.

Mitigation Measure 14. Steep-walled Holes and Trenches. To prevent inadvertent entrapment of the California red-legged frog or San Francisco garter snake during construction, the agency-approved biologist and/or construction foreman/manager will ensure that all excavated, steep-walled holes or trenches more than one foot deep are completely covered at the close of each working day by plywood or similar materials, or provided with one or more escape ramps constructed of earth fill or wooden planks and inspected by the agency-approved biologist. Before such holes or trenches are filled, they will be thoroughly inspected for trapped animals by the agency-approved biologist and/or construction foreman/manager. If at any time a trapped California red-legged frog or San Francisco garter snake is discovered by the agency-approved biologist or anyone else, the steps in Mitigation Measure 15 will be followed.

Mitigation Measure 15. Protocol if California Red-legged Frog or San Francisco Garter Snake is Encountered. If a California red-legged frog or San Francisco garter snake, or any animal that construction personnel believes may be either of these species, is encountered during project construction, the following will be followed:

- All work that could result in direct injury, disturbance, or harassment of the individual animal shall immediately cease.
- The foreman and agency-approved biologist will be immediately notified.
- The agency-approved biologist will determine if the animal is a California red-legged frog or San Francisco garter snake and if so will follow Mitigation Measure 16 for California red-legged frog or Mitigation Measure 17 for San Francisco garter snake.

Mitigation Measure 16. Relocation of California Red-legged Frogs. If any California red-legged frogs are found during implementation of Mitigation Measures 7, 8, 10-11, or 13-14 the agency-approved biologist will contact the USFWS to determine if moving any of the individuals is appropriate. In making this determination the USFWS will consider if an appropriate relocation site exists. If the USFWS approves moving animals, the project proponent will ensure the agency-approved biologist is given sufficient time to move the animals from the impact area before ground disturbance is initiated. Only agency-approved biologists will capture, handle, and move the California red-legged frog. The agency-approved biologist will monitor any relocated frog until it is determined that it is not imperiled by predators or other dangers.

Mitigation Measure 17. Monitor San Francisco Garter Snake. The agency-approved biologist will monitor any individual of the San Francisco garter snake encountered within the impact area but allow it to leave the impact area on its own. If the agency-approved biologist determines that the snake cannot leave on its own then the USFWS and CDFW will be consulted to determine if the snake can be captured and relocated to appropriate habitat on the outside of the impact area. No San Francisco garter snakes will be handled without explicit agency approval.

Mitigation Measure 18. Speed Limit. Project-related vehicles will observe a 15 mile-per-hour speed limit in all project areas, except on City and County roads, and State highways; this is particularly important on rainy nights when California red-legged frogs are most active.

Mitigation Measure 19. Daytime Restriction. Nighttime construction will be avoided.

Mitigation Measure 20. Food and Trash. To eliminate an attraction for the predators of the California red-legged frog and San Francisco garter snake, all food-related trash items such as wrappers, cans, bottles, and food scraps will be disposed of in solid, closed containers (trash cans) and removed at the end of each working day from the entire construction site.

Mitigation Measure 21. Prohibition of Plastic Mono-filament Netting. Plastic mono-filament netting (erosion control matting), rolled erosion control products or similar material will not be used at the project site to prevent trapping California red-legged frogs, San Francisco garter snakes, or other species.

Mitigation Measure 22. Pesticide, Rodenticide, Herbicide Use. The use of pesticides, rodenticides, and herbicides in the impact area will be utilized in such a manner to prevent primary or secondary poisoning of the California red-legged frog and/or San Francisco garter snake potentially present in the BSA, and the depletion of food items on which they depend. All uses of such compounds will observe label and other restrictions mandated by the U.S. Environmental Protection agency, California Department of Food and Agriculture, and other appropriate State and Federal regulations, as well as additional project-related restrictions deemed necessary by the USFWS and CDFW.

6.2.4 Impacts on the Central California Coast Steelhead and the Western Pond Turtle (Less than Significant with Mitigation)

Both Central California Coast steelhead and western pond turtles may be present in Pilarcitos Creek within or downstream of the BSA. Because the project will not occur within Pilarcitos Creek in the BSA, direct impacts of construction-related activities on these species' habitat will not occur, and impacts on individuals are not expected except that during construction, minor and temporary increases in turbidity may occur. In addition, steelhead and western pond turtles might be killed or injured as a result of the spill of petrochemicals, hydraulic fluids, or solvents into Pilarcitos Creek. However, implementation of a storm water pollution prevention plan (SWPPP) with associated BMPs (see section 6.5.1) will minimize potential impacts on steelhead and western pond turtles as a result of increased turbidity and spills of hazardous materials into Pilarcitos Creek. In addition, western pond turtles may disperse from Pilarcitos Creek to the upland in the project site and be injured or killed by project related construction activities. However, implementation of Mitigation Measures 7-10 and 12-22 described above, for western pond turtles in addition to California red-legged frogs and San Francisco garter snakes, will reduce potential impacts on western pond turtles to less-than-significant levels.

6.2.5 Impacts on the San Francisco Dusky-footed Woodrat (Less than Significant with Mitigation)

San Francisco dusky-footed woodrats may be present, and could potentially nest, in the riparian habitat associated with Pilarcitos Creek and the perennial freshwater marsh in the BSA. Although impacts on riparian habitat are expected to be limited, if they occur at all, it is possible that limited impacts could occur to riparian habitat and the riparian buffer associated with Pilarcitos Creek allowed under the City's Local Coastal Program, notably the creation of paths, trails, or other environmentally related educational uses (J. Doughty, pers. comm.). If so, such impacts could result in destruction of nests, injury or mortality of woodrats (especially if occupied nests are present), and loss of woodrat habitat. Due to the regional abundance of woodrat habitat and the limited nature of impacts to this species' habitat anticipated to result from the project, impacts to this species' habitat is less than significant. Although San Francisco dusky-footed woodrats are also fairly abundant regionally, this species is important ecologically; woodrats serve as prey for a variety of predatory species, and woodrat nests provide dens and refugia for a variety of invertebrate, reptile, amphibian, and small mammal species. Therefore, impacts to individual woodrats and their nests would be significant. Implementation of Mitigation Measure 24 will reduce impacts on San Francisco dusky-footed woodrats to less-than-significant levels.

Mitigation Measure 23. Preconstruction Survey for San Francisco Dusky Footed Woodrat Nests.

Focused surveys for San Francisco dusky-footed woodrat nests within the riparian habitat associated with Pilarcitos Creek and the marsh habitat will be conducted within 7 days of the start of construction. If no nests are found, then no further mitigation will be warranted. If nests are found, then Mitigation Measures 24 and 25 will be implemented.

Mitigation Measure 24. Disturbance-Free Buffers. Dusky-footed woodrats are year-round residents. Therefore, avoidance mitigation is limited to designing the project to avoid direct impacts on woodrat nests to the extent feasible. Ideally, a minimum 10-ft buffer should be maintained between project construction activities and each nest to avoid disturbance. In some situations, a smaller buffer may be allowed if in the opinion of the qualified biologist removing the nest would be a greater impact than that anticipated due to project activities. If nests are observed within riparian habitat and this habitat will be avoided by the project, high-visibility fencing will be installed around these woodrat nests to keep workers, construction equipment, and construction materials out of the area where the nests are located.

Mitigation Measure 25. Relocation of Nest Materials. If avoidance of occupied nests is not feasible, the woodrats will be evicted from their nests prior to the removal of the nests and onset of ground-disturbing activities to avoid injury or mortality of the woodrats. A qualified biologist will disturb the woodrat nest to the degree that all woodrats leave the nest and seek refuge outside of the project activity area. Subsequently, the nest sticks will be relocated; these materials will be piled at the base of a nearby tree or shrub outside of the impact area. The spacing between relocated nests will not be less than 20 ft, unless a qualified biologist has determined that the habitat can support higher densities of nests.

6.2.6 Impacts on Nonbreeding Special-Status Animals (Less than Significant)

The monarch butterfly, American peregrine falcon, pallid bat, Townsend's big-eared bat, northern harrier, and mountain lion may occur in the BSA as occasional foragers, visitors, migrants, or transients, but are not expected to breed (or roost, in the case of the two bat species) in the BSA due to a lack of suitable habitat, or to occur in the BSA frequently or in large numbers. Project construction would permanently alter the extent of foraging and dispersal habitat for these species in the BSA. However, the loss or conversion of this habitat would affect only a very small proportion of regionally available habitat for these species and would not adversely affect local or regional populations of these species. This loss of potential foraging or dispersal habitat would not rise to the CEQA standard of having a *substantial* adverse effect, and this impact would not constitute a significant impact on these species or their habitat under CEQA. Individuals of these species could potentially be disturbed if present in or adjacent to the project site during construction, but no injury or mortality of these species will occur, and disturbance of foraging or dispersing individuals of these species would be a less-than-significant impact.

6.2.7 Impacts on the San Francisco Common Yellowthroat, Yellow Warbler, and Raptors, Including the White-tailed Kite (Less than Significant)

The San Francisco common yellowthroat, yellow warbler, and white-tailed kite, all of which are considered special-status species, may nest and forage in the BSA. In addition, other raptors, such as the red-tailed hawk, red-shouldered hawk, and Cooper's hawk, could potentially nest on the project site and are identified as Unique Species in the Half Moon Bay Zoning Code. These species are assessed together because the impacts of the project on these species would be similar.

Heavy ground disturbance, noise, and vibrations caused by project development in the BSA could disturb nesting, foraging, or roosting individuals of these species, causing them to move away from impact areas. Although adult birds are not expected to be killed or injured, as they could easily fly from the impact area prior to such effects occurring, eggs or young in nests could be lost. In addition, construction disturbance during the nesting season (February 1 through August 31, for most species) could result in the incidental loss of eggs or nestlings, either directly through the destruction or disturbance of active nests or indirectly by causing the abandonment of nests.

Based on the extent of suitable habitat within the BSA and typical territory sizes of these species, no more than one or two pairs of raptors (considering all four aforementioned raptor species together) and one to three pairs of the San Francisco common yellowthroat and yellow warbler are expected to nest in the BSA. Therefore, the loss of suitable habitat and the potential loss of active nests potentially resulting from project activities would represent a very small fraction of the regional habitat and populations of these species and would not rise to the CEQA standard of having a *substantial* adverse effect. This type of impact would not be significant under CEQA for the species that could potentially nest in the project site due to the local and regional abundances of these species and/or the low magnitude of the potential impact of the project on these species (i.e., the project is only expected to impact one or two individual pairs of these species, which is not a significant impact to their regional populations). However, all native bird species, including San Francisco common yellowthroats, yellow warblers, and white-tailed kites, are protected from direct take by the MBTA and California Fish and Game Code. In addition, biological resources policies in the updated LCP include Policy 6-64, as follows:

Active Nest Monitoring. Ensure construction and tree removal during nesting seasons (generally from February 1 to August 15) complies with the Migratory Bird Treaty Act, California Fish and Game Code, and other applicable regulations by surveying the project vicinity for active nests, avoiding disturbance if active nests are found by employing exclusion buffers or other methods recommended by a qualified biologist, and monitoring active nests until all young have fledged.

As a result, we recommend the following measures to avoid impacts to nesting birds and to comply with the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code.

Recommended Measure A. Avoidance. To the extent feasible, construction activities will be scheduled to avoid the nesting season. If construction activities are scheduled to take place outside the nesting season, all impacts to nesting birds protected under the MBTA and California Fish and Game Code will be avoided. The nesting season for most birds in San Mateo County extends from February 1 through August 15.

Recommended Measure B. Preconstruction Surveys and Nest Buffers. If it is not possible to schedule construction activities between August 16 and January 31, then preconstruction surveys for nesting birds will be conducted by a qualified ornithologist to ensure that no nests will be disturbed during project implementation. These surveys will be conducted no more than seven days prior to the initiation of construction activities. During this survey, the ornithologist will inspect all trees and other potential nesting habitats (e.g.,

shrubs, California annual grasslands, and buildings) in and immediately adjacent to the impact area for nests. If an active nest is found sufficiently close to work areas to be disturbed by these activities, the ornithologist will determine the extent of a construction-free buffer zone to be established around the nest (typically 300 ft for raptors and 100 ft for other species), to ensure that no nests of species protected by the MBTA and California Fish and Game Code will be disturbed during project implementation.

Recommended Measure C. Inhibition of Nesting. If construction activities will not be initiated until after the start of the nesting season, all potential nesting substrates (e.g., bushes, trees, grasses, and other vegetation) that are scheduled to be removed by the project be removed prior to the start of the nesting season (e.g., prior to February 1). This will preclude the initiation of nests in this vegetation, and prevent the potential delay of the project due to the presence of active nests in these substrates.

6.3 Impacts on Sensitive Communities: 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

6.3.1 Impacts on Riparian Habitat or Other Sensitive Natural Communities (Less than Significant with Mitigation)

Within the BSA, riparian woodland habitat is present along the banks of Pilarcitos Creek and forms a dense, wide thicket that extends up to 200 ft from the banks into the BSA. Also, riparian woodland habitat is present along the banks of the perennial freshwater marsh. The City's Zoning Code and Local Coastal Program includes riparian area and corridors as sensitive habitats. The City of Half Moon Bay Zoning Code defines the Riparian Buffer Zone as being 50 ft from the edge of the riparian canopy or 100 ft from top of bank, whichever is greater (shown on Figure 5). Additionally, all ecological systems associated with drainages (i.e., riparian habitat) and drainage and pond features with bed and bank topography may be regulated by Sections 1600-1616 of the California Fish and Game Code; therefore, the riparian habitat along Pilarcitos Creek and the perennial freshwater marsh may require an LSAA from the CDFW prior to project activities. Also, the riparian habitat along Pilarcitos Creek includes the red willow-arroyo willow vegetation alliance, which is classified as a sensitive vegetation alliance by CDFW. Project impacts to this habitat type could include riparian tree removal, direct loss of habitat around the perennial freshwater marsh, and compaction or understory removal to construct trails or other recreational or educational facilities within the Pilarcitos Creek corridor. Due to the ecological value of riparian habitats, such impacts would be significant.

Indirect impacts to these habitats will be minimized and avoided through compliance with the project SWPPP and MRP, as well as observance of the 50-foot riparian buffer zone. If project activities occur within the Riparian Buffer Zone or in riparian habitat, as allowed by the Half Moon Bay LCP, the project will mitigate impacts to riparian habitat and sensitive natural communities by implementing the following mitigation measures:

Mitigation Measure 26. Avoidance of Riparian Habitat. All riparian habitat and the 50-foot riparian buffer area to be avoided will be shown on project design plansets, and prior to project activities, these areas will be protected with high-visibility fencing. If a trail or similar facility will be installed within the riparian corridor of Pilarcitos Creek, trees to be avoided will be clearly marked for retention. The project will also comply with the MRP and General Construction permit to prevent increases in peak flow, erosion, or reduction in water quality for downslope waters, which will prevent stream downcutting, riparian bank erosion, or other downstream impacts. If riparian vegetation is impacted, then Mitigation Measure 27 and/or 28 will be implemented.

Mitigation Measure 27. Pruning of Riparian Trees. If project activities require pruning of riparian trees or shrubs, a certified arborist will be retained to perform any necessary pruning to minimize harm to vegetation, avoid injury leading to tree death for trees intended to be retained, and ensure rapid regeneration. Pruning will be limited to the minimum area necessary.

Mitigation Measure 28. Riparian Habitat Compensatory Mitigation. If project activities require removal of riparian habitat, the project shall compensate for permanent loss of riparian habitat via preservation, enhancement, and management. Because all riparian habitat within the BSA provides foraging and dispersal habitat for California red-legged frog and San Francisco garter snake, mitigation ratios for impacts will be 3:1 for San Francisco garter snake foraging habitat, and 1:1 for dispersal habitat for both species (see Section 3.2, Mitigation Measure 5). Mitigation can include onsite and/or offsite habitat occupied by the frog and snake, and will be preserved and managed in perpetuity (e.g. for loss of riparian habitat surrounding the marsh, the riparian corridor along Pilarcitos Creek could have cape ivy removed and be restored with native vegetation, which will enhance habitat quality for special-status species).

Placement of new development within the Riparian Buffer Zone will be offset at a ratio of 1:1 through the installation of native riparian plantings within the unaffected portions of the buffer. Tree plantings will be native trees, such as arroyo willow, black cottonwood (*Populus trichocarpa*), or box elder (*Acer negundo*). Buffer plantings will be monitored for 5 years and the criteria for success will be 70% survival and no more than 5% cover of Cal-IPC rated moderate and high impact weed species (excluding common annual grasses).

Temporary impacts to riparian habitat shall be restored in place at a 1:1 ratio through re-establishment of original contours along banks, decompaction of compacted soils where necessary, and seeding with a native seed mix and native tree plantings, developed by a qualified restoration ecologist. The native seed mix will contain grass and forb species that occur in the project vicinity. Tree plantings will be native trees, such as arroyo willow, black cottonwood, or box elder. Temporary impact areas will be monitored for 2 years and the criteria for success will be 75% vegetation cover or more compared to pre-project conditions and no more than 5% cover of Cal-IPC-rated moderate and high impact weed species (excluding Cal-IPC-rated annual grasses). Any planting for impacts as described above will require the development of a Riparian Restoration Plan (RRP). The RRP will clearly enumerate project related impacts to the Riparian buffer and riparian woodland, and will be implemented for the mitigation lands. That plan will include, at a minimum, the following information:

- a summary of habitat impacts and the proposed mitigation;
- a description of the location and boundaries of the mitigation site and description of existing site conditions;
- a description of measures to be undertaken to enhance (e.g., through focused management that may include removal of invasive species in adjacent suitable but currently unoccupied habitat) the mitigation site for the focal special-status species;
- a description of measures to transplant individual plants or seeds from the impact area to the mitigation site, if appropriate (which will be determined by a qualified plant or restoration ecologist);
- proposed management activities to maintain high-quality habitat conditions for the focal species;
- a description of habitat and species monitoring measures on the mitigation site, including specific, objective final and performance criteria, monitoring methods, data analysis, reporting requirements, monitoring schedule, etc. At a minimum, performance criteria will include the survival requirements and restrictions on Cal-IPC rated weed infestations described above; and
- contingency measures for mitigation elements that do not meet performance criteria.

The RRP will be prepared by a qualified plant or restoration ecologist. Approval of the RRP by the City will be required before the project impact occurs.

6.3.2 Impacts Caused by Non-Native and Invasive Species (Less than Significant with Mitigation)

Several non-native, invasive plant species occur in the grassland and riparian habitats located throughout the BSA. Invasive species can spread quickly and can be difficult to eradicate. Many non-native, invasive plant species produce seeds that germinate readily following disturbance. Further, disturbed areas are highly susceptible to colonization by non-native, invasive species that occur locally, or whose propagules are transported by personnel, vehicles, and other equipment. Activities such as trampling, equipment staging, and vegetation removal are all factors that would contribute to disturbance. Areas of disturbance could serve as the source for promoting the spread of non-native species, which could degrade the ecological values of riparian habitat and adversely affect native plants and wildlife that occur there. Invasive species can have an adverse effect on native species and habitats in several ways, including by altering nutrient cycles, fire frequency and/or intensity, and hydrologic cycles; by creating changes in sediment deposition and erosion; by dominating habitats and displacing native species; by hybridizing with native species; and by promoting non-native animal species (Bossard et al. 2000).

Invasive species, such as French broom, Himalayan blackberry, cape ivy, and poison hemlock are already present within and adjacent to riparian habitats. However, project activities near existing riparian habitat could cause them to spread further into previously unoccupied areas within the riparian and grassland habitats.

Therefore, this impact is considered significant. Implementation of the following mitigation measure will reduce potential weed-related impacts on sensitive habitats and the species they support to a less-than-significant level.

Mitigation Measure 29. Invasive Species Best Management Practices (BMPs). The following BMPs will be implemented to limit the spread of invasive species into sensitive habitats:

- All ground disturbing equipment used adjacent to the riparian habitat will be washed (including wheels, tracks, and undercarriages) at a legally operating equipment yard both before and after being used at the site.
- All applicable construction materials used on site, such as straw wattles, mulch, and fill material, will be certified weed free.
- The project will follow a Stormwater Pollution Prevention Plan as per the NPDES *General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities* (Construction General Permit; Water Board Order No. 2009-0009-DWQ) if applicable.
- All disturbed soils will be stabilized and planted with a native seed mix from a local source following construction.
- If excavating, soil and vegetation removed from densely weed-infested areas (for example, dense poison hemlock infestations or cape ivy infestations) will not be used in general soil stockpiles and will not be redistributed as topsoil cover for the newly filled areas. All weed-infested soil will be disposed of off-site at a landfill or buried at least 2.5 ft below final grade.

6.4 Impacts on Wetlands: 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

6.4.1 Impacts on Wetlands and Waters (Less than Significant with Mitigation)

Both Pilarcitos Creek and the perennial freshwater marsh present in the BSA may be subject to the regulatory jurisdiction of the USACE, RWQCB, and CDFW and may require CWA 401/404 permits and a LSAA from the CDFW prior to project activities. Additionally, the Zoning Code and Local Coastal Program includes wetlands as sensitive habitats. The City of Half Moon Bay Zoning Code defines the Wetland Buffer Zone as “one hundred feet, measured from the high water point, except that no buffer is required for man-made ponds and reservoirs used for agriculture”.

Wetlands are relatively scarce regionally, and even small wetland areas make disproportionate contributions to water quality, groundwater recharge, watershed function, and wildlife habitat in the region. Thus, any permanent loss or temporary disturbance of wetland habitat because of the project would be considered significant under CEQA.

Project development also has the potential to cause indirect impacts on jurisdictional waters to changes in water quality. However, construction projects in California causing land disturbances that are equal to 1 ac or greater must comply with State requirements to control the discharge of stormwater pollutants under the NPDES *General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities* (Construction General Permit; Water Board Order No. 2009-0009-DWQ). Prior to the start of construction/demolition, a Notice of Intent must be filed with the State Water Board describing the project. A SWPPP must be developed and maintained during the project and it must include the use of BMPs to protect water quality until the site is stabilized. Standard permit conditions under the Construction General Permit require that the applicant utilize various measures including: on-site sediment control best management practices, damp street sweeping, temporary cover of disturbed land surfaces to control erosion during construction, and utilization of stabilized construction entrances and/or wash racks, among other factors.

A list of example BMPs include:

- Work areas that are temporarily impacted will be restored with respect to pre-existing contours and conditions, to the extent feasible, upon completion of work. Restoration work including re-vegetation and soil stabilization will be evaluated upon completion of work and performed, as needed.
- Store, handle, and dispose of construction materials and wastes properly, so as to prevent their contact with stormwater.
- Control and prevent the discharge of all potential pollutants, including solid wastes, paints, concrete, petroleum products, chemicals, wash water or sediment and non-stormwater discharges to storm drains and water courses.
- Avoid cleaning, fueling, or maintaining vehicles on site, except in a designated area in which run-off is contained and treated.
- Perform clearing and earth moving activities during dry weather to the maximum extent practical.
- Remove spoils promptly and avoid stockpiling of fill materials when rain is forecast. Cover soil stockpiles and other materials with a tarp or other waterproof material during qualifying rain events.
- Trash and construction related solid wastes must be deposited into a covered receptacle to prevent contamination and dispersal by wind.
- In the event of rain, all grading work is to cease immediately.
- Implement an erosion control plan during the wet season (October 15 through April 15), including, at a minimum, the following:
 - During the rainy season, all paved areas will be kept clear of earth material and debris.
 - Inlet protection will be installed at open inlets to prevent sediment from entering the storm drain system.
 - Straw rolls will be placed at the toe of slopes, and along the down slope perimeter of the project area.

- The integrity and effectiveness of construction fencing and erosion control measures will be inspected on a daily basis. Corrective actions and repairs will be carried out immediately for fence breaches and ineffective BMPs.

A hazardous spill plan will be developed prior to construction of any equipment yards or similar development on the parcel. The plan will describe what actions will be taken in the event of a spill. The plan will also incorporate preventative measures to be implemented, such as vehicle and equipment staging, cleaning, maintenance, and refueling; and contaminant (including fuel) management and storage. In the event of a contaminant spill, work at the site will immediately cease until the contractor has contained, and mitigated the spill. The contractor will immediately prevent further contamination and notify appropriate authorities, and mitigate damage as appropriate. Adequate spill containment materials, such as oil diapers and hydrocarbon cleanup kits, shall be available on site at all times. Containers for storage, transportation, and disposal of contaminated absorbent materials will be provided in the project area.

In many Bay Area counties, including San Mateo County, projects may also have to comply with the *California Regional Water Quality Control Board, San Francisco Bay Region, Municipal Regional Stormwater NPDES Permit (MRP)* (Water Board Order No. R2-2015-0049). This MRP requires that all projects that meet certain criteria must implement BMPs and incorporate Low Impact Development practices into the design to prevent stormwater runoff pollution, promote infiltration, and hold/slow down the volume of water coming from a site after construction has been completed. To meet these permit and policy requirements, projects must incorporate the use of green roofs, impervious surfaces, tree planters, grassy swales, bioretention and/or detention basins, among other factors. These same features will be used to treat any stormwater that flows to the riverine habitat during large storm events. The perennial freshwater marsh wetland is protected from indirect water quality impacts by the constructed berms for the impoundment. Thus, impacts on water quality would be reduced to a level of less-than-significant.

The project does not proposed to impact wetlands directly by filling or grading, and there is no vegetation removal proposed within the wetlands on-site. Temporary impacts due to construction access or staging are also not proposed. However, in the absence of measures to ensure that accidental impacts do not occur, it is possible that construction equipment could impact wetlands inadvertently. Implementation of the following mitigation measure will ensure that no such impacts occur, reducing impacts due to permanent or temporary disturbance of wetlands to a less-than-significant level.

6.5 Mitigation Measure 29. Avoidance of Wetlands and Waters. All wetland habitat within 100 ft of project impact areas will be shown on project design plansets, and prior to project activities, these areas will be protected with high-visibility ESA fencing. Impacts on Wildlife Movement: 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

6.5.1 Impacts on Wildlife Movement: (Less than Significant with Mitigation)

For many species, the landscape in the BSA is a mosaic of suitable and unsuitable habitat types. Environmental corridors are segments of land that provide a link between these different habitats while also providing cover. Development that fragments natural habitats (i.e., breaks them into smaller, disjunct pieces) can have a twofold impact on wildlife: first, as habitat patches become smaller they are unable to support as many individuals (patch size); and second, the area between habitat patches may be unsuitable for wildlife species to traverse (connectivity).

The BSA is situated adjacent to a housing development on its western border, SR 92 on its northern border, and a maintenance yard at its eastern end. This adjacent development currently restricts wildlife movement to and from habitats to the north, west, and east of the BSA. Thus, the study likely does not function as a high-quality movement corridor for most species, particularly special-status species. However, because Pilarcitos Creek runs along its southern border, wildlife are able to disperse into the BSA along this riparian corridor. Wildlife dispersing into or through the BSA are currently able to move between Pilarcitos Creek and the perennial freshwater marsh in the northwestern section of the BSA. Thus, any development of the intervening annual grassland between Pilarcitos Creek and the perennial freshwater marsh would result in isolating the marsh. For example, this isolation would most likely impact any California red-legged frog population currently utilizing the marsh as breeding habitat by restricting the species' ability to disperse to and from the marsh to other habitat patches for this species in the region connected by the creek (see Section 6.4.2 above). Therefore, any project activity that isolates the perennial marsh from Pilarcitos Creek would be considered significant under CEQA. However, implementation of Mitigation Measures 4 and 5 for California red-legged frogs and San Francisco garter snakes would reduce impacts on these and other species currently using the perennial marsh to a less-than significant level. Because the project does not propose to impact Pilarcitos Creek and will have little impact, if any, on the riparian habitat and associated buffer, wildlife will be able to continue moving through the site along the creek, and the project will not result in significant impacts to wildlife movement along the creek.

6.6 Impacts due to Conflicts with Local Policies: Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance

6.6.1 Impacts to Heritage Trees per Municipal Code Section 7.40 (Less than Significant with Mitigation)

Per City of Half Moon Bay Municipal Code Section 7.40, Heritage Trees, a permit from the City Manager or his or her designee and payment of a fee are required for the removal of any trees which meets the definition of heritage tree, as defined in Section 3.4.2 above.

The BSA contains trees that likely meet the definition of a Heritage Tree. Because these trees are protected by the City of Half Moon Bay's heritage tree ordinance, their removal would meet the threshold of having a substantial adverse effect, and would be considered potentially significant under CEQA. Implementation of the following mitigation measure will reduce this impact to a less-than-significant level.

Mitigation Measure 30. During detailed design of the project, removal of trees protected by the City heritage tree ordinance will be avoided and minimized to the extent feasible. If tree removal is necessary, it is recommended that a certified arborist conduct a tree survey to determine the number and health of heritage trees within the developed habitat of the BSA. Where removal on trees cannot be avoided, the project proponent will comply with the standards of the City heritage tree ordinance, including the planting of replacement trees where feasible and approval from the City Manager.

6.7 Impact due to Conflicts with an Adopted Habitat Conservation Plan: Conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan (No Impact)

The BSA is not located within an area covered by an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. Therefore, the project would not conflict with any such plans.

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Personal Communications

John Doughty of the City of Half Moon Bay in an email on July 6, 2018 to, and a conversation on August 27, 2018 with, Jeff Wilkinson of H. T. Harvey & Associates.

Appendix A. Plants Observed

Family	Scientific Name	Common Name	Wetland Indicator Status
Agavaceae	<i>Chlorogalum pomeridianum</i>	soap plant	UPL
Anacardiaceae	<i>Toxicodendron diversilobum</i>	poison oak	FAC
Apiaceae	<i>Conium maculatum</i>	poison hemlock	FAC
	<i>Hydrocotyle verticillata</i>	whorled marsh-pennywort	OBL
	<i>Torilis arvensis</i>	field hedge parsley	UPL
Araceae	<i>Lemna</i> sp.	duckweed	OBL
Araliaceae	<i>Hedera helix</i>	English ivy	FACU
Asteraceae	<i>Arctotheca prostrata</i>	creeping capeweed	UPL
	<i>Baccharis pilularis</i>	coyote brush	UPL
	<i>Carduus pycnocephalus</i>	Italian thistle	UPL
	<i>Cirsium vulgare</i>	bull thistle	FACU
	<i>Deinandra corymbosa</i>	coastal tarweed	UPL
	<i>Delairea odorata</i>	cape ivy	UPL
	<i>Helminthotheca echioides</i>	bristly ox-tongue	FAC
	<i>Lactuca serriola</i>	prickly lettuce	FACU
	<i>Madia sativa</i>	Chile tarweed	UPL
	<i>Silybum marinum</i>	milk thistle	UPL
Azollaceae	<i>Azolla filiculoides</i>	mosquito fern	OBL
Betulaceae	<i>Alnus rubra</i>	red alder	FAC
Brassicaceae	<i>Brassica nigra</i>	black mustard	UPL
	<i>Hirschfeldia incana</i>	Mediterranean hoary mustard	UPL
	<i>Raphanus sativus</i>	wild radish	UPL
Caryophyllaceae	<i>Silene gallica</i>	windmill pink	UPL
Cupressaceae	<i>Sequoia sempervirens</i>	coast redwood	UPL
Cyperaceae	<i>Carex barbarae</i>	Santa Barbara sedge	FAC
	<i>Carex densa</i>	dense sedge	OBL
	<i>Cyperus eragrostis</i>	tall flatsedge	FACW
Equisetaceae	<i>Equisetum arvense</i>	common horsetail	FAC
Fabaceae	<i>Acacia dealbata</i>	silver wattle	UPL
	<i>Genista monspessulana</i>	French broom	UPL
	<i>Lotus corniculatus</i>	bird's foot trefoil	FAC

Family	Scientific Name	Common Name	Wetland Indicator Status
	<i>Lupinus arboreus</i>	coastal bush lupine	UPL
	<i>Trifolium angustifolium</i>	narrow leaved clover	UPL
	<i>Vicia villosa</i>	hairy vetch	UPL
Fagaceae	<i>Quercus agrifolia</i>	coast live oak	UPL
Junaceae	<i>Juncus effusus</i>	bog rush	FACW
	<i>Juncus patens</i>	common rush	FACW
	<i>Juncus xiphioides</i>	iris leaved rush	OBL
Lamiaceae	<i>Stachys bullata</i>	California hedge nettle	UPL
Linaceae	<i>Linum bienne</i>	narrow leaved flax	UPL
Myrtaceae	<i>Eucalyptus globulus</i>	blue gum	UPL
Pinaceae	<i>Hesperocyparis macrocarpa</i>	Monterey cypress	UPL
	<i>Pinus radiata</i>	Monterey pine	UPL
	<i>Pseudotsuga menziesii</i>	Douglas fir	FACU
Plataginaceae	<i>Plantago coronopus</i>	cutleaf plantain	FAC
Poaceae	<i>Agoseris stolonifera</i>	creeping bentgrass	FAC
	<i>Aira caryophyllea</i>	silvery hairgrass	FACU
	<i>Avena</i> sp.	wild oats	UPL
	<i>Briza maxima</i>	rattlesnake grass	UPL
	<i>Briza minor</i>	little quaking grass	FAC
	<i>Bromus diandrus</i>	ripgut brome	UPL
	<i>Bromus hordeaceus</i>	soft chess	FACU
	<i>Cortaderia jubata</i>	Pampas grass	FACU
	<i>Cynosurus echinatus</i>	dogtail grass	UPL
	<i>Festuca perenne</i>	Italian ryegrass	FAC
	<i>Holcus lanatus</i>	velvet grass	FAC
	<i>Hordeum murinum</i>	meadow barley	FAC
	<i>Polypogon monspeliensis</i>	rabbitsfoot grass	FACW
Polygonaceae	<i>Rumex acetosella</i>	sheep sorrel	FACU
	<i>Rumex crispus</i>	curly dock	FAC
Primulaceae	<i>Lysimachia arvensis</i>	scarlet pimpernel	FAC
Rosaceae	<i>Cotoneaster pannosus</i>	silverleaf cotoneaster	UPL
	<i>Rubus armeniacus</i>	Himalayan blackberry	FAC
	<i>Rubus ursinus</i>	California blackberry	FACU
Salicaceae	<i>Salix laevigata</i>	red willow	FACW
	<i>Salix lasiandra</i>	Pacific willow	FACW

Family	Scientific Name	Common Name	Wetland Indicator Status
	<i>Salix lasiolepis</i>	arroyo willow	FACW
Typhaceae	<i>Typha latifolia</i>	common cattail	OBL
Urticaceae	<i>Urtica dioica</i> ssp. <i>dioica</i>	stinging nettle	FAC

Appendix B. Special-Status Plants Considered for Potential Occurrence

Name	Status ¹	General Habitat Description	Potential for occurrence in the BSA ²
Federal or State Endangered, Threatened, or Candidate Species			
San Mateo thornmint (<i>Acanthomintha duttonii</i>)	FE, SE, 1B.1	Annual herb. Occurs on serpentine in chaparral, valley and foothill grassland. Blooms April – June.	Absent. There is no suitable habitat present within the BSA due to the absence of serpentine substrate. Also, this species is highly restricted in distribution and is known from only two extant natural occurrences and one introduced population in San Mateo county. Therefore, this species is determined to be absent from the BSA.
Fountain thistle (<i>Cirsium fontinale</i> var. <i>fontinale</i>)	FE, SE, 1B.1	Perennial herb. Occurs in serpentine seeps in chaparral openings and valley and foothill grassland. Blooms June – October.	Absent. There is no suitable habitat for this species within the BSA due to lack of serpentine seeps in the BSA. Known only from the Crystal Springs Reservoir area within the Golden Gate National Recreation Area. Therefore, this species is determined to be absent from the BSA.
San Mateo woolly sunflower (<i>Eriophyllum latilobum</i>)	FE, SE, 1B.1	Perennial herb. Occurs on serpentine in cismontane woodland, often on roadcuts. Blooms May – June.	Absent. There is no suitable habitat for this species within the BSA due to lack of serpentine substrate. Also, this species is highly restricted in distribution and is known only from the Crystal Springs Reservoir area within the Golden Gate National Recreation Area. Therefore, this species is determined to be absent from the BSA.
Marin western flax (<i>Hesperolinon congestum</i>)	FT, CT, 1B.1	Annual herb. Occurs on serpentine substrate in chaparral and valley and foothill grassland. Blooms April – July.	Absent. No suitable habitat is present within the BSA due to lack of serpentine substrate. Known only from the Crystal Springs Reservoir area. Therefore, this species is determined to be absent from the BSA.
Coast yellow leptosiphon (<i>Leptosiphon croceus</i>)	SC; 1B.1	Annual herb. Occurs in coastal bluff scrub and coastal prairie. Blooms April – May.	Absent. There is no coastal bluff or scrub habitat present within the BSA. Also, this species is highly restricted in distribution and is known only from one population in Moss Beach. Therefore, this species is determined to be absent from the BSA.

Name	Status ¹	General Habitat Description	Potential for occurrence in the BSA ²
White-rayed pentachaeta (<i>Pentachaeta bellidiflora</i>)	FE, CE, 1B.1	Annual herb. Occurs on serpentine substrate on cismontane woodland and valley and foothill grassland. Blooms March – May.	Absent. There is no suitable habitat for this species within the BSA due to lack of serpentine substrate. Also, this species is highly restricted in distribution and is Known only from the Crystal Springs Reservoir area and near Edgewood Park and Natural Preserve. Therefore, this species is determined to be absent from the BSA.
Hickman's cinquefoil (<i>Potentilla hickmanii</i>)	FE, SE, 1B.1, LCP	Perennial herb. Occurs in marshy areas within coastal bluff scrub and closed-cone coniferous forest. Also, vernal mesic meadows and seeps, and freshwater marshes and swamps. Blooms April – August	Absent. There is marginal freshwater marsh habitat for this species within the BSA. However, no suitable vegetation association is present. Additionally, this species is only known locally from Rancho Corral de Tierra area of the Golden Gate National Recreation Area. Therefore, this species is determined to be absent from the BSA.
CRPR Species and Locally Rare Species			
Blasdale's bent grass (<i>Agrostis blasdalei</i>)	1B.2	Perennial grass. Occurs in coastal scrub, dunes, and prairie. Blooms May – July.	Absent. There is no suitable coastal scrub, dune, or prairie habitat for this species within the BSA. Known only from coastal sites in southern San Mateo County. Therefore, this species is determined to be absent from the BSA.
Franciscan onion (<i>Allium peninsulare</i> var. <i>franciscanum</i>)	1B.2	Perennial herb. Occurs on hillsides in cismontane woodland and valley and foothill grassland with serpentine, clay, and volcanic soils. Blooms May – June.	Absent. There is no suitable habitat for this species within the BSA due to the lack of suitable soils. Only known locally from the Crystal Springs Reservoir area within the Golden Gate National Recreation Area. Therefore, this species is determined to be absent from the BSA.
Bent-flowered fiddleneck (<i>Amsinckia lunaris</i>)	1B.2	Annual herb. Coastal bluff scrub, cismontane woodland and valley and foothill grassland, often on serpentine soils. Blooms March – June.	Absent. There is no suitable habitat for this species within the BSA due to lack of serpentine soils. Only known locally from the Crystal Springs Reservoir area within the Golden Gate National Recreation Area. Additionally, there are no records of coastal occurrences. Therefore, this species is determined to be absent from the BSA.

Name	Status ¹	General Habitat Description	Potential for occurrence in the BSA ²
California androsace (<i>Androsace elongata</i> ssp. <i>acuta</i>)	4.2	Annual herb. Occurs on dry grassy slopes in chaparral, foothill woodland, northern coastal scrub, and coastal sage scrub. Blooms February – April.	Absent. There is no suitable chaparral habitat for this species within the BSA. Additionally, there are no recent records of occurrences in San Mateo County. Therefore, this species is determined to be absent from the BSA.
Coast rock cress (<i>Arabis blepharophylla</i>)	4.3; LCP	Perennial herb. Occurs in broadleaved upland forest, coastal bluff scrub, coastal prairie, and coastal scrub. Blooms February – May.	Absent. There is no suitable forest, scrub, or prairie habitat for this species within the BSA. Only known locally from a coastal site in San Mateo County and from the Rancho Corral de Tierra area of the Golden Gate National Recreation Area. Therefore, this species is determined to be absent from the BSA.
Santa Cruz manzanita (<i>Arctostaphylos andersonii</i>)	1B.2	Occurs in openings and edges of broadleaved upland forest, chaparral, and North Coast coniferous forest. Blooms November – April.	Absent. There is no suitable forest or chaparral habitat for this species within the BSA. Vegetative material would have been detectable during the June 2018 site visit. Therefore, this species is determined to be absent from the BSA.
Montara manzanita (<i>Arctostaphylos montarensis</i>)	1B.2, LCP	Evergreen shrub. Occurs in maritime chaparral and coastal scrub. Blooms January– March.	Absent. There is no suitable chaparral habitat within the BSA. Vegetative material would have been detectable during the June 2018 site visit. Only known locally from higher elevations within the Golden Gate National Recreation Area. Therefore, this species is determined to be absent from the BSA.
Kings Mountain manzanita (<i>Arctostaphylos regismontana</i>)	1B.2	Evergreen shrub. Occurs on granite or sandstone in broadleaved upland forest, chaparral, and North Coast coniferous forest. Blooms January – April.	Absent. There is no suitable granite or sandstone substrate within the BSA. Vegetative material would have been detectable during the June 2018 site visit. Only known locally from higher elevations within open spaces east of Half Moon Bay. Therefore, this species is determined to be absent from the BSA.
Ocean bluff milk-vetch (<i>Astragalus nuttallii</i> var. <i>nuttallii</i>)	4.2	Perennial herb. Occurs in coastal bluff scrub and coastal dunes in rocky or sandy areas. Blooms all year.	Absent. There is no suitable coastal bluff or dune habitat within the BSA. Only known locally from several coastal sites in San Mateo County and the Presidio in San Francisco. Therefore, this species is determined to be absent from the BSA.

Name	Status ¹	General Habitat Description	Potential for occurrence in the BSA ²
Coastal marsh milk-vetch (<i>Astragalus pycnostachyus</i> var. <i>pycnostachyus</i>)	1B.2	Perennial herb. Occurs in coastal salt marshes, seeps and mesic coastal dunes. Blooms April – October.	Absent. There is no salt marsh or coastal dune habitat for this species within the BSA. Only known locally from several coastal sites in San Mateo County. Therefore, this species is determined to be absent from the BSA.
Brewer's calandrinia (<i>Calandrinia breweri</i>)	4.2	Annual herb. Occurs in chaparral and coastal scrub. Blooms January – June.	Absent. There is no chaparral or coastal scrub habitat for this species within the BSA. Only known locally from the Crystal Springs Reservoir area. Therefore, this species is determined to be absent from the BSA.
Oakland star-tulip (<i>Calochortus umbellatus</i>)	4.2	Perennial herb. Occurs in open chaparral or woodland, usually on serpentine substrate. Blooms March – May.	Absent. There is no suitable chaparral or woodland habitat for this species within the BSA. Only known locally from several locations in the Santa Cruz Mountains. Therefore, this species is determined to be absent from the BSA.
Johnny-nip (<i>Castilleja ambigua</i> var. <i>ambigua</i>)	4.2	Annual herb. Occurs in mesic areas in coastal bluffs, coastal prairie, coastal scrub, and valley and foothill grassland. Also occurs in marshes and vernal pools. Blooms May – August.	Absent. There is marginal mesic grassland habitat present within the BSA. However, the grassland habitat is dominated by ruderal species. Additionally, no suitable vegetation association is present. Known locally from several coastal locations in San Mateo County. Therefore, this species is determined to be absent from the BSA.
Pappose tarplant (<i>Centromadia parryi</i> ssp. <i>parryi</i>)	1B.2	Annual herb. Occurs in coastal prairie, meadows and seeps coastal salt marshes and swamps and vernal mesic valley and foothill grassland often in alkaline soils. Blooms May – November.	Absent. There is no suitable mesic alkaline habitat present within the BSA. Only known locally from the Rancho Corral de Tierra area of the Golden Gate National Recreation Area. Therefore, this species is determined to be absent from the BSA.
San Francisco Bay spineflower (<i>Chorizanthe 4uspidate</i> var. <i>4uspidate</i>)	1B.2	Annual herb. Occurs on sandy soils in coastal bluff scrub, coastal dunes, coastal prairie, and coastal scrub.	Absent. There is no suitable habitat for this species within the BSA due to lack of sandy soils. Known from only one recent occurrence at Thorton State Beach near San Francisco. Therefore, this species is determined to be absent from the BSA.

Name	Status ¹	General Habitat Description	Potential for occurrence in the BSA ²
Franciscan thistle (<i>Cirsium andrewsii</i>)	1B.2	Perennial herb. Occurs on mesic and sometimes serpentine substrates in broadleaved upland forest, coastal bluff scrub, coastal prairie, and coastal scrub. Blooms March – July.	Absent. There is no suitable habitat for this species within the BSA, due to the lack of fserpentinitic bedrock geology. This species is presumed extirpated from San Mateo County. Therefore, this species is determined to be absent from the BSA.
San Francisco collinsia (<i>Collinsia multicolor</i>)	1B.2	Annual herb. Occurs in moist, shady areas in closed cone coniferous forest and coastal scrub. Blooms March – May.	Absent. There is no suitable forest or coastal scrub habitat for this species within the BSA. There are no records of occurrences along the San Mateo coast. Therefore, this species is determined to be absent from the BSA.
Clustered lady's slipper (<i>Cypripedium fasciculatum</i>)	4.2	Perennial herb. Occurs in mesic, shady areas of conifer forests. Blooms March – July.	Absent. Known from several locations in the Santa Cruz Mountains, but there is no suitable habitat for this species within the BSA, so this species is considered absent from the BSA.
Mountain lady's slipper (<i>Cypripedium montanum</i>)	4.2	Perennial herb. Occurs in moist areas and dry slopes in mixed evergreen and conifer forests. Blooms March – June.	Absent. Known from one non-specific location near La Honda in San Mateo County, but there is no suitable habitat for this species within the BSA, so this species is considered absent from the BSA.
Western leatherwood (<i>Dirca occidentalis</i>)	1B.2	Deciduous shrub. Occurs on mesic sites in broadleaved upland forest, closed-cone coniferous forest, chaparral, cismontane woodland, North Coast coniferous forest, riparian scrub, and riparian woodland. Blooms January – April.	Absent. There is marginal habitat for this species within the BSA, and this species is known from higher elevation locations in the Santa Cruz Mountains in San Mateo County. Vegetative material would have been detectable during the June 2018 site visit and was not observed, so this species is considered absent from the BSA.
California bottle-brush (<i>Elymus californicus</i>)	4.3	Perennial grass. Occurs in broadleaved upland forest, cismontane woodland, north coast coniferous forest, and riparian woodland. Blooms May – November.	Absent. There is marginal habitat for this species within the BSA. Known from the Rancho Corral de Tierra area of the Golden Gate National Recreation Area. However, there are no records of occurrences along the San Mateo coast, so this species is considered absent from the BSA.

Name	Status ¹	General Habitat Description	Potential for occurrence in the BSA ²
San Francisco wallflower (<i>Erysimum franciscanum</i>)	4.2; LCP	Perennial herb. Occurs on serpentine and granite substrate in coastal strand, northern coastal scrub, and valley grassland. Blooms March – June.	Absent. Known from the Crystal Springs Reservoir area. No suitable habitat for this species is present within the BSA due to lack of bedrock geology, so this species is considered absent from the BSA.
Beach strawberry (<i>Fragaria chiloensis</i>)	LCP	Perennial herb. Occurs near the coast in sandy soils often in road cuts, on coastal bluffs, and on cliffs. Blooms February – March.	Absent. There is no suitable habitat present within the BSA due to lack of sandy soils. This species would have been detectable during the June 2018 site visit and was not observed, so this species is considered absent from the BSA.
Stinkbells (<i>Fritillaria agrestis</i>)	4.2	Perennial herb. Occurs in clay soils on banks, depressions, and slopes in chaparral, valley grassland, and foothill woodland. Sometimes occurs in serpentine soils. Blooms March – June.	Absent. Known only from Año Nuevo State Park in southern San Mateo County. There is no suitable habitat present within the BSA, so this species is considered absent from the BSA.
Hillsborough chocolate lily (<i>Fritillaria biflora</i> var. <i>Ineziana</i>)	1B.1	Perennial herb. Occurs on serpentine in cismontane woodland and valley and foothill grassland. Blooms March – April.	Absent. Known only from the Hillsborough area of San Mateo County. There is no suitable habitat for this species in the BSA due to lack of serpentine substrate, so this species is considered absent from the BSA.
Marin checker lily (<i>Fritillaria lanceolata</i> var. <i>tristulis</i>)	1B.1	Perennial herb. Occurs in coastal prairie, coastal scrub, and coastal bluff scrub. Blooms February –May.	Absent. Known mainly from Marin County. There is one non-specific occurrence in Rancho Corral de Tierra area of the Golden Gate National Recreation Area. There is no suitable habitat present within the BSA, so this species is considered absent from the BSA.
Fragrant fritillary (<i>Fritillaria liliacea</i>)	1B.2	Perennial herb. Occurs in cismontane woodland, coastal prairie, coastal scrub, valley and foothill grassland near the coast, on heavy clay and serpentine soils. Blooms February – April.	Absent. Known from the Crystal Springs area. There is no suitable habitat for this species within the BSA due to a lack of bedrock geology, so this species is considered absent from the BSA.

Name	Status ¹	General Habitat Description	Potential for occurrence in the BSA ²
San Francisco gumplant (<i>Grindelia hirsutula</i> var. <i>maritima</i>)	1B.2	Perennial herb. Occurs on serpentine or sandy substrates in coastal bluff scrub, coastal scrub, and valley and foothill grassland. Blooms August – September.	Absent. Known from Mc Nee State Park area. There is no suitable habitat present within the BSA due to lack of sandy or serpentine substrates, so this species is absent from the BSA.
Short-leaved evax (<i>Hesperevax sparsiflora</i> var. <i>brevifolia</i>)	2.2	Annual herb. Occurs on sandy substrates in coastal bluff scrub and coastal dunes. Blooms March – June.	Absent. There is one non-specific occurrence from Rancho Corral de Tierra area of the Golden Gate National Recreation Area. There is no suitable habitat within the BSA due to the lack of serpentine or sandy substrates, so this species is absent from the BSA.
Kellogg's horkelia <i>Horkelia Tuneate</i> subsp. <i>sericea</i>)	1B.1	Annual herb. Occurs on sandy substrate in closed-cone coniferous forest, chaparral, coastal dunes, old sand hills, coastal scrub. Blooms April – September.	Absent. Known from near Rancho Corral de Tierra area of the Golden Gate National Recreation Area. There is no suitable habitat present within the BSA due to lack of sandy substrate, so this species is absent from the BSA.
B-7 Point Reyes horkelia (<i>Horkelia marinensis</i>)	1B.2	Perennial herb. Occurs on sandy substrates in coastal dunes, coastal prairie, and coastal scrub. Blooms May – September.	Absent. Known mainly from coastal areas in Santa Cruz County. There is one non-specific occurrence from Rancho Corral de Tierra area of the Golden Gate National Recreation Area. There is no suitable habitat present within the BSA due to lack of sandy substrate, so this species is absent from the BSA.
Harlequin lotus (<i>Hosackia gracilis</i>)	4.2	Perennial herb. Occurs in marshes, shores, ponds, ditches, wet areas in meadows in mixed evergreen forest, northern coastal scrub, and closed-cone pine Forest. Blooms March – July.	Possible. There is suitable habitat present within the BSA. Known from several locations along the San Mateo coast and the Crystal Springs Reservoir area. Could potentially occur in the riparian habitat along Pilarcitos Creek
Coast iris (<i>Iris longipetala</i>)	4.2	Perennial herb. Occurs in seeps and mesic areas in coastal prairie and lower montane coniferous forest.	Absent. Known from the Crystal Springs Reservoir area. There is no suitable habitat present within the BSA, so this species is absent from the BSA.

Name	Status ¹	General Habitat Description	Potential for occurrence in the BSA ²
perennial goldfields (<i>Lasthenia californica</i> ssp. <i>Macrantha</i>)	1B.2	Perennial herb. Occurs in coastal dunes, coastal bluff scrub, coastal scrub, and grasslands along immediate coast. Blooms January – November.	Absent. Known from nearby open spaces along the San Mateo County Coast, but there is no suitable habitat present within the BSA, so this species is absent from the BSA.
Bristly leptosiphon (<i>Leptosiphon acicularis</i>)	4.2	Annual herb. Occurs in grassy areas in coastal prairie, chaparral, and foothill woodland. Blooms April – May.	Absent. Known from the Crystal Springs Reservoir area, but there is no suitable habitat present within the BSA, so this species is absent from the BSA.
Serpentine leptosiphon (<i>Leptosiphon ambiguous</i>)	4.2	Annual herb. Occurs in grassy areas on serpentine soils. Blooms April – May.	Absent. There is no suitable habitat present within the BSA due to lack of serpentine substrate. There are no records of occurrences along the San Mateo coast. This species is absent from the BSA.
Large-flowered leptosiphon (<i>Leptosiphon grandiflorus</i>)	4.2	Annual herb. Occurs in open grassy flats in coastal strand, foothill woodland, northern coastal scrub, coastal sage scrub, closed-cone pine forest, valley grassland, and coastal prairie, generally in sandy soil.	Absent. There is no suitable habitat present within the BSA, and there are no recent records occurrences in San Mateo County. Mainly known from Henry Coe State Park and the Mt. Hamilton area. This species is absent from the BSA.
Rose linanthus (<i>Leptosiphon rosaceus</i>)	1B.1	Annual herb. Occurs in coastal bluff scrub. Blooms April – June.	Absent. Known from the Pillar Point Bluff area, but there is no suitable habitat present within the BSA, so this species is absent from the BSA.
Crystal Springs lessingia (<i>Lessingia arachnoidea</i>)	1B.2	Annual herb. Occurs on serpentine in cismontane woodland, coastal scrub, and valley and foothill grassland. Blooms July – October.	Absent. Known from the Crystal Springs Reservoir area. There is no suitable habitat for this species within the BSA due to lack of serpentine substrate, so this species is absent from the BSA.

Name	Status ¹	General Habitat Description	Potential for occurrence in the BSA ²
Woolly-headed lessingia (<i>Lessingia hololeuca</i>)	3	Annual herb. Occurs in broadleaved upland forest, coastal scrub, lower montane coniferous forest and valley and foothill grassland on clayey and serpentine substrates. Blooms June – October.	Absent. Known from the Crystal Springs Reservoir area. There is no suitable habitat for this species within the BSA due to lack of serpentine and clayey substrates, so this species is absent from the BSA.
Coast lily (<i>Lilium maritimum</i>)	1B.1	Perennial herb. Occurs in broadleaved upland forest, closed-cone coniferous forest, coastal prairie, coastal scrub, and freshwater marshes and swamps. Blooms May – July.	Absent. Known from Point Reyes National Seashore in Marin County. There is suitable habitat for this species within the BSA. However, this species is presumed extirpated from San Mateo County, so this species is absent from the BSA.
Ornduff's meadowfoam (<i>Limnanthes douglasii</i> var. <i>ornduffii</i>)	1B.2	Annual herb. Occurs in mesic meadows and seeps as well as agricultural fields in coastal prairie. Referred to as yellow meadowfoam in the LCP Blooms. March – May.	Absent. There is marginal habitat present within the BSA. However, this species is highly restricted in distribution and is known only from the Pillar Point Bluff area, so this species is absent from the BSA.
San Mateo tree lupine (<i>Lupinus arboreus</i> var. <i>eximius</i>)	3.2; LCP	Evergreen shrub. Occurs in chaparral and coastal scrub. Referred to as Davy's Bush Lupine in the LCP. Blooms April – July.	Absent. Known from McNee Ranch State Park and Montara mountain. There is no suitable habitat for this species within the BSA, so this species is absent from the BSA.
Indian Valley bush mallow (<i>Malacothamnus aboriginum</i>)	1B.2	Deciduous shrub. Occurs on rocky and often burned areas in chaparral and cismontane woodland. Blooms April – October.	Absent. There is one non-specific occurrence from Rancho Corral de Tierra area of the Golden Gate National Recreation Area. Known mainly from San Benito County. There is no suitable habitat for this species within the BSA due to lack of rocky substrate, so this species is absent from the BSA.
Arcuate bush mallow (<i>Malacothamnus arcuatus</i>)	1B.2	Evergreen shrub. Occurs in chaparral. Blooms April – September.	Absent. Known from the Crystal Springs Reservoir area. There is no suitable habitat for this species within the BSA. Vegetative material would have been detectable during the June 2018 site visit but none was seen. Therefore, this species is absent from the BSA.

Name	Status ¹	General Habitat Description	Potential for occurrence in the BSA ²
Davidson's bush mallow (<i>Malacothamnus davidsonii</i>)	1B.2	Deciduous shrub. Occurs in chaparral, cismontane woodland, coastal scrub, and riparian woodland. Blooms June – January.	Absent. There is marginal habitat present within the BSA. However, this species is known only from locations in the Santa Cruz Mountains, so this species is absent from the BSA.
Hall's bush mallow (<i>Malacothamnus hallii</i>)	1B.2	Evergreen shrub. Occurs in open areas in chaparral and coastal scrub. Blooms May – September.	Absent. There is no suitable chaparral or coastal scrub habitat for this species within the BSA. Vegetative material would have been detectable during the June 2018 site visit. Additionally, this species is only known locally from locations in the Santa Cruz Mountains. Therefore, this species is determined to be absent from the BSA.
Marsh microseris (<i>Microseris paludosa</i>)	1B.2	Perennial herb. Occurs in moist areas in closed-cone coniferous forest, cismontane woodland, coastal scrub and valley and foothill grassland. Blooms April – June.	Absent. There is marginal mesic grassland habitat for this species within the BSA. However, this species is known only from one recent occurrence in San Mateo County, near Pescadero. Therefore, this species is determined to be absent from the BSA.
Elongate copper moss (<i>Mielichhoferia elongata</i>)	4.3	Moss. Occurs in broadleaved upland forest, chaparral, cismontane woodland, coastal scrub, lower montane coniferous forest, meadows and seeps, and subalpine coniferous forest on vernal mesic, acidic metamorphic rock.	Absent. There is no suitable metamorphic rock habitat for this species within the BSA. Known only from one non-specific location in southern San Mateo County. Therefore, this species is determined to be absent from the BSA.
Woodland woolythreads (<i>Monolopia gracilens</i>)	1B.2	Annual herb. Occurs on serpentine substrate in broadleaved upland forest, chaparral, cismontane woodland, north coast coniferous forest and valley and foothill grassland, usually in open areas. Blooms February – July	Absent. There is no suitable habitat for this species within the BSA due to lack of serpentine substrate. Only known locally from locations in the Santa Cruz Mountains. Therefore, this species is determined to be absent from the BSA.

Name	Status ¹	General Habitat Description	Potential for occurrence in the BSA ²
Gairdner's yampah (<i>Perideridia gairdneri</i> ssp. <i>gairdneri</i>)	4.2; LCP	Perennial herb. Occurs in moist soils within broadleaved upland forest, chaparral, coastal prairie, valley and foothill grassland, and vernal pools. Blooms June – October.	Absent. There is marginal mesic grassland habitat for this species within the BSA. However, only known from the Crystal Springs Reservoir area and the Pescadero area. Additionally, no suitable vegetation association is present. Therefore, this species is determined to be absent from the BSA.
Dudley's lousewort (<i>Pedicularis dudleyi</i>)	1B.2	Perennial herb. Occurs in coastal chaparral and coniferous forest. Blooms April – June.	Absent. There is no suitable chaparral and forest habitat for this species within the BSA. Also, this species is known only from several locations in southern San Mateo County. Therefore, this species is determined to be absent from the BSA.
Choris's popcorn-flower (<i>Plagiobothrys chorisianus</i> var. <i>chorisianus</i>)	1B.2	Annual herb. Occurs in moist areas within coastal scrub and chaparral, Blooms March – June.	Absent. There is no suitable coastal scrub habitat for this species within the BSA. Only known locally from coastal scrub habitats along the San Mateo County Coast, including Half Moon Bay. Therefore, this species is determined to be absent from the BSA.
Monterey pine (<i>Pinus radiata</i>)	1B.1, LCP	Perennial evergreen tree. Occurs in Closed-cone coniferous forest and Cismontane woodland. Commonly planted as an ornamental throughout coastal California.	Present as an ornamental. The Monterey pines present within the BSA were planted as part of landscaping and do not naturally occur in the BSA. Only three native stands are known in CA, at Año Nuevo, Cambria, and the Monterey Peninsula. Therefore, native stands of Monterey pine are determined to be absent from the BSA.
Michael's rein orchid (<i>Piperia michaelii</i>)	4.2	Perennial herb. Occurs in coastal bluff scrub, closed-cone coniferous forest, chaparral, cismontane woodland, coastal scrub, and lower montane coniferous forest. Blooms April – June.	Absent. There is no suitable woodland or chaparral habitat for this species within the BSA. Only known from coniferous forest locations in San Mateo County. Therefore, this species is determined to be absent from the BSA.
Oregon polemonium (<i>Polemonium carneum</i>)	2.2	Perennial herb. Occurs in coastal scrub and lower montane coniferous forest. Blooms from April – September	Absent. There is no suitable scrub or forest habitat for this species within the BSA. Only known locally from the Rancho Corral de Tierra area of the Golden Gate National Recreation Area. Therefore, this species is determined to be absent from the BSA.

Name	Status ¹	General Habitat Description	Potential for occurrence in the BSA ²
Lobb's aquatic buttercup (<i>Ranunculus lobbii</i>)	4.2	Annual herb. Occurs in freshwater ponds, wetlands, and vernal pools. Blooms from February – May.	Absent. There is marginal habitat present within the BSA. Additionally, No suitable vegetation association is present. Only known locally from the Crystal Springs Reservoir area. Therefore, this species is determined to be absent from the BSA.
Hoffmann's sanicle (<i>Sanicula hoffmannii</i>)	4.3	Perennial herb. Occurs in broadleaved upland forest, coastal bluff scrub, chaparral, cismontane woodland, coastal scrub, and lower montane coniferous forest. Blooms March – May.	Absent. There is suitable chaparral or woodland habitat present within the BSA. Only known from several locations in southern San Mateo County. Therefore, this species is determined to be absent from the BSA.
Chaparral ragwort (<i>Senecio aphanactis</i>)	2B.2	Annual herb. Occurs in dry, open rocky areas in chaparral, cismontane woodland, and coastal scrub. Also occurs in alkaline flats. Blooms February – May.	Absent. There is no suitable chaparral or woodland habitat for this species within the BSA. Locally, there is only one non-specific occurrence near Purisima Creek Redwoods and Open Space Preserve. Therefore, this species is determined to be absent from the BSA.
San Francisco campion (<i>Silene verecunda</i> ssp. <i>Verecunda</i>)	1B.2, LCP	Perennial herb. Occurs on sandy substrate in coastal bluff scrub, chaparral, coastal prairie, coastal scrub, and valley and foothill grassland. Referred to as Dolores campion in the LCP Blooms February – August.	Absent. There is no suitable habitat for this species within the BSA due to lack of sandy substrate. Only known locally from the higher elevations within the Rancho Corral de Tierra area of the Golden Gate National Recreation Area. Therefore, this species is determined to be absent from the BSA.
Marsh zigadenus (<i>Toxicoscordion fontanum</i>)	4.2	Perennial herb. Occurs in vernal moist areas, marshes, and wetlands, often on serpentine soils in chaparral and mixed evergreen forest. Blooms April – July.	Absent. There is no suitable habitat for this species within the BSA due to lack of serpentine soils. Known from only one location near Crystal Spring Reservoir area. Therefore, this species is determined to be absent from the BSA.
Saline clover (<i>Trifolium hydrophilum</i>)	1B.2	Annual herb. Occurs in salt marshes, mesic sites in valley and foothill grassland, and vernal pools on alkaline soils. Blooms April – June.	Absent. There is no suitable habitat for this species within the BSA due lack of alkaline soils. Additionally, there is only one non-specific occurrence for this species in San Mateo County. Therefore, this species is determined to be absent from the BSA.

Name	Status ¹	General Habitat Description	Potential for occurrence in the BSA ²
San Francisco owl's clover (<i>Triphysaria floribunda</i>)	1B.2	Annual herb. Usually occurs on serpentine substrate in coastal prairie, coastal scrub, valley and foothill grassland. Blooms April – June.	Absent. There is no suitable habitat for this species within the BSA due to lack of serpentine substrate. Only known from the higher elevations within the Rancho Corral de Tierra area of the Golden Gate National Recreation Area. Therefore, this species is determined to be absent from the BSA.
Coastal triquetrella (<i>Triquetrella californica</i>)	1B.2	Moss. Occurs on soil in coastal bluff scrub and coastal scrub.	Absent. There is no suitable coastal scrub habitat present within the BSA. Only known from near Pilarcitos Lake in San Mateo County. Therefore, this species is determined to be absent from the BSA.
Methuselah's beard lichen (<i>Usnea longissima</i>)	4.2	Lichen. Occurs in broadleafed upland forest and North Coast coniferous forest.	Absent. There is no suitable forest habitat present within the BSA. Known from a single occurrence in the Santa Cruz Mountains near Purisima Creek Redwoods Open Space Reserve. Therefore, this species is determined to be absent from the BSA.

¹ Status definitions:

FE = federally listed as endangered.

FT = federally listed as threatened.

SE = state listed as endangered.

ST = state listed as threatened.

SC = State Candidate for listing

LCP = Species identified as rare, threatened or endangered and are located in the San Mateo County Coastal Zone as indicated in the City of Half Moon Bay Local Coastal Plan (1993).

California Rare Plant Rank (CRPR)

1A = plants presumed extirpated in California and either rare or extinct elsewhere.

1B = plants rare, threatened, or endangered in California and elsewhere.

2A = plants presumed extirpated in California, but common elsewhere.

2B = plants rare, threatened, or endangered in California, but more common elsewhere.

3 = plants about which more information is needed—a review list.

4 = plants of limited distribution—a watch list.

Threat code extension

.1 = seriously threatened in California.

.2 = fairly endangered in California.

.3 = not very endangered in California.

² Definitions regarding potential occurrence:

Possible = Species was not observed during the reconnaissance surveys, but suitable habitat is present (habitat type, soils, and elevation), and the species is known to occur in the project vicinity.

Absent = Suitable habitat is not present, or the project site is outside the species' local distribution or elevational range.

Appendix C. Special-Status Animals Considered for Potential Occurrence

Name	Status ¹	General Habitat Description	Potential for Occurrence in the BSA ²
Federal or State Endangered, Threatened, or Candidate Species			
Bay checkerspot butterfly (<i>Euphydryas editha bayensis</i>)	FT	Native grasslands on serpentine soils. Larval host plants are <i>Plantago erecta</i> and/or <i>Castilleja</i> sp.	Absent. No suitable breeding or feeding habitat is present in the BSA. Further, suitable habitat for the species larval host plants, <i>Plantago erecta</i> and/or <i>Castilleja</i> sp., is not present in the BSA. Determined to be absent.
Mission blue butterfly (<i>Plebejus icarioides missionensis</i>)	FE	Coastal chaparral and coastal grasslands. Larval host plant are <i>Lupinus</i> spp.	Absent. No suitable breeding or feeding habitat is present in the BSA. Further, suitable habitat for the species larval host plants, <i>Lupinus</i> spp., is not present in the BSA. Determined to be absent.
Myrtle's silverspot butterfly (<i>Speyeria zerene myrtleae</i>)	FE	Coastal dune and prairie habitat. Larval host plants are violets, typically <i>Viola adunca</i> .	Absent. No suitable breeding or feeding habitat is present in the BSA. Further, suitable habitat for the species larval host plants, violets (typically <i>Viola adunca</i>), is not present in the BSA. Determined to be absent.
Monarch butterfly (<i>Danaus plexippus</i>)	FC	Overwintering roosts along the California coast from Mendocino County south to Baja California. Feed and breed exclusively on plant species in the subfamily Asclepiadoideae.	Possible. No suitable breeding or feeding habitat is present in the BSA due to the absence of milkweeds (<i>Asclepias</i> spp.). No overwintering roosts known in the BSA according to the Western Monarch Count's mapping tool – linked to in the Service's April 29, 2021 "Western Monarch Butterfly Conservation Recommendations" (USFWS 2021b). May occur as an occasional migrant, but not expected to breed or occur commonly/regularly in the BSA.
San Bruno elfin butterfly (<i>Callophrys mossii bayensis</i>)	FE	Coastal mountains near San Francisco Bay in the fog-belt of steep, north-facing slopes. Larval food plant is <i>Sedum spathulifolium</i> .	Absent. The San Bruno elfin butterfly is known only from the San Bruno Mountain, Milagra Ridge, and Montara Mountain in San Mateo County. Further, suitable habitat for the species larval host plant, broadleaf stonecrop (<i>Sedum spathulifolium</i>), a low growing succulent that grows in rocky outcrops on steep north facing slopes, is not present in the BSA. Determined to be absent.
Crotch bumble bee <i>Bombus crotchii</i>	SC	Open grassland and scrub habitats.	Absent. Although the species was historically found throughout the southern two-thirds of California, including the project vicinity, it is not expected to occur on the site due to recent range contractions (The Xerces Society 2018). Therefore, the species is determined to be absent.

Name	Status ¹	General Habitat Description	Potential for Occurrence in the BSA ²
Western bumble bee <i>Bombus occidentalis</i>	SC	Meadows and grasslands with abundant floral resources.	Absent. Although the species was historically found throughout much of central and northern California, including the project vicinity, it is not expected to occur on the site due to recent range contractions (The Xerces Society 2018). Therefore, the species is determined to be absent.
Delta smelt <i>Hypomesus transpacificus</i>	FT, SE	Estuarine systems in the Sacramento-San Joaquin Delta.	Absent. The Delta smelt occurs in estuarine waters in the Sacramento/San Joaquin Delta region of San Francisco Bay. The reach of Pilarcitos Creek within the BSA is considered a freshwater stream. No suitable aquatic habitat is present in the BSA. Determined to be absent.
Longfin smelt <i>Spirinchus thaleichthys</i>	FC, ST	Spawns in fresh water in the upper end of the San Francisco Bay; occurs year-round in the South Bay.	Absent. No suitable aquatic habitat is present in the BSA. The BSA is not associated with the San Francisco Bay habitat for the species within the county. Determined to be absent.
Central California Coast steelhead <i>Oncorhynchus mykiss</i>	FT	Cool streams with suitable spawning habitat and conditions allowing migration between spawning and marine habitats.	Possible. Adult steelhead migrate upstream in winter months, when adequate flows allow passage to upstream areas. This typically occurs between December and March. Eggs are laid in gravelly sections of the streambed, and hatch in spring. Juvenile steelhead remain in the creek system for one to three years before migrating to the ocean. Thus, steelhead can occur in Pilarcitos Creek year-round.
Tidewater goby <i>Eucyclogobius newberryi</i>	FE, CSSC	Brackish water habitats along coast, fairly still but not stagnant water and high oxygen levels.	Absent. The tidewater goby occurs in brackish, tidally influenced waters. The reach of Pilarcitos Creek within the BSA is approximately 1.7 mi upstream of the Pacific Ocean and is considered a freshwater stream. Further, the reach within the BSA lacks shallow lagoons or pools of still, non-stagnant waters, and is subject to flashy flows. These conditions make the BSA unsuitable for these and similar tidal species. Determined to be absent.
California red-legged frog <i>Rana draytonii</i>	FT, CSSC	Streams, freshwater pools, and ponds with emergent or overhanging vegetation.	Present. California red-legged frog adults and juveniles were observed in the perennial freshwater marsh in the BSA in 2005 (H. T. Harvey & Associates 2005). California red-legged frog adults were observed in Pilarcitos Creek approximately 0.5 mi from the BSA in 2006, and California red-legged frogs were observed in a pond in the vicinity of Pilarcitos Creek approximately 1.3 mi of the BSA in 2016 (CNDDDB 2021).

Name	Status ¹	General Habitat Description	Potential for Occurrence in the BSA ²
Foothill yellow-legged frog (<i>Rana boylei</i>)	SE	Partially shaded shallow streams and riffles with a rocky substrate. Occurs in a variety of habitats in coast ranges.	Absent. Nearest CNDDDB record is over 16 mi southeast of the BSA (CNDDDB 2021). Typical suitable habitat for the foothill yellow-legged frog (i.e., boulders and cobbles in open stream habitat) is not present. Determined to be absent.
California tiger salamander (<i>Ambystoma californiense</i>)	FT, ST	Vernal or temporary pools in annual grasslands or open woodlands.	Absent. No suitable habitat is present in the BSA. Further, populations have largely been extirpated from San Mateo County due to habitat loss, and the species is now considered absent from most of the project vicinity, including the BSA. The closest occurrence in the project vicinity is at Lake Lagunita on the Stanford campus, which is approximately 14 mi south of, and on the opposite side of the Santa Cruz Mountains from, the BSA (CNDDDB 2021). Determined to be absent.
San Francisco garter snake (<i>Thamnophis sirtalis tetrataenia</i>)	FE, SE, SP	Prefer densely vegetated freshwater habitats. May use upland burrows for aestivation.	Possible. Pilarcitos Creek and the perennial freshwater marsh in the BSA provides suitable foraging habitat. An observation of the San Francisco garter snake in Pilarcitos Creek approximately 0.5 mi from the BSA has been recorded in CNDDDB in 2004.
Salt marsh harvest mouse (<i>Reithrodontomys raviventris</i>)	FE, SE, SP	Salt marsh habitat dominated by common pickleweed or alkali bulrush.	Absent. No suitable habitat is present in the BSA. Outside the species' range. Determined to be absent.
Bank swallow (<i>Riparia riparia</i>)	ST	Colonial nester on vertical banks or cliffs with fine textured soils near water.	Absent. No suitable habitat present in the BSA. Determined to be absent.
Marbled murrelet (<i>Brachyramphus marmoratus</i>)	FT, SE (nesting)	Requires dense, mature forests of redwood and Douglas-fir for breeding.	Absent. The BSA lacks suitable coastal coniferous forest nesting habitat for the marbled murrelet. Determined to be absent.
Mountain lion <i>Puma concolor</i>	SC	Occurs in a variety of habitats, such as deserts, woodlands, wetlands, and high-alpine forests. Preferred habitat is strongly correlated with densely vegetated areas, higher elevations, steep slopes, and abundant prey (Murphy 1983, Logan and Irwin 1985, Logan and Sweanor 2001).	Possible. Movement records of multiple mountain lions fitted with GPS-enabled wildlife-tracking collars, have shown individual lions moving through the surrounding area of the BSA over the past 10 years (Santa Cruz Puma Project 2018). The BSA does not provide suitable breeding and denning habitats, which is found far removed from the frequent human disturbances that occur within the BSA. Individual mountain lions may occur occasionally within the BSA as transients, as they move across their extensive home ranges, but they are expected to occur very infrequently.

California Species of Special Concern

Name	Status ¹	General Habitat Description	Potential for Occurrence in the BSA ²
California giant salamander (<i>Dicamptodon ensatus</i>)	CSSC	Usually found in cool, moist, forest habitat, associated with rocky streams and springs. Water, preferably cold and flowing, is necessary for egg-laying sites and for the aquatic larval and adult forms.	Absent. Nearest CNDDDB records are over 3 mi southeast and 5 mi north of the BSA (CNDDDB 2021). The BSA is outside the montane/foothill habitat where this species occurs. Determined to be absent.
Santa Cruz black salamander (<i>Aneides niger</i>)	CSSC	Primarily found in moist habitats. Prefers cool, moist and shaded conditions along ravines and water courses.	Absent. Nearest CNDDDB record is over 7 mi southeast of the BSA (CNDDDB 2021). The BSA is outside the montane/foothill habitat where this species occurs. Determined to be absent.
Western pond turtle (<i>Actinemys marmorata</i>)	CSSC	Permanent or nearly permanent water in a variety of habitats.	Possible. The reach of Pilarcitos Creek within and adjacent to the BSA is degraded due to surrounding development; however, suitable basking and foraging habitat for pond turtles is present in these areas. In addition, the nearest CNDDDB recorded observations are over 4 mi from the BSA in the area of the Crystal Springs Reservoir (CNDDDB 2021). Thus, there is some potential for pond turtles to be present in the BSA, though they are likely present in low numbers and/or infrequently. The perennial freshwater marsh is too shallow, with emergent vegetation too thick, to be considered suitable aquatic foraging habitat for this species.
American badger (<i>Taxidea taxus</i>)	CSSC	Burrows in grasslands and occasionally in infrequently disked agricultural areas.	Absent. Badgers are not expected to occur in the BSA due to disturbance, both on the site and in surrounding areas, coupled with the absence of nearby records. Determined to be absent.
Pallid bat (<i>Antrozous pallidus</i>)	CSSC	Forages over many habitats; roosts in caves, rock outcrops, buildings, and hollow trees.	Possible. No suitable roosting habitat in the BSA. Individuals from colonies located within several miles of the BSA could potentially forage on the site in low numbers, though nothing about the site suggests that it provides particularly important foraging habitat for the species. Expected to occur in the BSA as an occasional forager, albeit infrequently and in low numbers.
Townsend's big-eared bat (<i>Corynorhinus townsendii</i>)	CSSC	Roosts in caves and mine tunnels, and occasionally in deep crevices in trees such as redwoods or in abandoned buildings, in a variety of habitats.	Possible. Roosting habitat does not occur in the BSA but roosts do occur along the coastal region near Half Moon Bay, and individuals may occasionally occur in the BSA to forage or disperse. Expected to occur in the BSA as an occasional forager over the site, albeit infrequently and in low numbers.

Name	Status ¹	General Habitat Description	Potential for Occurrence in the BSA ²
San Francisco dusky-footed woodrat (<i>Neotoma fuscipes annectens</i>)	CSSC	Nests in a variety of habitats including riparian areas, oak woodlands, and scrub.	Possible. The riparian habitat associated with Pilarcitos Creek and around the freshwater marsh in the BSA provides suitable nesting habitat. The nearest CNDDDB record is near Pilarcitos Creek over 3 mi east-northeast of the BSA. No nests were observed during the reconnaissance-level survey, but this species could potentially nest or forage in, or disperse through, the riparian habitat in the BSA.
Alameda song sparrow (<i>Melospiza melodia pusillula</i>)	CSSC	Nests in salt marsh, primarily in marsh gumplant and cordgrass along channels.	Absent. The BSA is outside of the area where the species nests in San Mateo County, which is along the San Francisco Bay marsh habitat of the county. Determined to be absent.
Burrowing owl (<i>Athene cunicularia</i>)	CSSC	Nests and roosts in open grasslands and ruderal habitats with suitable burrows, usually those made by California ground squirrels (<i>Spermophilus beecheyi</i>).	Absent. No nesting burrowing owls are known to occur in the surrounding project vicinity (CNDDDB 2021). The California annual grassland found in the BSA is too limited and surrounded by trees and development to provide good burrowing owl habitat. Thus, the species is not expected to occur in the BSA. Determined to be absent.
Northern harrier (<i>Circus cyaneus</i>)	CSSC (nesting)	Nests in marshes and moist fields, forages over open areas.	Present. The perennial freshwater marsh in the BSA provides suitable habitat. An individual (but not a nest) was observed foraging within this perennial freshwater marsh in 2014. Low probability of nesting in this marsh due to its limited size, though the species forages in low numbers in the marsh and ruderal grassland.
San Francisco common yellowthroat (<i>Geothlypis trichas sinuosa</i>)	CSSC	Nests in herbaceous vegetation, usually in wetlands or moist floodplains.	Possible. The riparian habitat associated with Pilarcitos Creek and the perennial freshwater marsh in the BSA provide suitable nesting and foraging habitat.
Yellow warbler (<i>Setophaga petechia</i>)	CSSC (nesting)	Nests in riparian woodlands.	Possible. The riparian habitat associated with Pilarcitos Creek and around the perennial freshwater marsh in the BSA provides suitable foraging and nesting habitat. Likely to occur primarily as a migrant, but one or two pairs could potentially breed in the BSA.

California Fully Protected Species

Name	Status ¹	General Habitat Description	Potential for Occurrence in the BSA ²
American peregrine falcon (<i>Falco peregrinus anatum</i>)	SP	Forages in many habitats; nests on cliffs and tall bridges and buildings.	Possible. The riparian habitat associated with Pilarcitos Creek at the BSA and nearby open space provide suitable foraging habitat, but suitable nesting habitat is absent.
Golden eagle (<i>Aquila chrysaetos</i>)	SP	Breeds on cliffs or in large trees (rarely on electrical towers), forages in open areas.	Absent. No suitable nesting habitat is present in the BSA, and the BSA is not expected to provide suitable prey or sufficiently extensive open foraging habitat for this species.
White-tailed kite (<i>Elanus leucurus</i>)	SP	Nests in trees and forages in extensive grasslands or marshes.	Present. The riparian habitat associated with Pilarcitos Creek and around the perennial freshwater marsh in the BSA provide ostensibly suitable nesting habitat. An individual was observed in the vicinity of the perennial freshwater marsh in 2014.

¹ Special-status Species Code Designations:

- FE = Federally listed Endangered
- FT = Federally listed Threatened
- FC = Federal Candidate for listing
- SE = State listed Endangered
- ST = State listed Threatened
- SC = State Candidate for listing
- CSSC = California Species of Special Concern

² Definitions regarding potential occurrence:

- Present = Species or sign of its presence was observed on the site, or there are records of the species' occurrence on the site.
- Possible = Species was not observed during the reconnaissance surveys, but suitable habitat is present (habitat type, soils, and elevation), and the species is known to occur in the project vicinity.
- Absent = Suitable habitat is not present, or the project site is outside the species' local distribution or elevational range.



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**880 Stone Pine Road Project
Half Moon Bay, San Mateo County, California**

**Preliminary Delineation of Wetlands
and Other Waters/Delineation of Coastal Zone Wetlands
Within California Coastal Commission Jurisdiction**

Project #4182-03

Prepared for:

John Doughty
City of Half Moon Bay
501 Main Street
Half Moon Bay, CA 94019

Prepared by:

H. T. Harvey & Associates

October 12, 2020

Executive Summary

H. T. Harvey & Associates surveyed an approximately 21-acre (ac) study area located in Half Moon Bay in San Mateo County that encompasses the public works yard at 880 Stone Pine Road for wetlands and other waters potentially subject to regulation under Section 404 of the Clean Water Act as administered by the United States Army Corps of Engineers (USACE). The survey also delineated the extent of waters of the state that may be subject to regulation by the Regional Water Quality Control Board (RWQCB) under Section 401 of the Clean Water Act and under the Porter Cologne Water Quality Control Act. Lastly, the survey also delineated jurisdictional habitats subject to regulation under Sections 1600-1607 of the California Fish and Game Code, which is administered by the California Department of Fish and Wildlife (CDFW). Areas were also surveyed using the California Coastal Commission (CCC) approach to wetland delineation (i.e. any one of the three parameters typically used by USACE present at a sample point is indicative of CCC wetland habitat).

In total, approximately 0.91 acres of potentially jurisdictional features as defined by the USACE and the RWQCB were identified in the study area. These include approximately 0.29 acres of Section 404 and Section 401 waters situated below the ordinary high water mark (OHWM) line of Pilarcitos Creek, which forms the southeastern edge of the property. Sections 404 and 401 wetlands are also present within an abandoned stock pond which is perennially inundated and presently occupied by emergent freshwater marsh totaling 0.38 acres. Section 401 waters of the state extend farther up to the top of the bank from Pilarcitos Creek, for an additional 0.24 acres.

CDFW jurisdictional features as defined by bed and bank topography and riparian habitat were identified in the study area, which totaled 3.52 acres and includes riparian habitat beyond the top of bank. Approximately 2.85 acres of riparian habitat were identified in the project area. Areas that fall with the jurisdiction of the CCC include all 3.52 acres that are also considered jurisdictional by CDFW.

Summary of Jurisdictional Waters and Habitats within the Project and Study Areas

Potentially Jurisdictional Habitats	Study Area (Acres) ¹
Section 404 Waters of the U.S. Total	0.67
Perennial Freshwater Marsh	0.38
Aquatic Riverine	0.29
Section 401 Waters of the State (Up to Top of Bank) Total	0.91
Perennial Freshwater Marsh	0.38
Aquatic Riverine	0.29
Riparian Woodland (within top of bank)	0.24
CDFW and CCC Jurisdiction Total	3.52
Perennial Freshwater Marsh	0.38
Aquatic Riverine	0.29
Riparian Woodland	2.85

¹ Note: Values are approximate due to rounding.

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Section 1. Introduction

1.1 Study Area Description

The approximately 21-acre (ac) study area is located in Half Moon Bay in San Mateo County (Figure 1). The study area is located between State Route (SR) 92 and Pilarcitos Creek near downtown Half Moon Bay and is the site of a former plant nursery (Figure 2). It is located within the *Half Moon Bay California* 7.5-minute USGS quadrangle (Figure 3). A man-made impoundment and several buildings occur in the northwest corner and northeast corners of the site, respectively. Additionally, there is still infrastructure present from former nursery operations, including several unused dilapidated buildings, areas with black ground plastic (adjacent to the riparian woodland along Pilarcitos Creek), several vaulted culverts, concrete channels, and irrigation pumps and pipes. During the site visit, a large portion of the grassland had been recently mowed. Also, sections of the grassland were covered in wood chips. As such, the ground cloths and mulch inhibit vegetation growth. West of the study area is high-density development associated with the City of Half Moon Bay; north of the study area is SR 92, a heavily used road between Half Moon Bay and Interstate 280; east of the study area between SR 92 and Pilarcitos Creek, and on both sides of Pilarcitos Creek are various small agricultural parcels with associated infrastructure and development; south of the study area is agricultural parcels along Pilarcitos Creek that opens to rural land, with the Miramontes Ridge Open Space Reserve to the southeast.

The climate at the study area is coastal Mediterranean, with most rain falling in the winter and spring. Fog and cool temperatures are common in the summer. Climate conditions in the study area include a 30-year average of approximately 29.16 inches of annual precipitation with an average temperature range from 52°F to 61°F (PRISM 2020). Relative to the 30-year climate normal, precipitation in the preceding rain year (June 2019–May 2020; 15.99 inches) was approximately 55% of normal for that time period (PRISM 2020). Elevations within the study area range from approximately 60 feet (ft) to 110 ft above sea level (WGS84) (Google 2020).

Based on a review of available soil survey maps for the area including those by the U.S. Department of Agriculture’s Natural Resources Conservation Service (NRCS), the study area is generally comprised of coarse sandy loam soils adjacent to Pilarcitos Creek, such as the Farallone soil series, and clay loams, such as the Tierra soil series, upslope to SR 92 (NRCS 2020a). Soils across the study area are generally greater than 60 inches in depth with the exception of areas in the northeastern portion of the site containing Gazos (GoF3 and Gv) soils, which are less than 30 inches to a root-restrictive layer. The Farallone loam, nearly level, Gullied land, Gullied land (Gazos-Lobitos soil material), and Tierra clay loam, moderately steep, eroded soil series (totaling 12.3 acres) are listed as hydric in San Mateo County on the National Hydric Soils List (NRCS 2020b). Eight major soil series within the study area are shown on Figure 4 and are summarized in Table 3 below.

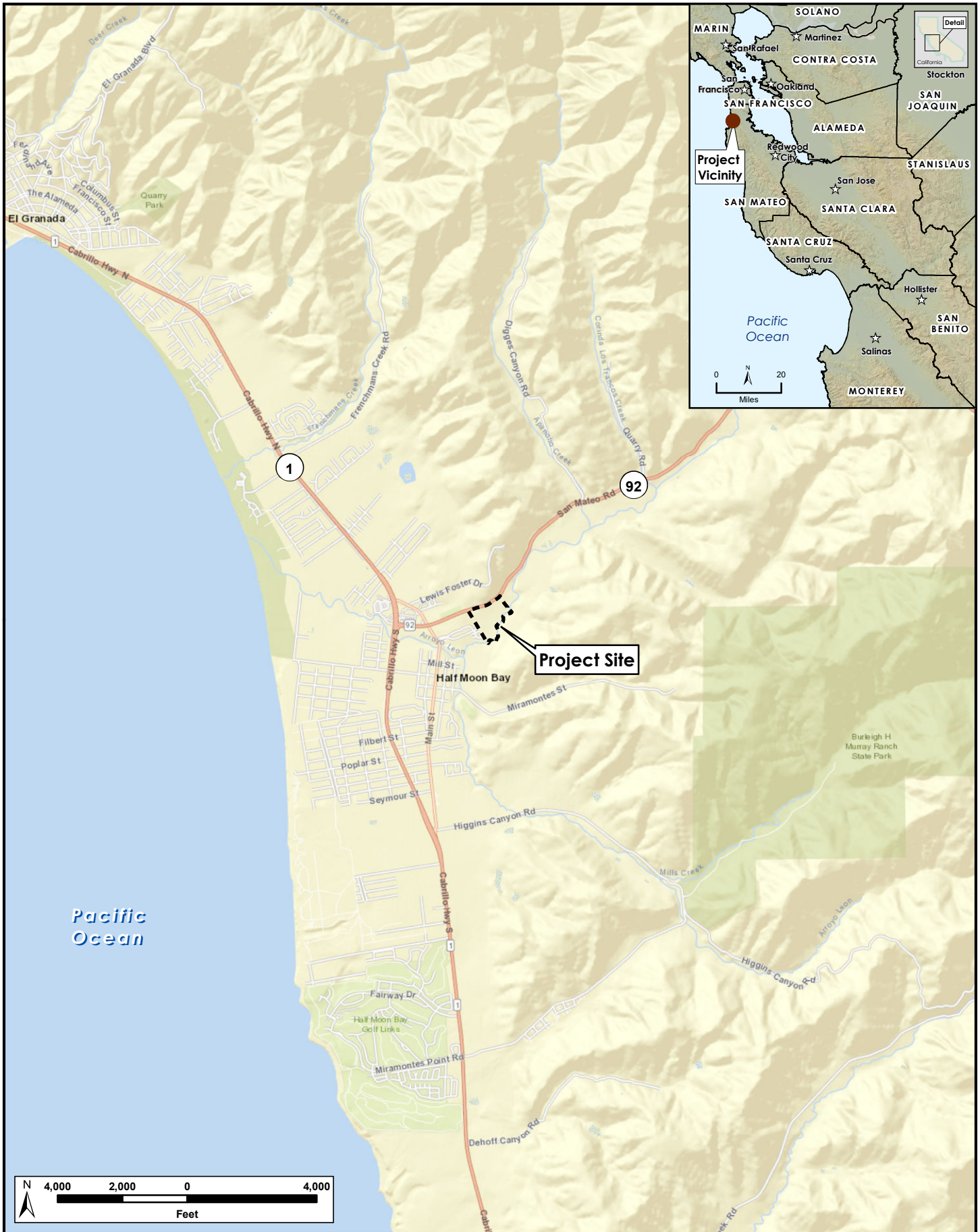
Table 1. Soils within the Biological Study Area

Soil Series	Acreage	Hydric
Farallone loam, nearly level (FaA)	8.8	Yes
Tierra loam, steep, severely eroded (TeE3)	3.1	No
Farallone coarse sandy loam, moderately steep, eroded (FcD2)	4.5	No
Gazos and Lobitos soils, steep and very steep, severely eroded (GoF3)	1.3	No
Gullied land (alluvial soil material; Gu)	1.7	Yes
Tierra loam, sloping, eroded (TeC2)	1.1	Yes
Gullied land (Gazos-Lobitos soil material; Gv)	0.7	Yes
Tierra clay loam, moderately steep, eroded (TcD2)	0.1	No

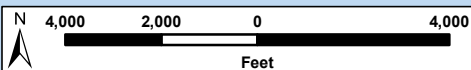
The U.S. Fish and Wildlife Service’s National Wetlands Inventory (NWI) map of the study area is depicted in Figure 5. The NWI identified one feature in the study area, Pilarcitos Creek, which it classified as a palustrine, forest, seasonally flooded wetland (FPOC) (NWI 2020). NWI maps are based on interpretation of aerial photography, limited verification of mapped units, and/or classification of wetland types using the classification system developed by Cowardin et al. (1979). These wetland data are available for general reference purposes and do not necessarily correspond to jurisdictional waters.

1.2 Survey Purpose

H. T. Harvey & Associates surveyed the study area for features that may meet the physical criteria and regulatory definition of “waters of the United States” and waters of the state (jurisdictional waters). The purpose of the field survey was to identify the extent and distribution of potentially jurisdictional waters, such as wetlands and other waters, occurring within the proposed work area boundaries under conditions existing at the time of the June 2020 survey. In addition, we surveyed the study area to determine the extent of areas likely subject to regulation by the California Coastal Commission (CCC), and for features that meet the criteria for regulation by the California Department of Fish and Wildlife (CDFW) under California Fish and Game Code Section 1603.



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Figure 1. Vicinity Map

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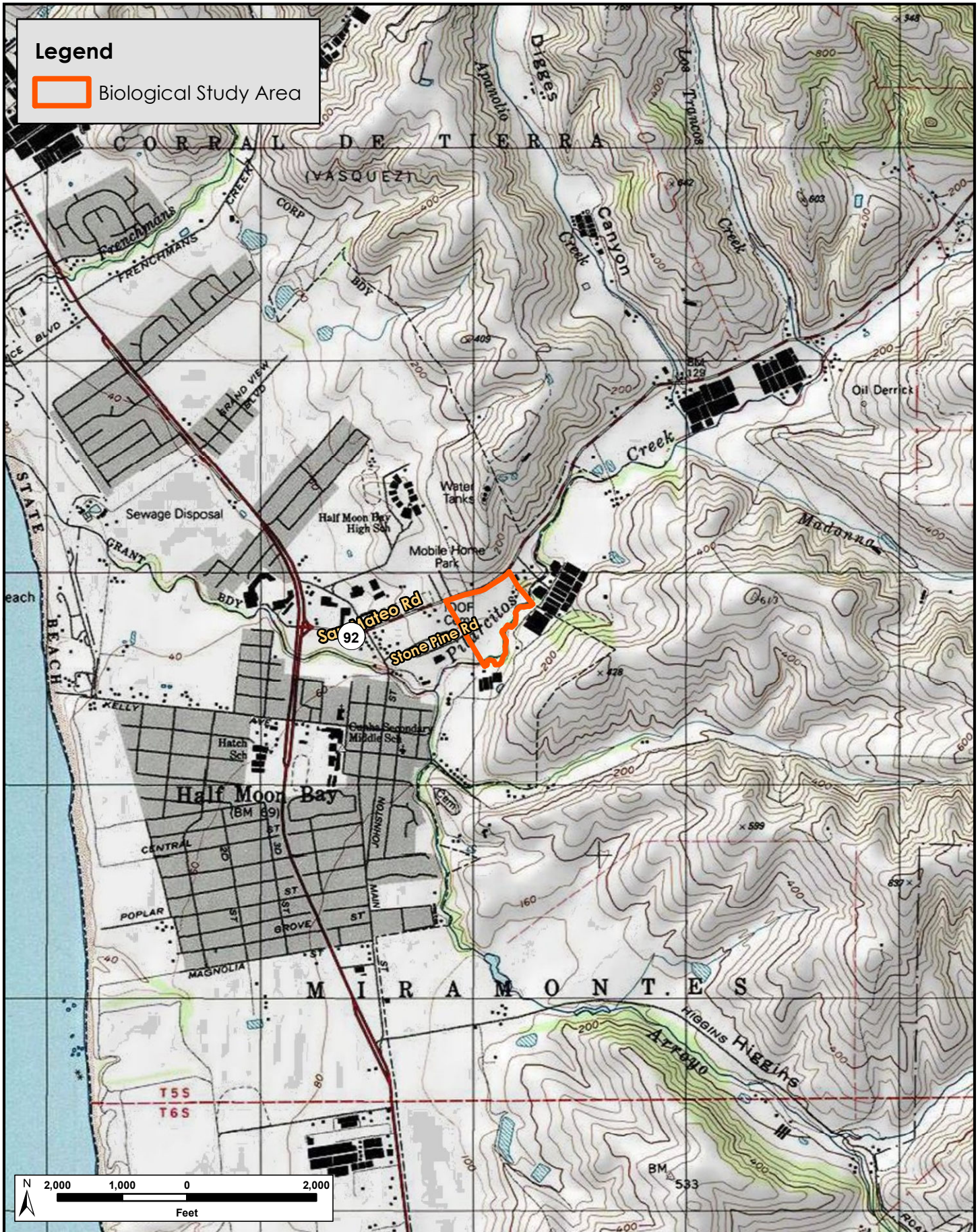
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Figure 2. Study Area

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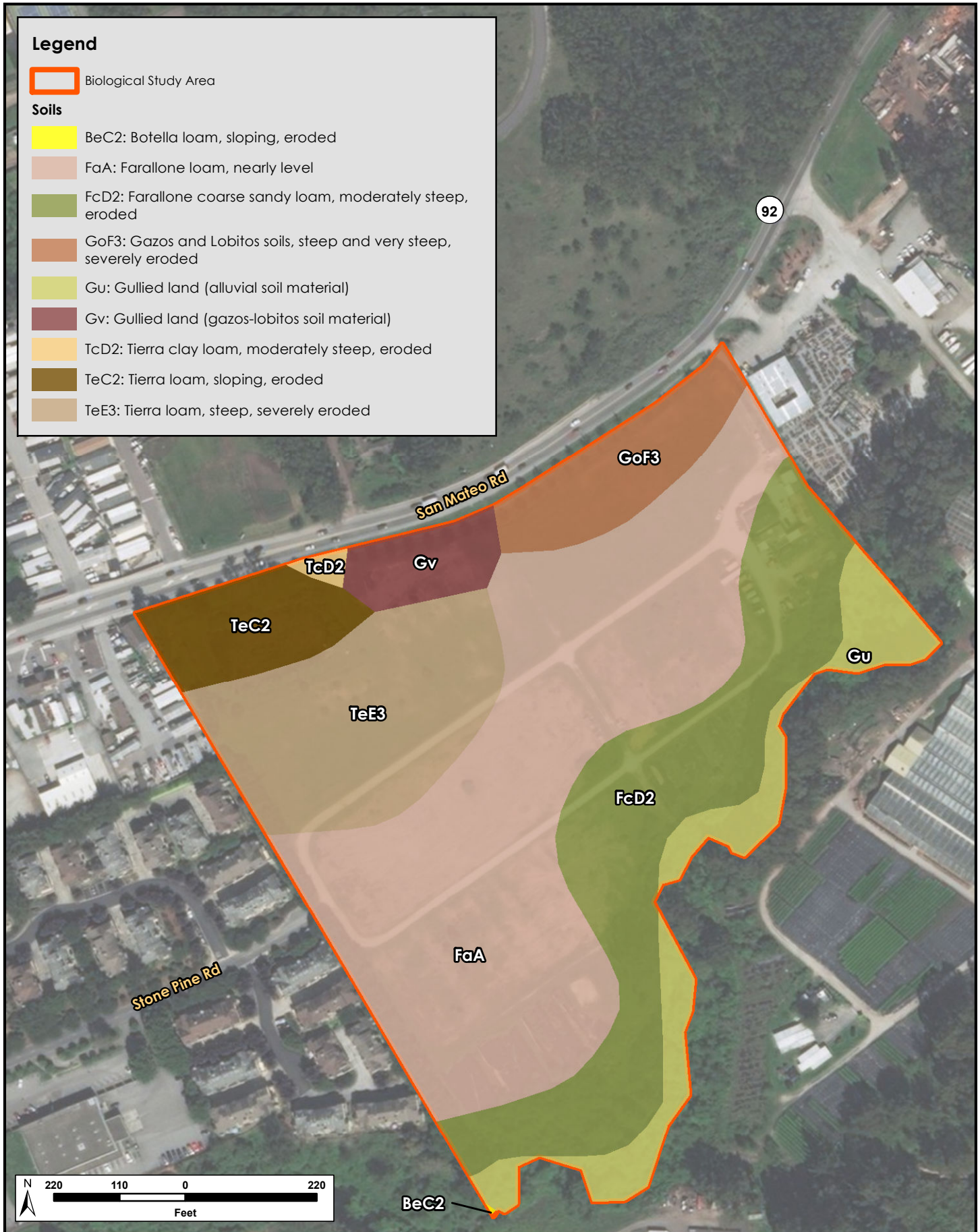
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Figure 3. USGS Topographic Map

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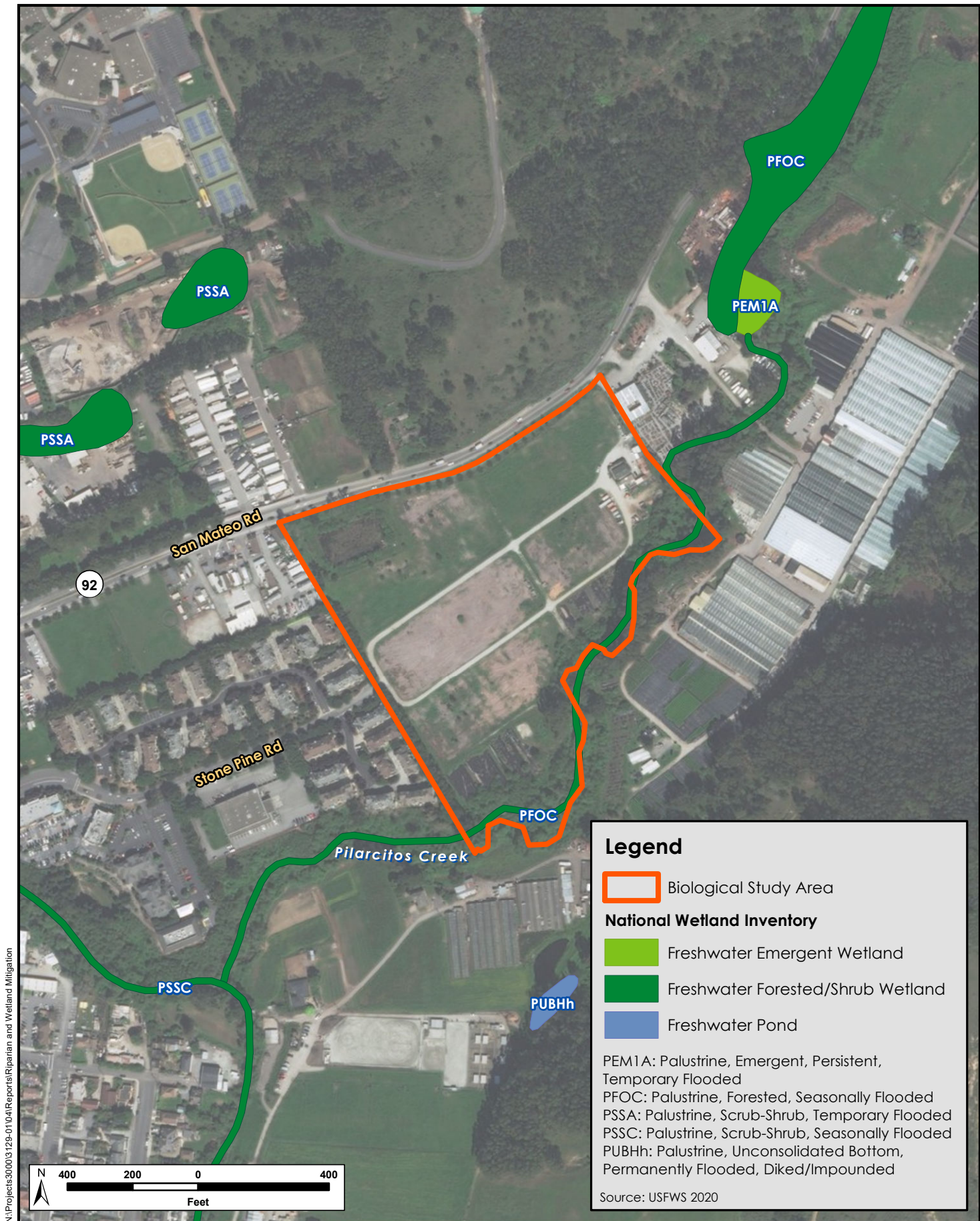
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Figure 4. Soils Map

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Figure 5. NWI Map

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Section 2. Survey Methods

Before the delineation survey was conducted, topographic maps and aerial photos of the study area were obtained and reviewed from several sources, such as the USGS (Figure 3), NRCS (Figure 4), NWI (Figure 5), and Google Earth software (Google 2020). Additionally, information was derived from surveys and background research conducted for the preparation of the 880 Stone Pine Road Project Biological Resources Report, concurrently prepared by H. T. Harvey & Associates (H. T. Harvey & Associates in prep).

On June 12, 2020, H. T. Harvey & Associates plant ecologist, Mark Bibbo, M.S., performed a technical delineation of wetlands and other waters in the study area, in accordance with the *Corps of Engineers 1987 Wetlands Delineation Manual* (Corps Manual; Environmental Laboratory 1987). Additionally, the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region (Version 2.0)* (Regional Supplement) (USACE 2010) were followed to document site conditions relative to hydrophytic vegetation, hydric soils, and wetland hydrology. Mr. Bibbo mapped the extent and distribution of wetlands and other waters of the U.S. that may be subject to regulation under Section 404 of the Clean Water Act (CWA) as well as waters of the state that may be subject to regulation under the Porter Cologne Water Quality Control Act, which is administered by the RWQCB. The study area was also surveyed for areas that meet the physical criteria of a wetland according to the California Coastal Commission (CCC), as well as aquatic and riparian habitat that may be subject to regulation under Sections 1600-1607 of the California Fish and Game Code, which is administered by CDFW.

2.1 Identification of Jurisdictional Waters

The “Routine Determination Method, On-Site Inspection Necessary (Section D)” outlined in the Corps Manual (Environmental Laboratory 1987), and the updated data forms, vegetation sampling methods, and hydric soil and hydrology indicators developed for the Regional Supplement (USACE 2010) were used to examine the vegetation, soils, and hydrology in the accessible areas of the study area. This three-parameter approach to identifying wetlands is based on the presence of a prevalence or dominance of hydrophytic vegetation, hydric soils, and wetland hydrology.

In addition to applying these survey methods, Mr. Bibbo compiled this report in accordance with guidance provided in *Updated Map and Drawing Standards for the South Pacific Division Regulatory Program* (USACE 2016a) and *Information Requested for Verification of Corps Jurisdiction* (USACE 2016b). These documents list the information that must be submitted as part of a request for a jurisdictional determination, including:

- Locality map (Figure 1)
- Study area map (Figure 2)
- USGS quadrangle sheet (Figure 3)

- Soils map (Figure 4)
- National Wetlands Inventory map (Figure 5)
- Vegetation communities map (Figure 6)
- Delineation map (Figure 7)
- Current soil survey report (Appendix A)
- Plant species observed (Appendix B)
- Data forms for wetlands sample points (Appendix C)
- Written rationale for sample point choice (Section 3.1, “Observations, Rationales, and Assumptions”)
- Color photos (Appendix D)
- Aquatic resources table (Appendix E)
- Signed statement from the property owner(s) allowing USACE personnel to enter the property and collect samples during normal business hours (Appendix F).

During the survey, the study area was examined for topographic features, drainages, alterations to site hydrology or vegetation, and recent significant disturbance. A determination was then made as to whether normal environmental conditions were present at the time of the field survey. In the field, the techniques used to identify wetlands included digging soil pits to sample soil from various depths, observing the vegetation growing near the soil sample points, and characterizing the current surface and subsurface hydrologic features present near the sample points. Features meeting wetland vegetation, soil, and hydrology criteria were then mapped in the field using a Trimble GeoXT™ GPS unit capable of submeter accuracy.

2.2 Identification of Section 404 Potential Jurisdictional Wetlands (Special Aquatic Sites)

Where wetland field characteristics were present, Mr. Bibbo examined vegetation, soils, and hydrology using the Routine Determination Method outlined in the Corps Manual (Environmental Laboratory 1987) and the updated data forms, vegetation sampling methods, and hydric soil and hydrology indicators developed for the Regional Supplement (USACE 2010).

Vegetation. Plants observed at each of the sample sites were identified to species, where possible, using *The Jepson Manual, Vascular Plants of California, Second Edition* (Baldwin et al. 2012). The wetland indicator status of each species was obtained from the *Western Mountains, Valleys, and Coast 2016 Regional Wetland Plant List* (Lichvar et al. 2016). Wetland indicator species are designated according to their frequency of occurrence in wetlands. For instance, a species which is usually a hydrophyte, but occasionally found in uplands is designated a



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Figure 6. Vegetation Communities and Photo Points Map

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facultative wetland indicator species. The wetland indicator groups, indicator symbol, and the qualitative frequency of occurrence of species within wetlands are shown in Table 2.

Table 2. Wetland Indicator Status Categories for Vascular Plants

Indicator Category	Symbol	Ecological Description ¹
Obligate	OBL	Almost always a hydrophyte, rarely in uplands
Facultative wetland	FACW	Usually is a hydrophyte, but occasionally found in uplands
Facultative	FAC	Commonly occurs as either a hydrophyte or nonhydrophyte
Facultative upland	FACU	Occasionally is a hydrophyte, but usually occurs in uplands
Upland ²	UPL	Rarely is a hydrophyte, almost always in uplands

¹ Based on the National Wetland Plant List Indicator Rating Definitions (Lichvar et al 2016)

² Plant species that are not listed in the Arid West 2016 Regional Wetland Plant List (Lichvar et al. 2016) are considered UPL species

Obligate and facultative wetland indicator species are hydrophytes that occur “in areas where the frequency and duration of inundation or soil saturation produce permanently or periodically saturated soils of sufficient duration to exert a controlling influence on the plant species present” (Environmental Laboratory 1987). Facultative indicator species may be considered wetland indicators when found growing in hydric soils that experience periodic saturation. Plant species that are not on the regional list of wetland indicator species are considered upland species. A complete list of the vascular plants observed in the study area, including their current indicator status, is provided in Appendix B.

Hydric Soils. Up to 20 inches of the soil profile were examined for hydric soil indicators. The National Technical Committee for Hydric Soils (NTCHS) defines a hydric soil as one formed under conditions of saturation, flooding or ponding long enough during the growing season to develop anaerobic conditions in the upper 12 inches of soil (NRCS 2010). Hydric soils include soils developed under sufficiently wet conditions to support the growth and regeneration of hydrophytic vegetation. In general, evidence of a hydric soil includes characteristics such as organic soils (histosols), reducing soil conditions, gleyed soils, soils with bright mottles and/or low matrix chroma, soils listed as hydric by the U.S. Department of Agriculture (USDA) on the National Hydric Soils List (NRCS 2020), and iron and manganese concretions. Reducing soil conditions can also include circumstances where there is evidence of frequent ponding for long or very long duration. A long duration is defined as a period of inundation for a single event that ranges from seven (7) days to a month and a very long duration is greater than one month (Environmental Laboratory 1987).

Munsell Soil Notations (Munsell 2009) were recorded for the soil matrix of each soil sample. The Munsell color system is based on three color properties: hue, value, and chroma. A brief description of each component of the system is described below, in the order they are used in describing soil color (i.e., hue/value/chroma):

1. **Hue.** The Munsell Soil Color Chart is divided into five principal hues: yellow (Y), green (G), purple (P), blue (B), and red (R), along with intermediate hues such as yellow-red (YR) and green-yellow (GY). Example of commonly encountered hue numbers include 2.5YR, 10YR, and 5Y.
2. **Value.** *Value* refers to lightness, ranging from white to grey to black. Common numerical values for value in the Munsell Soil Color Chart range from 2 for saturated soils to 8 for faded or light colors. Hydric soils often show low-value colors when soils have accumulated sufficient organic material to indicate development under wetland conditions, but can show high-value colors when iron depletion has occurred, removing color value from the soil matrix. Value numbers are commonly reported as 8/, 2.5/, and 6/.
3. **Chroma.** *Chroma* describes the purity of the color, from “true” or “pure” colors to “pastel” or “washed out” colors. Chromas commonly range from 1 to 8, but can be higher for gleys. Soil matrix chroma values that are 1 or less, or 2 or less when mottling is present, are typical of soils that have developed under anaerobic conditions. Chroma numbers are listed, for example, as /1, /5, and /8.

The NRCS Web Soil Survey (NRCS 2020a) was consulted to determine which soil types have been mapped in the study area (Table 1, Figure 4). Detailed descriptions of these soil types are provided in Appendix A.

Wetland Hydrology. Wetland hydrology is defined as an area that is inundated either permanently or periodically at mean water depths less than 6.6 feet, or where the soil is saturated at the surface at some time during the growing season of the prevalent vegetation. The period of inundation or soil saturation varies according to the hydrologic/soil moisture regime and occurs in both tidal and non-tidal situations.

Wetland hydrology encompasses all hydrologic characteristics of areas that are periodically inundated or have soils saturated to the surface at some time during the growing season. Wetland hydrology indicators provide evidence that the site has a continuing wetland hydrologic regime. Primary indicators might include visual observation of surface water (A1), high water table (A2), soil saturation (B1), water-stained leaves (B9), and hydrogen sulfide odor (C1). Secondary indicators might include riverine drift deposits (B3), drainage patterns (B10), and passing score for the FAC-neutral test (D5). Each of the sample points was examined for positive field indicators (primary and secondary) of wetland hydrology, following the guidance provided in the Regional Supplement.

2.3 Identification of Section 404 Jurisdictional Other Waters

“Other waters”, which includes lakes, slough channels, seasonal ponds, tributary waters, non-wetland linear drainages, and salt ponds were also mapped within the study area. Such areas are identified by the (seasonal or perennial) presence of standing or running water and generally lack hydrophytic vegetation. In non-tidal or muted tidal waters, such as this site, USACE jurisdiction extends to the OHWM which is defined in 33 CFR Part 328.3 as “the line on the shore established by the fluctuations of water and indicated by physical characteristics, such as a clear, natural line impressed on the bank, shelving, changes in the character of the soil, destruction of terrestrial vegetation or the presence of litter and debris.” In tidal waters, USACE jurisdiction extends to the landward extent of vegetation associated with salt or brackish water or the high tide line (HTL)

(see 33 CFR, Part 328.4). The HTL is defined in 33 CFR, Part 328.3 as “the line of intersection of the land with the water’s surface at the maximum height reached by a rising tide. The HTL may be determined, in the absence of actual data, by a line of oil or scum along shore objects, a more or less continuous deposit of fine shell or debris on the foreshore or berm, other physical markings or characteristics, vegetation lines, tidal gauges, or other suitable means that delineate the general height reached by a rising tide. The line encompasses spring high tides and other tides that occur with periodic frequency, but does not include storm surges in which there is a departure from the normal or predicted reach of the tide due to the piling up of water against a coast by strong winds such as those accompanying a hurricane or other intense storm.”

2.4 Identification of Coastal Zone Wetlands within CCC Jurisdiction

The project area were also surveyed for areas that meet the physical criteria of a wetland according to the California Coastal Commission (CCC). Under the California Coastal Act, the CCC regulates development in the coastal zone, including land and water use. Wetlands found in the coastal zone are regulated under the California Coastal Act of 1976 (CCA) and the federal Coastal Zone Management Act (CZMA), and are within jurisdiction of the CCC (CCC 2008). Any activities within the coastal zone that affect aquatic resources, including wetlands, require a coastal development permit from either the CCC or a certified Local Coastal Program (LCP) (Division 20 of the Public Resources Code). The CCC is responsible for protecting coastal resources and assessing potential impacts on wetlands and other waters subject to regulation under the California Coastal Act (Pub. Res. Code §30330-30344).

Under the CCA, wetlands are defined as “Lands within the coastal zone which may be covered periodically or permanently with shallow water and include saltwater marshes, freshwater marshes, open or closed brackish water marshes, swamps, mudflats, or fens.” (Pub. Res. Code §30121). The CCC uses definitions similar to the federal government in defining wetland habitat. The U.S. Fish and Wildlife Service (USFWS) uses a general definition from its wetlands classification system first published in 1979:

Wetlands are lands transitional between terrestrial and aquatic systems where the water table is usually at or near the surface or the land is covered by shallow water (Cowardin, et al. 1979). For purposes of this classification, wetlands must have 1 or more of the following 3 attributes: “(1) at least periodically, the land supports hydrophytes, (2) the substrate is predominantly undrained hydric soil; and (3) the substrate is non-soil and is saturated with water or covered by shallow water at some time during the growing season of each year” (Cowardin, 1979). The USFWS definition includes, swamps; freshwater, brackish water, and saltwater marshes; bogs; vernal pools, periodically inundated saltflats; intertidal mudflats; wet meadows; wet pastures; springs and seeps; portions of lakes, ponds, rivers and streams; and all other areas which are periodically or permanently covered by shallow water, or dominated by hydrophytic vegetation, or in which the soils are predominantly hydric in nature.

For purposes of implementing Section 404 of the federal Clean Water Act, the United States Environmental Protection Agency (EPA) and the USACE define wetlands as:

Those areas that are inundated or saturated by surface or ground water 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 similar areas (40 CFR 232.2).

Both the CCC and the federal government (in the USFWS and the USACE) provide further specificity in their wetlands definitions to guide the process of wetlands delineation. The CCC's regulations (California Code of Regulations Title 14 (14 CCR)) establish a **“one parameter definition”** that only requires evidence of a single parameter to establish wetland conditions and accepts wetland determinations based on the presence of one parameter—wetland vegetation, wetland soils, or, under certain conditions, wetland hydrology (using the criteria described above, under the USACE methods, for each parameter), similar to the USFWS wetlands classification system:

Wetland shall be defined as land where the water table is at, near, or above the land surface long enough to promote the formation of hydric soils or to support the growth of hydrophytes, and shall also include those types of wetlands where vegetation is lacking and soil is poorly developed or absent as a result of frequent or drastic fluctuations of surface water levels, wave action, water flow, turbidity or high concentrations of salt or other substance in the substrate. Such wetlands can be recognized by the presence of surface water or saturated substrate at some time during each year and their location within, or adjacent to, vegetated wetlands or deep-water habitats.

In contrast, the USACE generally uses a **three parameter definition** for delineating wetlands. In the California coastal zone, the CCC, with the assistance of the California Department of Fish and Wildlife (CDFW), is responsible for determining the presence of wetlands subject to regulation under the CCA. The local government also has a direct role in the identification and delineation process in areas with a certified LCP. For wetland development projects requiring USACE review, the applicant may, in some cases, need to obtain two delineation approvals, one for the coastal development permit, and another for the USACE Section 404 permit (CCC 2008).

The CCC delineation of wetlands in the field typically requires substantial evidence of indicators that can be easily observed or assayed. Wetlands typically occur on physical gradients (i.e., wet to dry conditions, hydric to non-hydric soils, and hydrophytic to meso/xerophytic vegetation). Delineations document boundaries between a predominance of hydrophytic vegetation and upland vegetation and boundaries between hydric and non-hydric soils. Because wetland delineation is not an exact science, the CCC recognizes the importance of professional judgement:

Some wetlands may not be readily identifiable by simple means. In such cases, the CCC will also rely on the presence of hydrophytes and/or the presence of hydric soils. Thus, the presence or absence of hydrophytes and hydric soils make excellent physical parameters upon which to judge the existence of wetland habitat areas for the purposes of the Coastal

Act, but they are not the sole criteria. In some cases, proper identification of wetlands will require the skills of a qualified professional.

Resource and regulatory agencies have found it difficult to strictly define some wetlands because of the often transient hydrology, the absence of hydric soils, and the heterogeneous vegetation composition. Yet these areas exhibit many of the functions and values found in other wetlands. In the past, CCC staff has recognized some of these areas, including riparian areas, as “environmentally sensitive areas” within the meaning of Coastal Act §30107.5, and then regulated development through §30240. The semi-arid climate of California also presents problems for the identification and delineation of wetlands. Some wetlands in this part of California can remain dry for one or more seasons because of the Mediterranean climate typical of the state.

The CCC’s regulations acknowledge these distinctions by specifying some general decision rules for establishing the upland boundary of wetlands:

...the upland limit of a wetland shall be defined as:

- a. the boundary between land with predominantly hydrophytic cover and land with predominantly mesophytic or xerophytic cover;*
- b. the boundary between soil that is predominantly hydric and soil that is predominantly nonhydric; or*
- c. in the case of wetlands without vegetation or soils, the boundary between land that is flooded or saturated at some time during years of normal precipitation, and land that is not (14 CCR Section 13577).*

Therefore, additional scientific methods and guidance are required to facilitate the wetland delineation process in the field. A common source of guidance for wetland delineators is the *1987 USACE Wetland Delineation Manual* and the *Regional Supplement*. Another important guidance document is the USFWS’s *List of Plant Species that Occur in Wetlands*. Similarly, guidance on the identification of hydric soils is provided by the Natural Resource Conservation Service in its *Field Indicators of Hydric Soils in the United States* (2010).

In a CCC delineation, the extent of both hydric soils and wetland vegetation should be determined and the wetland boundary drawn to coincide with that parameter that results in the larger wetland area. Where the presence of wetlands is difficult to determine because some field indicators appear ambiguous or unreliable, the CCC has occasionally, in past actions, considered strong evidence of upland conditions in making its wetland determination. However, the CCC has not considered the simple absence of standard field indicators of either hydric soils or wetland hydrology to be strong evidence of upland conditions and, hence, evidence that wetland conditions do not exist. Showing strong evidence of upland conditions requires collecting field data during the rainy season to determine whether the site evaluated becomes inundated or not or whether the major portion of the root zone of the predominant vegetation becomes saturated for greater than seven continuous days or not. This information can then be used to determine if the previously assessed vegetation or soil field indicator found to be ambiguous or unreliable is indicative of wetland or upland conditions.

Prior to conducting fieldwork, H. T. Harvey & Associates reviewed a variety of pertinent technical documents. During the CCC delineation, the presence and frequency of hydrophytic vegetation, hydrology indicators, and hydric soil indicators (or lack thereof) were used as the primary indicators for identifying potential wetland areas.

2.5 Identification of Waters of the State

The Porter Cologne Water Quality Control Act (Porter-Cologne) broadly defines waters of the state as “any surface water or groundwater, including saline waters, within the boundaries of the state.” Because Porter-Cologne applies to any water, whereas the CWA applies only to certain waters, California’s jurisdictional reach overlaps and may exceed the boundaries of waters of the U.S. For example, Water Quality Order No. 2004-0004-DWQ states that “shallow” waters of the state include headwaters, wetlands, and riparian areas. Where forested riparian habitat is not present, jurisdiction is taken to the top of bank or levee. Where forested habitat occurs, the outer canopy of any riparian trees rooted within top of bank may be considered jurisdictional as these trees can provide allochthonous input to the channel below.

On April 2, 2019, the California State Water Resources Control Board (SWRCB) adopted the State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State. In these new guidelines, riparian habitats are not specifically described as waters of the state but instead as important buffer habitats to streams that do conform to the State Wetland Definition. The Procedures describe riparian habitat buffers as important resources that may both be included in required mitigation packages for permits for impacts to waters of the state, as well as areas requiring permit authorization from the RWQCBs to impact.

The 2019 Procedures also clarify that wetland-upland boundaries for wetlands comprising waters of the state should be set using the USACE delineation framework (Environmental Laboratory 1987, USACE 2010), with one important distinction. Some areas in California function as wetlands despite lacking abundant wetland vegetation. For example, non-vegetated playas, tidal flats, and some types of seasonal wetlands provide a variety of wetland functions, including water filtration, groundwater recharge, and the support of wetland wildlife. While USACE procedures require 5% vegetative cover to be considered a wetland rather than “other waters”, the RWQCB has determined that no such minimum vegetative cover is necessary for an area to be considered a wetland under the State Wetland Definition. Waters of the state were identified within the study area.

2.6 Identification of CDFW Jurisdiction

Ephemeral and intermittent streams, rivers, creeks, dry washes, sloughs, blue line streams on USGS maps, and watercourses with subsurface flows fall under California Department of Fish and Wildlife (CDFW) jurisdiction. Canals, aqueducts, irrigation ditches, and other means of water conveyance may also be considered streams if they support aquatic life, riparian vegetation, or stream-dependent terrestrial wildlife. A stream is defined in Title 14, California Code of Regulations §1.72, as “a body of water that flows at least periodically or intermittently through a bed or channel having banks and that supports fish and other aquatic life. Jurisdiction

does not include tidal areas such as tidal sloughs unless there is freshwater input. This includes watercourses having surface or subsurface flow that supports or has supported riparian vegetation.” Using this definition, CDFW extends its jurisdiction to encompass riparian habitats that function as a part of a watercourse. California Fish and Game Code §2786 defines riparian habitat as “lands which contain habitat which grows close to and which depends upon soil moisture from a nearby freshwater source.” The lateral extent of a stream and associated riparian habitat that would fall under the jurisdiction of CDFW can be measured in several ways, depending on the particular situation and the type of fish or wildlife at risk. At minimum, CDFW would claim jurisdiction over a stream’s bed and bank. Where riparian habitat is present, the outer edge of riparian vegetation is generally used as the line of demarcation between riparian and upland habitats. CDFW jurisdictional habitats were mapped within the study area.

Section 3. Survey Results and Discussion

The following vegetation communities and land cover types were mapped in the study area: (1) aquatic riverine (Pilarcitos Creek), (2) perennial freshwater wetland, (3) Willow/alder stands (one parameter CCC wetland), (4) California annual grassland, (5) mixed riparian woodland, and (6) developed (Figure 6). Ten sample points (SPs) were examined to identify jurisdictional features (Figure 7; Appendix C). In the study area, approximately 3.77 ac of potentially jurisdictional waters regulated by USACE, RWQCB, CDFW, and the CCC were identified (Table 3). The results of the June 2020 delineation are described below.

Table 3. Summary of Jurisdictional Waters and Habitats within the Study Area

Potentially Jurisdictional Habitats	Study Area (Acres) ¹
Section 404 Waters of the U.S. Total	0.67
Perennial Freshwater Marsh	0.38
Aquatic Riverine	0.29
Section 401 Waters of the State (Up to Top of Bank) Total	0.91
Perennial Freshwater Marsh	0.38
Aquatic Riverine	0.29
Riparian Woodland (within top of bank)	0.24
CDFW and CCC Jurisdiction Total	3.52
Perennial Freshwater Marsh	0.38
Aquatic Riverine	0.29
Riparian Woodland	2.85

Note: Values are approximate due to rounding.

Study Area. Approximately 0.91 ac of Section 404 and Section 401 waters, including wetlands are found in the study area (Figure 7; Appendix D, Photos 2, 6).

Waters of the state (Section 401 waters only) extend to the top of bank of Pilarcitos Creek in the study area and includes approximately 0.24 ac of riparian habitat (Figure 8; Appendix D, Photos 1 and 3 in Appendix D)..

Pilarcitos Creek is a perennial drainage following from headwaters on Montara Mountain east of the study area to the Pacific Ocean west of the study area. As such, this feature would be regulated by CDFW under California Fish and Game Code Section 1603. Approximately 0.38 acres of freshwater wetland, 0.26 ac of streambed and approximately 2.85 ac of associated riparian woodland that would be regulated by CDFW occur within the study area (Figure 9). Areas falling within CCC jurisdiction include those same 3.52 total acres (Figure 9).

Information assembled during this investigation and pertinent to the identification of jurisdictional wetlands and other waters is presented in the six appendices of this report. In addition, Appendix E provided at the end of this document is an electronic attachment in Microsoft Excel format, per USACE (2016b) guidelines.

- Appendix A—Custom Soil Report for Project Study Area
- Appendix B—Plants Observed in the Study Area
- Appendix C—Western Mountains, Valley, and Coast Wetland Determination Data Forms
- Appendix D—Photographic Documentation of the Study Area
- Appendix E—Aquatic Resources Table
- Appendix F—Signed Statement from the Property Owner Allowing Access

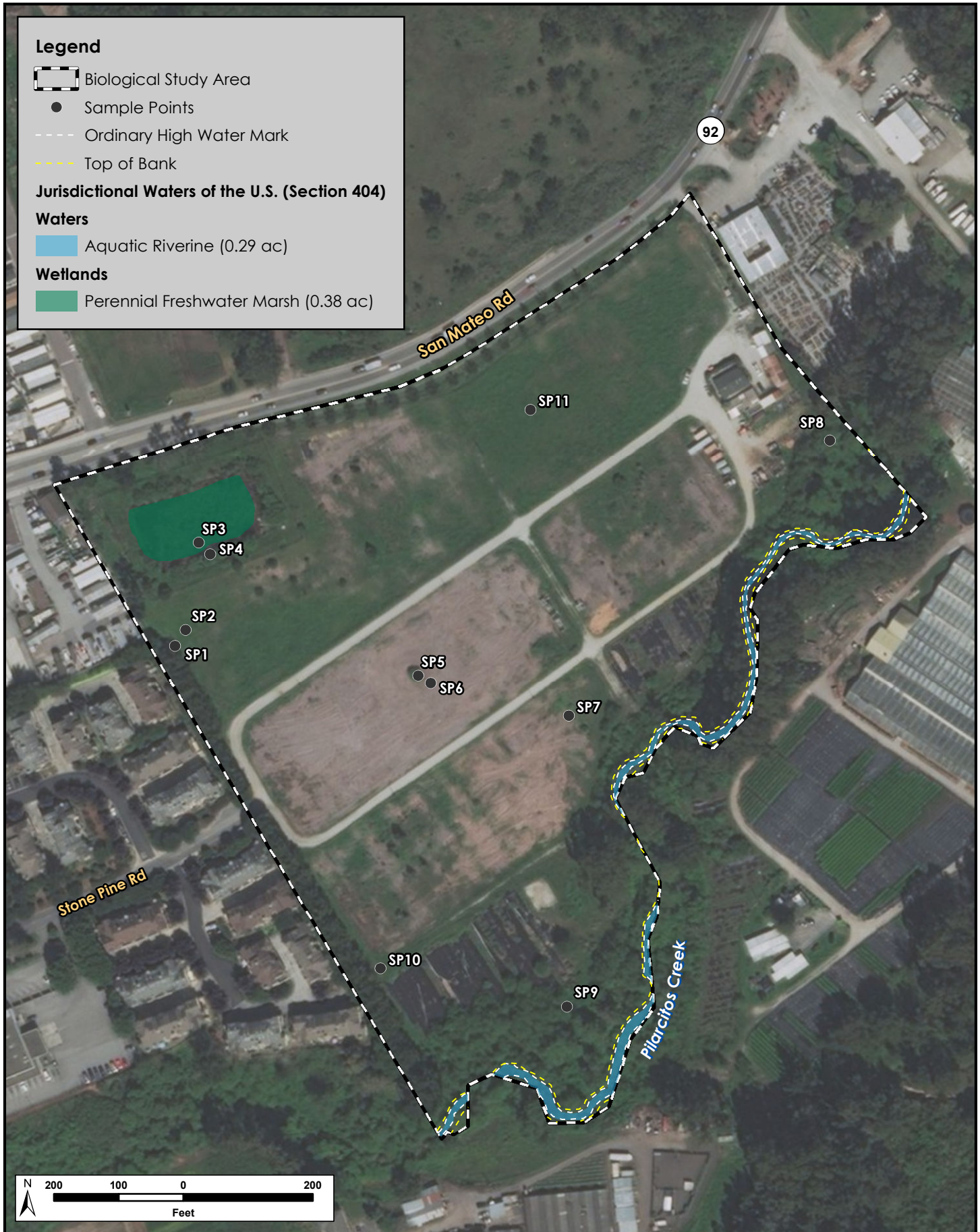
3.1 Observations, Rationale, and Assumptions

Study area conditions observed during the delineation survey are reported here, along with pertinent background information and precipitation data.

3.1.1 Background Information

This preliminary delineation assumes that normal circumstances prevailed at the time of the June 2020 survey, and results are based upon the conditions present. The survey was performed using the “Routine Method of Determination” using three parameters, as outlined in the Regional Supplement, although areas meeting at least one parameter were delineated as CCC-jurisdictional wetlands. All features that were noted as potential USACE-jurisdictional wetlands or other waters are also considered potential CCC-jurisdictional wetlands because they possess at least one parameter for a CCC-jurisdictional wetland.

Land use surrounding the study area consists of agriculture to the east and south, open space to the north and south, suburban residential to the west, and commercial to the east.



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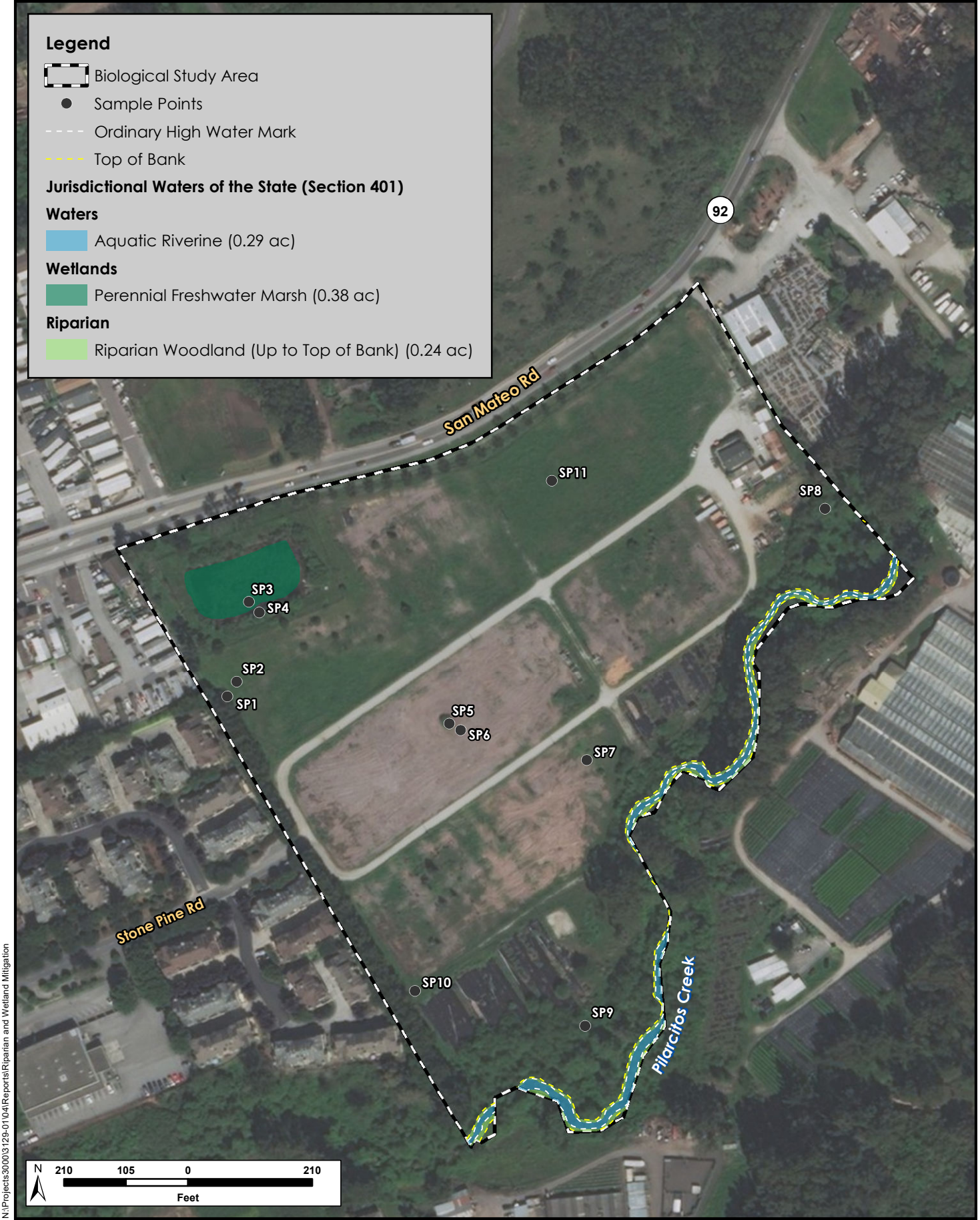


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Figure 7. Preliminary Identification of Waters of the United States

880 Stone Pine Road Project, Wetland Delineation Report (4182-03)

October 2020



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Ecological Consultants

Figure 8. Preliminary Identification of Waters of the State
880 Stone Pine Road Project, Wetland Delineation Report (4182-03)
October 2020



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Figure 9. CDFW/CCC Jurisdictional Habitats

880 Stone Pine Road Project, Wetland Delineation Report (4182-03)

October 2020

3.1.2 Precipitation Data

The survey took place in the 2020 dry season. Relative to the 30-year climate normal, precipitation in the study area was below average for the twelve month period leading up to the delineation. Total precipitation recorded for the twelve months prior to the delineation was 15.99 in., which is approximately 55% of the 30-year average (1981–2010) (PRISM 2020). These conditions were taken into account when assessing the biotic habitats present on the site. Despite the below average precipitation, water was still flowing in Pilarcitos Creek, and the abandoned stock pond was still inundated and surface water was present. The boundaries of wetlands remained clear owing to the presence of hydrophytic vegetation and hydrology indicators.

3.1.3 Site Conditions and Observations

Several areas containing at least one parameter indicative of wetlands, but lacking one or more parameters (*i.e.*, CCC wetlands not claimed by the USACE), were detected within the study area.

The southern boundary of the study area is demarcated by Pilarcitos Creek, a 13.5-mile perennial stream that flows from the western slopes of the Santa Cruz Mountains through Pilarcitos Canyon and discharges into the Pacific Ocean. The creek drains approximately 30 square mi and has numerous tributaries. The study area is approximately 1.7 mi upstream from the mouth of the Creek at the Pacific Ocean. Pilarcitos Creek has a well-developed riparian corridor for much of its length upstream and downstream of the study area. Pilarcitos Creek and its riparian corridor fall within the jurisdiction of the USACE, RWQCB, CDFW, and the CCC (Figures 7–10).

The study area is located in the Arroyo Leon hydrologic unit (180500060201) within the San Francisco Coastal South Sub Region of the California Region.

The majority of site was previously in agricultural nursery production. A man-made impoundment and several buildings occur in the northwest corner and northeast corners of the site, respectively. Additionally, there is still infrastructure present from former nursery operations, including several unused dilapidated buildings, areas with black ground plastic (adjacent to the riparian woodland along Pilarcitos Creek), several vaulted culverts, concrete channels, and irrigation pumps and pipes. Areas of the site that are currently in ruderal grassland appear to be regularly mowed to keep vegetation low for fire prevention. At the time of the June 2020 survey, the site was beginning to be mowed for the first time that season. Also, sections of the grassland were covered in wood chips. As such, the ground cloths and mulch inhibit vegetation growth.

The manmade impoundment in the northwest corner of the study area is approximately 200 ft by 110 ft. The impoundment is a raised earthen embankment design and sits at an elevation of 114 ft (WGS84). Water was previously pumped into this impoundment from Pilarcitos Creek to be used by the nursery for its operations (H. T. Harvey & Associates and RMC 2010). The pump appears to be currently inactive. However, the impoundment continues to hold water and extensive emergent vegetation and is classified as perennial

freshwater marsh habitat, indicating that the pond as it was excavated may have some connection to groundwater. At the time of the June 2020 survey, there was no evidence of flow from the pond.

Within the ruderal grassland, there are willow-alder stands characterized by individual or small stands of arroyo willows (*Salix lasiolepis*, FACW) and red alder (*Alnus rubra*, FACW, Appendix D, Photo 3). These species generally do not require the soil to be inundated to persist, but they generally do require access to a permanent water source, such as a creek or high groundwater, which they can access with deep roots. This also indicates that in at least some areas of the parcel in some years, the upper soil profile was moist enough to allow recruitment of these typically riparian tree species. Based on an analysis of historical aerials in Google Earth, the clumps of trees appear to be less than 10 years old, and sprouted and grew following the abandonment of nursery activities on the site (Google, Inc. 2020), possibly with assistance from artificial hydrology from irrigation in the last years of the nursery. These two tree species are functional phreatophytes, meaning that they are woody perennials with a deep taproot that are able to access deeper groundwater. They may have germinated and established in a wet year or assisted by irrigation overspray, and have been able to persist due to their deep taproot. Again, these trees occur on upland terraces that were previously cultivated for agriculture and are spatially separated from the riparian corridor along Pilarcitos Creek. We do not believe that this entire area truly stays saturated for a substantial portion of the growing season each year, as the site lacks hydric soil and hydrology indicators. Despite the fact that both arroyo willow and red willow have a wetland indicator status (FACW), we feel that in this situation these trees are indicators of a high groundwater table, as opposed to wetland conditions, or presence of a riparian corridor. Therefore we do not consider these patches of trees to be CCC jurisdictional wetlands.

There were areas within the California annual grassland, primarily along the western edge of the study area that supported dense monotypic stands of poison hemlock (*Conium maculatum*, FAC) (SP7 and SP10, Appendix C; Photo 4, Appendix D), indicative of disturbance and infestation. Both these areas were portions of the study area that had previously been in nursery production. The soils at the sample points were similar to nearby upland soils, with low chroma and low value soil colors throughout the soil profile (10 YR 3/2 or 3/3). Soils were dry and no hydric soil indicators were observed at either sample point. Additionally, no indicators of hydrology were observed in association with these stands of poison hemlock.

Poison hemlock is adapted to grow as a hydrophyte or non-hydrophyte depending on environmental conditions and is classified as an invasive plant by the California Invasive Plant Council (Cal-IPC 2020). It is tolerant of a wide range of moisture conditions including habitats with hydric, mesic (damp or moist soils that are not hydric), or even mildly xeric (dry) soils. Poison hemlock is a serious weed that is capable of rapid establishment, particularly on disturbed sites or where little vegetation exists at the start of the growing season. Once it is firmly established under such conditions, it can prevent the growth of most other vegetation. The soils within the project area are disturbed, based on the historical use of the area for agriculture and the presence of non-native vegetation, and as previously stated do not exhibit evidence of being hydric. The occurrence of poison hemlock is most likely in response to the highly disturbed soils found within the project area; therefore, it is not a strong wetland indicator in this situation because it is growing as a non-hydrophyte. It is our professional

opinion that these areas are not functioning as wetlands and should not be mapped as one-parameter CCC wetlands due to the lack of hydric soils, hydrology, and poison hemlock not growing as a hydrophyte.

3.1.4 Rationale for Sample Point Choice

Ten sample points were selected to document conditions in representative jurisdictional and non-jurisdictional areas (Figure 7, Appendix C). Rationale and findings for wetland data form sample point locations are summarized in Table 4.

Table 4. Summary of Sample Point Locations and Results

Name	Sampling Rationale	Hydrophytic Vegetation?	Hydric Soil?	Wetland Hydrology?	Overall Wetland Assessment
SP1	Placed to examine abandoned agricultural ditch.	Yes	No	No	Upland position; this area does not meet the three parameter wetland criteria. The wetland vegetation observed is FAC-dominated and weedy.
SP2	Placed to examine the hillslope adjacent the ditch – upland position.	No	No	No	Upland position; this area does not meet the three parameter wetland criteria.
SP3	Emergent freshwater marsh in an abandoned (but still inundated) agricultural pond – FM1.	Yes	Yes	Yes	This area is a three parameter wetland.
SP4	Upland paired point to SP4.	Yes	No	No	Upland; this area does not meet the three parameter. Hydrophytic vegetation is riparian vegetation dominated by Arroyo willow.
SP5	Placed to examine the willow/alder stands that occur throughout the site.	Yes	No	No	These small stands do not meet the three parameter USACE wetland criteria, hydric soils and wetland hydrology not present, presence of these trees does not necessarily indicate wetland conditions.
SP6	Upland paired point to SP5.	No	No	No	This area does not meet the three parameter wetland criteria.
SP7	Placed to examine poison hemlock infestation on terrace in southern portion of property.	Yes	No	No	Upland; this area does not meet the three parameter wetland criteria. The wetland vegetation observed is FAC-dominated and weedy.
SP8	Placed to investigate the riparian corridor of Pilarcitos Creek	Yes	No	No	This area does not meet the three parameter wetland criteria.

Name	Sampling Rationale	Hydrophytic Vegetation?	Hydric Soil?	Wetland Hydrology?	Overall Wetland Assessment
SP9	Placed to investigate the riparian corridor of Pilarcitos Creek in southwest corner of property.	Yes	No	No	Upland; this area does not meet the three parameter wetland criteria.
SP10	Placed to investigate area of poison hemlock infestation on terrace in southern portion of property.	Yes	No	No	Upland; this area does not meet the three parameter wetland criteria. The wetland vegetation observed is FAC-dominated and weedy.
SP11	Placed in upland grassland in the northeastern corner of the property.	No	No	No	Upland position; this area does not meet the three parameter wetland criteria.

OHWM-1 was placed perpendicular to Pilarcitos Creek (R-1) in the northeast corner of the wetland delineation study area (Appendix C; Appendix D, Photo 1). Pilarcitos Creek is a perennial creek with a well-defined OHWM that was identified by the observations of shelving, the clear presence of a bed and bank, and drift deposits.

3.1.5 Photo Points

Photo point labels, coordinates, and rationale for the photo are include in Table 4. Photos are included in Appendix D.

Table 5. Coordinates and Rationale for Photo Points

Label	Latitude	Longitude	Rationale
Photo 1	37.469261	-122.421798	Riparian habitat along Pilarcitos Creek
Photo 2	37.468813	-122.425454	Emergent freshwater marsh habitat around the abandoned agricultural pond
Photo 3	37.468319	-122.423926	Willow/Alder patches in the ruderal grassland matrix – SP5
Photo 4	37.468084	-122.423153	Portion of project area dominated by poison hemlock – SP7
Photo 5	37.469411	-122.423262	Upland grassland habitat typical of the site
Photo 6	37.467987	-122.422659	Pilarcitos Creek

3.2 Identification of Section 404 Waters

Approximately 0.29 ac of Section 404 waters were observed within the study area including the aquatic riverine habitat within the OHWM of Pilarcitos Creek (R1, Figure 7; Photo 6 in Appendix D) forming the eastern edge of study area. The extent of Section 404 waters was demarcated by the boundary formed by the OHWM.

Pilarcitos Creek is a 13.5-mile perennial stream that flows from the western slopes of the Santa Cruz Mountains through Pilarcitos Canyon and discharges into the Pacific Ocean approximately 1.7 mi downstream of the study area. Pilarcitos Creek is within the Arroyo Leon hydrologic unit (180500060201) within the San Francisco Coastal South Sub Region of the California Region. There is no tidal influence within Pilarcitos Creek in the study area.

3.3 Identification of Section 404 Potentially Jurisdictional Wetlands (Special Aquatic Sites)

In general, areas that were considered to be wetlands included solid stands of hydrophytes and/or areas observed to be ponded and/or saturated for long duration. Approximately 0.38 ac of potential USACE jurisdictional wetlands were identified in the study area (Figure 7). Three parameters identifying Section 404 wetlands were observed at one sample point (Figure 7; SP3, Appendix C). The feature that was determined to be a potentially USACE jurisdictional wetland is summarized below.

3.3.1 Perennial Freshwater Marsh (FM1)

Approximately 0.38 ac of emergent perennial freshwater marsh was mapped within study area, occupying an abandoned agricultural pond (FM1, Figure 7; SP3, Appendix C; (Photo 2 in Appendix D)).

Vegetation. Dominant vegetation associated with the wetlands included hydrophytes such as common cattail (*Typha latifolia*, OBL), whorled marsh-pennywort (*Hydrocotyle verticillata*, OBL), duckweeds (*Lemna* spp., OBL), and mosquito fern (*Azolla filiculoides*, OBL).

Soils. The soils were assumed to be hydric since the sample point was under several inches of water and soils are inundated year round. In addition, a hydrogen sulfide smell was observed in a shallow pit dug on the edge of the marsh.

Hydrology. The hydrology indicator observed at this location was the presence of surface water. Based on the timing of the survey, it would appear that this agricultural pond supports year-round surface water. Inundation was observed in aerial photos from recent years in fall months (Google Inc. 2020).

3.4 Identification of Section 401 Waters of the State

The extent of Section 401 waters of the state (RWQCB jurisdiction) in the study area includes a total of 0.91 ac, including areas within Section 404 jurisdiction as described above and riparian habitat up to the top of the banks. In the field, the top of bank was determined by mapping the first significant topographic break in slope. Waters of the state include all waters of the U.S., and cover approximately 0.38 ac of open water, 0.29 ac of perennial marsh, and 0.24 ac of riparian habitat (Figure 8). Characteristics of waters of the state, including wetlands, are described above in Sections 3.2 and 3.3.

3.5 Identification of CDFW Jurisdiction

The study area contains a perennial stream (Pilarcitos Creek) with a defined bed and bed topography along with associated riparian habitat, as defined by CDFW (Figure 9; Photo 1 and 6 in Appendix D). Riparian habitat was mapped by the dripline of trees and the extent of riparian vegetation. Pond features were mapped by the top of bank (which can extend beyond the OHWM used to measure the extent of waters of the U.S.).

Mixed Riparian Woodland. Approximately 2.85 ac of riparian woodland habitat extends from the water's edge and up the bank of Pilarcitos Creek. This riparian corridor is wide, well-developed, and extends upstream and downstream of the wetland delineation study area along Pilarcitos Creek. In addition, because the centerline of the creek is roughly equivalent to the eastern edge of the parcel, the riparian corridor on the eastern bank of the creek extends outside of the study area. Dominant trees and shrubs observed include arroyo willow (*Salix lasiolepis*, FACW), red willow (*Salix laevigata*, FACW), and red alder (*Alnus rubra*, FACW). The understory is mostly composed of dense and overlapping layers of Himalayan blackberry (*Rubus armeniacus*, FAC), cape ivy (*Delairea odorata*, UPL), and English ivy (*Hedera helix*, FACU). Given the density of the shrub/vine understory, herbaceous vegetation is limited.

3.6 Areas Not Meeting the Regulatory Definition of Section 404 Wetlands and Waters/Coastal Zone Wetlands within CCC Jurisdiction

In general, areas that were not considered to be wetlands, were not dominated by hydrophytic vegetation, and did not exhibit hydrology indicators were considered uplands. Approximately 17.64 ac of the study area do not meet the regulatory definitions of jurisdictional waters or jurisdictional habitats (Figure 6). This includes the ruderal grassland and developed landscape with ornamental vegetation (Photos 4 and 5, Appendix D).

Ruderal Grassland. Ruderal (i.e., disturbed) California annual grassland habitat is the most extensive vegetation community in the project area at 8.16 ac. Non-native grasses within this plant community are strongly dominant, generally outcompeting other forb and native grass species that may otherwise be present. At the time of the reconnaissance survey, this habitat was dominated by non-native grasses and forbs, including wild oat (*Avena* sp., UPL), Italian rye grass (*Festuca perenne*, FAC), soft brome (*Bromus hordeaceus*, FACU), black mustard (*Brassica nigra*, UPL), wild radish (*Raphanus sativus*, UPL), and prickly lettuce (*Lactuca serriola*, FACU).

In addition to these species, many other forbs and grass species are commonly found but to a much lower extent. These species include bristly ox-tongue (*Helminthotheca echioides*, FAC), poison hemlock (FAC), and curly dock (*Rumex crispus*, FAC). All of these, as well as Italian rye grass, are technically scored as facultative hydrophytes (Lichvar et al. 2016), or plants that sometimes occur in wetlands and sometimes occur in uplands, and can potentially indicate moist condition. However, all these species often dominate disturbed upland areas, especially along the coast where frequent fog occurs, without indicating wetlands, and often form monotypic stands, indicating infestation.

A number of small patches of either arroyo willow (FACW) or red alder (FACW) occur throughout the ruderal grassland, as mentioned above (Photo 3 in Appendix D). These clumps consist of either one or a few two trees and are situated on terraces within the central portion of the study area in areas that were previously in agricultural production. These trees are not associated with the riparian corridor along Pilarcitos Creek, though they likely are able to persist due to locally higher groundwater (within several feet of the surface) near Pilarcitos Creek. We do not believe that this entire area, or any area in the ruderal grassland supporting isolated willows or alders, truly stays saturated within 2 ft of the surface for a substantial portion of the growing season each year, as the site lacks hydric soil and hydrology indicators, or localized topography that would lead to seasonal ponding. Although both arroyo willow and red willow have a wetland indicator status (FACW), we feel that in this situation these trees are functioning as phreatophytes (i.e. woody perennials with a deep taproot that are able to access deep groundwater) as opposed to indicators of wetland conditions, or presence of a riparian corridor. Therefore we do not consider these patches of trees to be CCC jurisdictional wetlands.

Developed/Ornamental. Developed/landscaped land use (1.38 ac) includes areas where remnant structures and/or pavement and landscaping from the previous land use of agriculture production remain, and native or ruderal vegetation is largely lacking. The areas of former landscaping largely include the dense hedgerows of Monterey cypress (*Hesperocyparis macrocarpa*, UPL) and Monterey pine (*Pinus radiata*, UPL) trees along the north and western edge of the study area. The areas of development also include areas at the eastern end of the property consisting of several buildings, steel storage containers, and dirt parking areas. The buildings are in active use by the City of Half Moon Bay. Additionally, there are several unused dilapidated structures, including unused concrete channels and culverts present within the grassland and adjacent to the riparian habitat.

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Appendix A. Custom Soil Report for Project Study Area



United States
Department of
Agriculture

NRCS

Natural
Resources
Conservation
Service

A product of the National
Cooperative Soil Survey,
a joint effort of the United
States Department of
Agriculture and other
Federal agencies, State
agencies including the
Agricultural Experiment
Stations, and local
participants

Custom Soil Resource Report for **San Mateo Area, California**

880 Stone Pine Road Project



Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (<http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/>) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (<https://offices.sc.egov.usda.gov/locator/app?agency=nrcs>) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

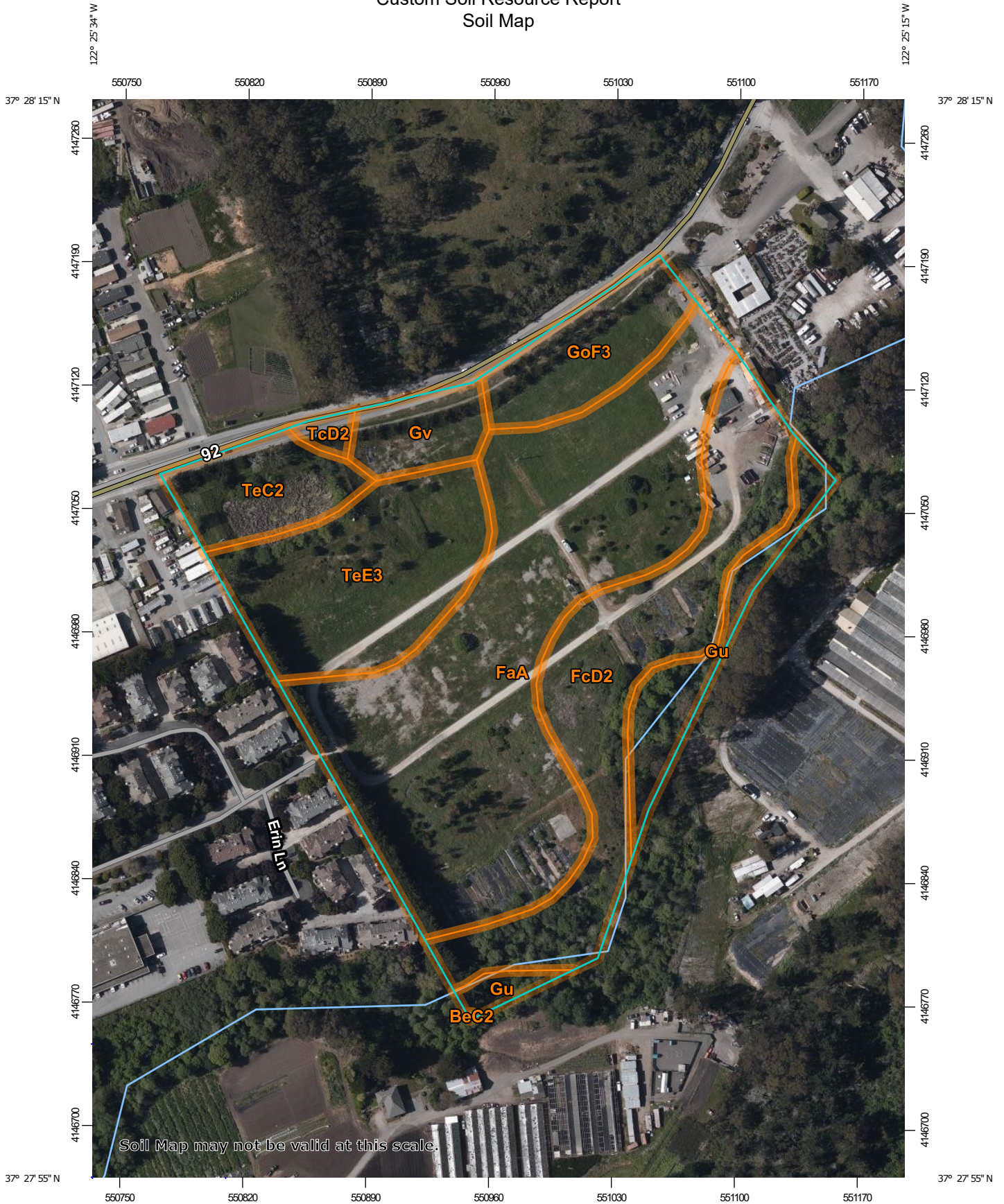
Custom Soil Resource Report

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

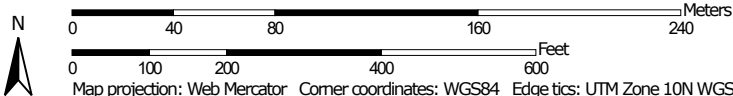
Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report Soil Map



Map Scale: 1:2,980 if printed on A portrait (8.5" x 11") sheet.



Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 10N WGS84

MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

Special Point Features

-  Blowout
-  Borrow Pit
-  Clay Spot
-  Closed Depression
-  Gravel Pit
-  Gravelly Spot
-  Landfill
-  Lava Flow
-  Marsh or swamp
-  Mine or Quarry
-  Miscellaneous Water
-  Perennial Water
-  Rock Outcrop
-  Saline Spot
-  Sandy Spot
-  Severely Eroded Spot
-  Sinkhole
-  Slide or Slip
-  Sodic Spot

-  Spoil Area
-  Stony Spot
-  Very Stony Spot
-  Wet Spot
-  Other
-  Special Line Features

Water Features

 Streams and Canals

Transportation

-  Rails
-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads

Background

 Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:15,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
 Web Soil Survey URL:
 Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: San Mateo Area, California
 Survey Area Data: Version 14, May 29, 2020

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Apr 29, 2019—Jun 5, 2019

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
BeC2	Botella loam, sloping, eroded	0.0	0.0%
FaA	Farallone loam, nearly level	8.7	41.5%
FcD2	Farallone coarse sandy loam, moderately steep, eroded	4.3	20.4%
GoF3	Gazos and Lobitos soils, steep and very steep, severely eroded	1.4	6.8%
Gu	Gullied land (alluvial soil material)	1.3	6.2%
Gv	Gullied land (gazos-lobitos soil material)	0.8	3.8%
TcD2	Tierra clay loam, moderately steep, eroded	0.1	0.7%
TeC2	Tierra loam, sloping, eroded	1.2	5.8%
TeE3	Tierra loam, steep, severely eroded	3.1	14.8%
Totals for Area of Interest		21.1	100.0%

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas

are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

San Mateo Area, California

BeC2—Botella loam, sloping, eroded

Map Unit Setting

National map unit symbol: h9v8
Elevation: 50 to 800 feet
Mean annual precipitation: 20 to 30 inches
Mean annual air temperature: 57 to 59 degrees F
Frost-free period: 250 to 350 days
Farmland classification: Not prime farmland

Map Unit Composition

Botella and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Botella

Setting

Landform: Alluvial fans, terraces, benches
Landform position (two-dimensional): Backslope, toeslope
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium

Typical profile

H1 - 0 to 20 inches: loam
H2 - 20 to 60 inches: silty clay loam

Properties and qualities

Slope: 7 to 15 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.57 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water capacity: High (about 10.2 inches)

Interpretive groups

Land capability classification (irrigated): 3e
Land capability classification (nonirrigated): 3e
Hydrologic Soil Group: C
Hydric soil rating: No

Minor Components

Soquel

Percent of map unit: 5 percent
Hydric soil rating: No

Unnamed

Percent of map unit: 5 percent

Hydric soil rating: No

Dublin

Percent of map unit: 5 percent

Hydric soil rating: No

FaA—Farallone loam, nearly level

Map Unit Setting

National map unit symbol: 2yrdy

Elevation: 30 to 210 feet

Mean annual precipitation: 28 to 30 inches

Mean annual air temperature: 56 to 57 degrees F

Frost-free period: 365 days

Farmland classification: Prime farmland if irrigated

Map Unit Composition

Farallone and similar soils: 85 percent

Minor components: 15 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Farallone

Setting

Landform: Alluvial fans, flood plains

Landform position (two-dimensional): Backslope, toeslope

Landform position (three-dimensional): Tread, talf

Down-slope shape: Linear

Across-slope shape: Linear

Parent material: Alluvium derived from granite

Typical profile

Ap - 0 to 20 inches: loam

AC - 20 to 48 inches: sandy loam

C - 48 to 60 inches: stratified coarse sandy loam to sandy loam

Properties and qualities

Slope: 0 to 1 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Well drained

*Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high
(0.60 to 2.00 in/hr)*

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Maximum salinity: Nonsaline (0.0 to 1.0 mmhos/cm)

Sodium adsorption ratio, maximum: 4.0

Available water capacity: Moderate (about 7.2 inches)

Interpretive groups

Land capability classification (irrigated): 1
Land capability classification (nonirrigated): 3c
Hydrologic Soil Group: B
Hydric soil rating: No

Minor Components

Denison

Percent of map unit: 10 percent
Landform: Terraces
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Miramar

Percent of map unit: 4 percent
Landform: Mountain slopes
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Mountainflank
Down-slope shape: Concave
Across-slope shape: Convex
Hydric soil rating: No

Unnamed

Percent of map unit: 1 percent
Landform: Depressions
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Dip
Down-slope shape: Concave
Across-slope shape: Concave
Hydric soil rating: Yes

FcD2—Farallone coarse sandy loam, moderately steep, eroded

Map Unit Setting

National map unit symbol: h9x5
Elevation: 50 to 200 feet
Mean annual precipitation: 20 to 30 inches
Mean annual air temperature: 55 degrees F
Frost-free period: 325 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Farallone and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Farallone

Setting

Landform: Alluvial fans, flood plains
Landform position (two-dimensional): Backslope, toeslope
Landform position (three-dimensional): Tread, talf
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium

Typical profile

H1 - 0 to 15 inches: coarse sandy loam
H2 - 15 to 48 inches: sandy loam
H3 - 48 to 60 inches: stratified coarse sandy loam to sandy loam

Properties and qualities

Slope: 10 to 20 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): High (1.98 to 5.95 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water capacity: Moderate (about 6.6 inches)

Interpretive groups

Land capability classification (irrigated): 4e
Land capability classification (nonirrigated): 4e
Hydrologic Soil Group: A
Hydric soil rating: No

Minor Components

Denison

Percent of map unit: 10 percent
Hydric soil rating: No

Miramar

Percent of map unit: 5 percent
Hydric soil rating: No

GoF3—Gazos and Lobitos soils, steep and very steep, severely eroded

Map Unit Setting

National map unit symbol: h9xw
Elevation: 50 to 2,380 feet
Mean annual precipitation: 15 to 30 inches
Mean annual air temperature: 55 to 63 degrees F
Frost-free period: 200 to 300 days

Custom Soil Resource Report

Farmland classification: Not prime farmland

Map Unit Composition

Gazos and similar soils: 45 percent

Lobitos and similar soils: 35 percent

Minor components: 20 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Gazos

Setting

Landform: Mountain slopes

Landform position (two-dimensional): Backslope

Landform position (three-dimensional): Mountainflank

Down-slope shape: Concave

Across-slope shape: Convex

Parent material: Shale

Typical profile

H1 - 0 to 8 inches: silt loam

H2 - 8 to 20 inches: silt loam

H3 - 20 to 24 inches: unweathered bedrock

Properties and qualities

Slope: 30 to 75 percent

Depth to restrictive feature: 20 to 24 inches to lithic bedrock

Drainage class: Well drained

Runoff class: Very high

Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.57 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Available water capacity: Low (about 3.3 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 7e

Hydrologic Soil Group: C

Hydric soil rating: No

Description of Lobitos

Setting

Landform: Mountain slopes

Landform position (two-dimensional): Backslope

Landform position (three-dimensional): Mountainflank

Down-slope shape: Concave

Across-slope shape: Convex

Parent material: Shale

Typical profile

H1 - 0 to 14 inches: silt loam

H2 - 14 to 25 inches: channery clay loam

H3 - 25 to 29 inches: channery loam

H4 - 29 to 34 inches: unweathered bedrock

Properties and qualities

Slope: 30 to 75 percent
Depth to restrictive feature: 29 to 34 inches to lithic bedrock
Drainage class: Well drained
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.57 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water capacity: Low (about 4.3 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: C
Hydric soil rating: No

Minor Components

Gullied land

Percent of map unit: 10 percent
Hydric soil rating: No

Sweeney

Percent of map unit: 5 percent
Hydric soil rating: No

Calera

Percent of map unit: 5 percent
Hydric soil rating: No

Gu—Gullied land (alluvial soil material)

Map Unit Setting

National map unit symbol: 2yrf4
Elevation: 20 to 420 feet
Mean annual precipitation: 29 to 32 inches
Mean annual air temperature: 56 to 57 degrees F
Frost-free period: 365 days
Farmland classification: Not prime farmland

Map Unit Composition

Gullied land, (aluvial): 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Gullied Land, (aluvial)

Setting

Landform: Flood plains
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium

Properties and qualities

Slope: 2 to 15 percent
Frequency of flooding: OccasionalNone

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 8w
Hydric soil rating: No

Minor Components

Unnamed

Percent of map unit: 5 percent
Landform: Draws
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Side slope
Down-slope shape: Linear
Across-slope shape: Concave
Hydric soil rating: Yes

Botella

Percent of map unit: 4 percent
Landform: Alluvial fans, terraces, benches
Landform position (two-dimensional): Backslope, toeslope
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Farallone

Percent of map unit: 3 percent
Landform: Alluvial fans, flood plains
Landform position (two-dimensional): Backslope, toeslope
Landform position (three-dimensional): Tread, talf
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Soquel

Percent of map unit: 3 percent
Landform: Flood plains
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Gv—Gullied land (gazos-lobitos soil material)

Map Unit Composition

Gullied land, (gazos-): 85 percent

Minor components: 15 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Gullied Land, (gazos-)

Setting

Landform: Mountain slopes

Landform position (two-dimensional): Backslope

Landform position (three-dimensional): Mountainflank

Down-slope shape: Concave

Across-slope shape: Convex

Parent material: Residuum weathered from shale

Typical profile

H1 - 0 to 60 inches: variable

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 8e

Hydric soil rating: No

Minor Components

Unnamed

Percent of map unit: 5 percent

Landform: Draws

Hydric soil rating: Yes

Gazos

Percent of map unit: 5 percent

Hydric soil rating: No

Lobitos

Percent of map unit: 5 percent

Hydric soil rating: No

TcD2—Tierra clay loam, moderately steep, eroded

Map Unit Setting

National map unit symbol: 2yrf9

Elevation: 60 to 720 feet

Mean annual precipitation: 29 to 31 inches

Mean annual air temperature: 56 to 57 degrees F

Custom Soil Resource Report

Frost-free period: 365 days

Farmland classification: Not prime farmland

Map Unit Composition

Tierra and similar soils: 85 percent

Minor components: 15 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Tierra

Setting

Landform: Hills

Landform position (two-dimensional): Backslope

Landform position (three-dimensional): Side slope

Down-slope shape: Convex

Across-slope shape: Convex

Parent material: Alluvium derived from sedimentary rock

Typical profile

A - 0 to 17 inches: clay loam

Bt - 17 to 37 inches: clay

C - 37 to 60 inches: sandy clay loam

Properties and qualities

Slope: 11 to 20 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Moderately well drained

Capacity of the most limiting layer to transmit water (Ksat): Low to moderately low
(0.01 to 0.06 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Maximum salinity: Nonsaline (0.0 to 1.0 mmhos/cm)

Sodium adsorption ratio, maximum: 10.0

Available water capacity: Moderate (about 8.7 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 4e

Hydrologic Soil Group: D

Hydric soil rating: No

Minor Components

Colma

Percent of map unit: 10 percent

Landform: Terraces

Landform position (two-dimensional): Toeslope

Landform position (three-dimensional): Tread

Down-slope shape: Linear

Across-slope shape: Linear

Hydric soil rating: No

Santa lucia

Percent of map unit: 5 percent

Landform: Mountain slopes

Landform position (two-dimensional): Backslope

Custom Soil Resource Report

Landform position (three-dimensional): Mountainflank
Down-slope shape: Concave
Across-slope shape: Convex
Hydric soil rating: No

TeC2—Tierra loam, sloping, eroded

Map Unit Setting

National map unit symbol: 2yrfd
Elevation: 80 to 510 feet
Mean annual precipitation: 28 to 32 inches
Mean annual air temperature: 56 to 57 degrees F
Frost-free period: 365 days
Farmland classification: Not prime farmland

Map Unit Composition

Tierra and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Tierra

Setting

Landform: Hills
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Alluvium derived from sedimentary rock

Typical profile

A - 0 to 17 inches: loam
Bt - 17 to 37 inches: clay
C - 37 to 60 inches: sandy clay loam

Properties and qualities

Slope: 5 to 11 percent
Depth to restrictive feature: 10 to 24 inches to abrupt textural change
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Low to moderately low
(0.01 to 0.06 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline (0.0 to 1.0 mmhos/cm)
Sodium adsorption ratio, maximum: 10.0
Available water capacity: Very low (about 2.7 inches)

Interpretive groups

Land capability classification (irrigated): 3e
Land capability classification (nonirrigated): 3e

Custom Soil Resource Report

Hydrologic Soil Group: D
Hydric soil rating: No

Minor Components

Colma

Percent of map unit: 10 percent
Landform: Terraces
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Santa lucia

Percent of map unit: 3 percent
Landform: Mountain slopes
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Mountainflank
Down-slope shape: Concave
Across-slope shape: Convex
Hydric soil rating: No

Unnamed

Percent of map unit: 2 percent
Landform: Swales
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Side slope
Down-slope shape: Linear
Across-slope shape: Concave
Hydric soil rating: Yes

TeE3—Tierra loam, steep, severely eroded

Map Unit Setting

National map unit symbol: 2yrfg
Elevation: 100 to 650 feet
Mean annual precipitation: 29 to 31 inches
Mean annual air temperature: 56 to 57 degrees F
Frost-free period: 365 days
Farmland classification: Not prime farmland

Map Unit Composition

Tierra and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Tierra

Setting

Landform: Hills

Custom Soil Resource Report

Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Alluvium derived from sedimentary rock

Typical profile

A - 0 to 13 inches: loam
Bt - 13 to 33 inches: clay
C - 33 to 60 inches: sandy clay loam

Properties and qualities

Slope: 21 to 41 percent
Depth to restrictive feature: 10 to 24 inches to abrupt textural change
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Low to moderately low
(0.01 to 0.06 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline (0.0 to 1.0 mmhos/cm)
Sodium adsorption ratio, maximum: 10.0
Available water capacity: Very low (about 2.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: D
Hydric soil rating: No

Minor Components

Colma

Percent of map unit: 10 percent
Landform: Terraces
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Santa lucia

Percent of map unit: 5 percent
Landform: Mountain slopes
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Mountainflank
Down-slope shape: Concave
Across-slope shape: Convex
Hydric soil rating: No

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Appendix B. Plants Observed in the Project Area

Family	Scientific Name	Common Name	Wetland Indicator Status ¹
Agavaceae	<i>Chlorogalum pomeridianum</i>	Soap plant	UPL
Anacardiaceae	<i>Toxicodendron diversilobum</i>	Poison oak	FAC
Apiaceae	<i>Conium maculatum</i>	poison hemlock	FAC
	<i>Hydrocotyle verticillata</i>	Whorled Marsh-Pennywort	OBL
	<i>Torilis arvensis</i>	field hedge parsley	UPL
Araceae	<i>Lemna</i> sp.	duckweed	OBL
Araliaceae	<i>Hedera helix</i>	English ivy	FACU
Asteraceae	<i>Arctotheca prostrata</i>	creeping capeweed	UPL
	<i>Baccharis pilularis</i>	Coyote brush	UPL
	<i>Carduus pycnocephalus</i>	Italian thistle	UPL
	<i>Cirsium vulgare</i>	Bull thistle	FACU
	<i>Deinandra corymbosa</i>	Coastal tarweed	UPL
	<i>Delairea odorata</i>	cape ivy	UPL
	<i>Helminthotheca echioides</i>	Bristly ox-tongue	FAC
	<i>Lactuca serriola</i>	prickly lettuce	FACU
	<i>Madia sativa</i>	Chile Tarweed	UPL
	<i>Silybum marinum</i>	Milk thistle	UPL
Azollaceae	<i>Azolla filiculoides</i>	mosquito fern	OBL
Betulaceae	<i>Alnus rubra</i>	red alder	FAC
Brassicaceae	<i>Brassica nigra</i>	Black mustard	UPL
	<i>Hirschfeldia incana</i>	Mediterranean hoary mustard	UPL
	<i>Raphanus sativus</i>	Wild radish	UPL
Caryophyllaceae	<i>Silene gallica</i>	windmill pink	UPL
Cupressaceae	<i>Sequoia sempervirens</i>	Coast redwood	UPL
Cyperaceae	<i>Carex barbarae</i>	Santa Barbara Sedge	FAC
	<i>Carex densa</i>	Dense sedge	OBL

Family	Scientific Name	Common Name	Wetland Indicator Status ¹
	<i>Cyperus eragrostis</i>	Tall flatsedge	FACW
Equisetaceae	<i>Equisetum arvense</i>	common horsetail	FAC
Fabaceae	<i>Acacia dealbata</i>	Silver wattle	UPL
	<i>Genista monspessulana</i>	French broom	UPL
	<i>Lotus corniculatus</i>	bird's foot trefoil	FAC
	<i>Lupinus arboreus</i>	coastal bush lupine	UPL
	<i>Trifolium angustifolium</i>	Narrow leaved clover	UPL
	<i>Vicia villosa</i>	Hairy vetch	UPL
Fagaceae	<i>Quercus agrifolia</i>	Coast live oak	UPL
Junaceaeae	<i>Juncus effusus</i>	Bog rush	FACW
	<i>Juncus patens</i>	Common rush	FACW
	<i>Juncus xiphioides</i>	Iris leaved rush	OBL
Lamiaceae	<i>Stachys bullata</i>	California hedge nettle	UPL
Linaceae	<i>Linum bienne</i>	narrow leaved flax	UPL
Myrtaceae	<i>Eucalyptus globulus</i>	blue gum	UPL
Pinaceae	<i>Hesperocyparis macrocarpa</i>	Monterey cypress	UPL
	<i>Pinus radiata</i>	Monterey pine	UPL
	<i>Pseudotsuga menziesii</i>	Douglas fir	FACU
Plataginaceae	<i>Plantago coronopus</i>	cutleaf plantain	FAC
Poaceae	<i>Agoseris stolonifera</i>	Creeping bentgrass	FAC
	<i>Aira caryophyllea</i>	Silvery hairgrass	FACU
	<i>Avena</i> sp.	Wild oats	UPL
	<i>Briza maxima</i>	Rattlesnake grass	UPL
	<i>Briza minor</i>	Little quaking grass	FAC
	<i>Bromus diandrus</i>	Ripgut brome	UPL
	<i>Bromus hordeaceus</i>	soft chess	FACU
	<i>Cortaderia jubata</i>	Pampas grass	FACU
	<i>Cynosurus echinatus</i>	dogtail grass	UPL
	<i>Festuca perenne</i>	Italian ryegrass	FAC

Family	Scientific Name	Common Name	Wetland Indicator Status ¹
	<i>Holcus lanatus</i>	Velvet grass	FAC
	<i>Hordeum murinum</i>	meadow barley	FAC
	<i>Polypogon monspeliensis</i>	rabbitsfoot grass	FACW
Polygonaceae	<i>Rumex acetosella</i>	Sheep sorrel	FACU
	<i>Rumex crispus</i>	curly dock	FAC
Primulaceae	<i>Lysimachia arvensis</i>	scarlet pimpernel	FAC
Rosaceae	<i>Cotoneaster pannosus</i>	silverleaf cotoneaster	UPL
	<i>Rubus armeniacus</i>	Himalayan blackberry	FAC
	<i>Rubus ursinus</i>	California blackberry	FACU
Salicaceae	<i>Salix laevigata</i>	red willow	FACW
	<i>Salix lasiandra</i>	Pacific willow	FACW
	<i>Salix lasiolepis</i>	arroyo willow	FACW
Typhaceae	<i>Typha latifolia</i>	common cattail	OBL
Urticaceae	<i>Urtica dioica</i> ssp. <i>dioica</i>	stinging nettle	FAC

Notes:

Wetland Indicator Status obtained from Lichvar et al. (2016)

¹ Wetland Indicator Status Key:

OBL = Obligate wetland species, occur almost always in wetlands (>99% probability).

FACW = Facultative Wetland species, usually occur in wetlands (67 to 99% probability), but occasionally found in non-wetlands.

FAC = Facultative species, equally likely to occur in wetlands or non-wetlands (34 to 66% probability).

FACU = Facultative Upland, usually occur in non-wetlands (67% to 99%), but occasionally found in wetlands.

UPL = Obligate Upland species, occur almost always in non-wetlands (>99% probability).

NI = Non Indicator, not present on list.

Appendix C. Wetland Determination Data Forms

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys and Coast Region

Project Site: 880 Stone Pine Road Project City/County: Half Moon Bay, San Mateo Sampling Date: 6/12/2020
 Applicant/Owner: City of Half Moon Bay State: California Sampling Point: SP1
 Investigator(s): M. Bibbo Section/Township/Range: N/A
 Landform (hillslope, terrace, etc.): Hillslope Local Relief (concave, convex, none): Concave Slope (%): 2
 Subregion (LRR): LRR-C Lat: 37.468385 Long: -122.425183 Datum: WGS84
 Soil Map Unit Name: Tierra loam, steep, severely eroded NWI classification N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)
 Are Soil or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No _____
 Vegetation _____
 Are Soil or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)
 Vegetation _____

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <u>X</u>	No _____	Is the Sampled Area within a Wetland?	Yes _____	No <u>X</u>
Hydric Soil Present?	Yes _____	No <u>X</u>			
Wetland Hydrology Present?	Yes _____	No <u>X</u>			

Remarks:
 Point taken to examine swale on edge of property - appears to be a head-cut or erosional feature, perhaps an abandoned agricultural ditch.

VEGETATION

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1. _____	_____	_____	_____
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
Total Cover: _____			

Sapling/Shrub Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1. _____	_____	_____	_____
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
Total Cover: _____			

Herb Stratum (Plot size: <u>10 x 10 ft.</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Conium maculatum</u>	<u>40</u>	<u>X</u>	_____
2. <u>Festuca perennis</u>	<u>30</u>	<u>X</u>	_____
3. <u>Raphanus sativus</u>	<u>20</u>	<u>X</u>	_____
4. <u>Helminthotheca</u>	<u>10</u>	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
7. _____	_____	_____	_____
8. _____	_____	_____	_____
9. _____	_____	_____	_____
10. _____	_____	_____	_____
11. _____	_____	_____	_____
Total Cover: <u>100</u>			

Woody Vine Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1. _____	_____	_____	_____
2. _____	_____	_____	_____
Total Cover: _____			

% Bare Ground in Herb Stratum 0

Remarks:
 Ruderal vegetation dominated by Conium. Not a strong demarcation between vegetation in swale and surrounding hillslope.

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC:	<u>2</u>	(A)
Total Number of Dominant Species Across All Strata:	<u>3</u>	(B)
Percent of Dominant Species That Are OBL, FACW, or FAC:	<u>66</u>	(A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____ x 1 = _____	
FACW species _____ x 2 = _____	
FAC species _____ x 3 = _____	
FACU species _____ x 4 = _____	
UPL Species _____ x 5 = _____	
Column totals _____ (A)	_____ (B)
Prevalence Index = B/A = _____	

Hydrophytic Vegetation Indicators:

X 1 – Rapid Test for Hydrophytic Vegetation
 _____ 2 – Dominance Text is >50%
 _____ 3 – Prevalence Index is ≤3.0¹
 _____ 4 – Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
 _____ 5 – Wetland Non-vascular Plants¹ (Explain)
 _____ Problematic Hydrophytic Vegetation¹ (Explain)

¹ Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present?	Yes <u>X</u>	No _____
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SOIL

Sampling Point: **SP1**

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-16	7.5 YR 4/2	100					clay loam	many roots

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains ²Location: PL=Pore Lining, RC=Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)		Indicators for Problematic Hydric Soils ³ :	
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)	
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)	
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)	
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)		
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)		
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)		
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)		

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (If present):
 Type: _____
 Depth (inches): _____

Hydric Soil Present? Yes _____ No **X** _____

Remarks:
 Soil appears to be well-drained. No redox features observed.

HYDROLOGY

Wetland Hydrology Indicators:	
Primary Indicators (minimum of one required: check all that apply)	Secondary Indicators (2 or more required)
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Plowed Soils (C6)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	

Field Observations:

Surface Water Present? Yes _____ No **X** _____ Depth (inches): _____

Water Table Present? Yes _____ No **X** _____ Depth (inches): _____

Saturation Present? Yes _____ No **X** _____ Depth (inches): _____
 (includes capillary fringe)

Wetland Hydrology Present? Yes _____ No **X** _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
 Feature is ditch/swale-like and appears to be eroding via head cut. Likely a former agricultural ditch, used to convey run-off and has been long since abandoned. No indicators of recent flow observed. Feature does not appear to pond water either. Water may flow through here immediately following strong storm events, but then would transition to sheet flow at bottom of slope (i.e. does not drain directly into another stream or drainage).

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys and Coast Region

Project Site: 880 Stone Pine Road Project City/County: Half Moon Bay, San Mateo Sampling Date: 6/12/2020
 Applicant/Owner: City of Half Moon Bay State: California Sampling Point: SP2
 Investigator(s): M. Bibbo Section/Township/Range: N/A
 Landform (hillslope, terrace, etc.): Hillslope Local Relief (concave, convex, none): None Slope (%): 3-4
 Subregion (LRR): LRR-C Lat: 37.46845 Long: -122.42513 Datum: NAD83
 Soil Map Unit Name: Tierra loam, steep, severely eroded NWI classification None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)
 Are Soil or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No _____
 Vegetation _____
 Are Soil or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)
 Vegetation _____

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No <u>X</u>	Is the Sampled Area within a Wetland?	Yes _____	No <u>X</u>
Hydric Soil Present?	Yes _____	No <u>X</u>			
Wetland Hydrology Present?	Yes _____	No <u>X</u>			

Remarks:
 Point taken to examine the hillslope adjacent the swale.

VEGETATION

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1. _____	_____	_____	_____
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
Total Cover:	<u>0</u>		

Sapling/Shrub Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1. _____	_____	_____	_____
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
Total Cover:	<u>0</u>		

Herb Stratum (Plot size: <u>10 x 10 ft.</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Festuca perennis</u>	<u>60</u>	<u>X</u>	<u>FAC</u>
2. <u>Avena fatua</u>	<u>30</u>	<u>X</u>	<u>UPL</u>
3. <u>Raphanus sativa</u>	<u>5</u>		<u>UPL</u>
4. <u>Vicia sativa</u>	<u>5</u>		<u>UPL</u>
5. _____	_____	_____	_____
6. _____	_____	_____	_____
7. _____	_____	_____	_____
8. _____	_____	_____	_____
9. _____	_____	_____	_____
10. _____	_____	_____	_____
11. _____	_____	_____	_____
Total Cover:	<u>100</u>		

Woody Vine Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1. _____	_____	_____	_____
2. _____	_____	_____	_____
Total Cover:	_____		

% Bare Ground in Herb Stratum _____

Remarks:
 Italian rye-grass dominated grassland – other co-dominant species are upland grasses and forbs.

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50 (A/B)

Prevalence Index worksheet:

Total % Cover of: Multiply by:

OBL species _____ x 1 = _____

FACW species _____ x 2 = _____

FAC species 60 x 3 = 180

FACU species _____ x 4 = _____

UPL Species 40 x 5 = 200

Column totals 100 (A) 380 (B)

Prevalence Index = B/A = 3.8

Hydrophytic Vegetation Indicators:

___ 1 – Rapid Test for Hydrophytic Vegetation

___ 2 – Dominance Text is >50%

___ 3 – Prevalence Index is ≤3.0¹

___ 4 – Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)

___ 5 – Wetland Non-vascular Plants¹ (Explain) Problematic Hydrophytic Vegetation¹ (Explain)

¹ Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes _____ No X

SOIL

Sampling Point: **SP2**

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-16	10YR 3/3	50					clay loam	
0-16	5 YR 5/4	50					clay loam	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains ²Location: PL=Pore Lining, RC=Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)			Indicators for Problematic Hydric Soils ³ :		
<input type="checkbox"/>	Histosol (A1)	<input type="checkbox"/>	Sandy Redox (S5)	<input type="checkbox"/>	2 cm Muck (A10)
<input type="checkbox"/>	Histic Epipedon (A2)	<input type="checkbox"/>	Stripped Matrix (S6)	<input type="checkbox"/>	Red Parent Material (TF2)
<input type="checkbox"/>	Black Histic (A3)	<input type="checkbox"/>	Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/>	Very Shallow Dark Surface (TF12)
<input type="checkbox"/>	Hydrogen Sulfide (A4)	<input type="checkbox"/>	Loamy Gleyed Matrix (F2)	<input type="checkbox"/>	Other (Explain in Remarks)
<input type="checkbox"/>	Depleted Below Dark Surface (A11)	<input type="checkbox"/>	Depleted Matrix (F3)		
<input type="checkbox"/>	Thick Dark Surface (A12)	<input type="checkbox"/>	Redox Dark Surface (F6)		
<input type="checkbox"/>	Sandy Mucky Mineral (S1)	<input type="checkbox"/>	Depleted Dark Surface (F7)		
<input type="checkbox"/>	Sandy Gleyed Matrix (S4)	<input type="checkbox"/>	Redox Depressions (F8)		

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (If present):
 Type: _____
 Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:
 Soil has a mixed matrix of two soil colors. Redox features not observed.

HYDROLOGY

Wetland Hydrology Indicators:	
Primary Indicators (minimum of one required: check all that apply)	Secondary Indicators (2 or more required)
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Plowed Soils (C6)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	

Field Observations:

Surface Water Present? Yes _____ No X Depth (inches): _____

Water Table Present? Yes _____ No X Depth (inches): _____

Saturation Present? Yes _____ No X Depth (inches): _____
 (includes capillary fringe)

Wetland Hydrology Present? Yes _____ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
 Hillslope, upland landscape position.

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys and Coast Region

Project Site: 880 Stone Pine Road Project City/County: Half Moon Bay, San Mateo Sampling Date: 6/12/2020
 Applicant/Owner: City of Half Moon Bay State: California Sampling Point: SP3
 Investigator(s): M. Bibbo Section/Township/Range: N/A
 Landform (hillslope, terrace, etc.): Hillslope Local Relief (concave, convex, none): None Slope (%): 3-4
 Subregion (LRR): LRR-C Lat: 37.46882 Long: -122.42505 Datum: WGS84
 Soil Map Unit Name: Tierra loam, steep, severely eroded NWI classification None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)
 Are Soil or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No _____
 Vegetation _____
 Are Soil or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)
 Vegetation _____

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <u>X</u> No _____	Is the Sampled Area within a Wetland?	Yes <u>X</u> No _____
Hydric Soil Present?	Yes <u>X</u> No _____		
Wetland Hydrology Present?	Yes <u>X</u> No _____		

Remarks:
 Freshwater marsh in an abandoned (but still inundated) agricultural pond.

VEGETATION

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1. _____	_____	_____	_____
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
Total Cover:	<u>0</u>		

Sapling/Shrub Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1. _____	_____	_____	_____
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
Total Cover:	<u>0</u>		

Herb Stratum (Plot size: <u>10 x 10 ft.</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Typha latifolia</u>	<u>60</u>	<u>X</u>	<u>OBL</u>
2. <u>Azolla spp.</u>	<u>20</u>	<u>X</u>	<u>OBL</u>
3. <u>Lemna spp.</u>	<u>10</u>		<u>OBL</u>
4. <u>Hydrocotyle verticillata</u>	<u>10</u>		<u>OBL</u>
5. _____	_____	_____	_____
6. _____	_____	_____	_____
7. _____	_____	_____	_____
8. _____	_____	_____	_____
9. _____	_____	_____	_____
10. _____	_____	_____	_____
11. _____	_____	_____	_____
Total Cover:	<u>100</u>		

Woody Vine Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1. _____	_____	_____	_____
2. _____	_____	_____	_____
Total Cover:	_____		

% Bare Ground in Herb Stratum 0

Remarks:
 Cattail-dominated freshwater marsh.

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of: Multiply by:

OBL species _____ x 1 = _____

FACW species _____ x 2 = _____

FAC species _____ x 3 = _____

FACU species _____ x 4 = _____

UPL Species _____ x 5 = _____

Column totals _____ (A) _____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

X 1 – Rapid Test for Hydrophytic Vegetation

X 2 – Dominance Text is >50%

_____ 3 – Prevalence Index is ≤3.0¹

_____ 4 – Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)

_____ 5 – Wetland Non-vascular Plants¹ (Explain)
 Problematic Hydrophytic Vegetation¹ (Explain)

¹ Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present?	Yes <u>X</u> No _____
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SOIL

Sampling Point: **SP3**

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
n/a							mucky	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains ²Location: PL=Pore Lining, RC=Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)		Indicators for Problematic Hydric Soils ³ :			
<input type="checkbox"/>	Histosol (A1)	<input type="checkbox"/>	Sandy Redox (S5)	<input type="checkbox"/>	2 cm Muck (A10)
<input type="checkbox"/>	Histic Epipedon (A2)	<input type="checkbox"/>	Stripped Matrix (S6)	<input type="checkbox"/>	Red Parent Material (TF2)
<input type="checkbox"/>	Black Histic (A3)	<input type="checkbox"/>	Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/>	Very Shallow Dark Surface (TF12)
<input checked="" type="checkbox"/>	Hydrogen Sulfide (A4)	<input type="checkbox"/>	Loamy Gleyed Matrix (F2)	<input type="checkbox"/>	Other (Explain in Remarks)
<input type="checkbox"/>	Depleted Below Dark Surface (A11)	<input type="checkbox"/>	Depleted Matrix (F3)		
<input type="checkbox"/>	Thick Dark Surface (A12)	<input type="checkbox"/>	Redox Dark Surface (F6)		
<input type="checkbox"/>	Sandy Mucky Mineral (S1)	<input type="checkbox"/>	Depleted Dark Surface (F7)		
<input type="checkbox"/>	Sandy Gleyed Matrix (S4)	<input type="checkbox"/>	Redox Depressions (F8)		

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (If present): Type: _____ Depth (inches): _____	Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
--	---

Remarks:
 Soil pit not dug, due to standing water. Hydrogen sulfide smell observed in a shallow pit dug on the edge of the marsh. Soils presumed hydric based on dominance of OBL species, and year-round inundation of soils.

HYDROLOGY

Wetland Hydrology Indicators:	
Primary Indicators (minimum of one required: check all that apply)	Secondary Indicators (2 or more required)
<input checked="" type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Plowed Soils (C6)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	

Field Observations: Surface Water Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): ~6" Water Table Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): N/A Saturation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): N/A (includes capillary fringe)	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
---	---

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
 Perennially inundated pond, likely fed by groundwater. Water present year round. The water depth in the middle of the pond feature is unknown.

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys and Coast Region

Project Site: 880 Stone Pine Road Project City/County: Half Moon Bay, San Mateo Sampling Date: 6/12/2020
 Applicant/Owner: City of Half Moon Bay State: California Sampling Point: SP4
 Investigator(s): M. Bibbo Section/Township/Range: N/A

Landform (hillslope, terrace, etc.): Hillslope Local Relief (concave, convex, none): None Slope (%): 1
 Subregion (LRR): LRR-C Lat: 37.46877 Long: -122.42499 Datum: WGS84

Soil Map Unit Name: Tierra loam, steep, severely eroded NWI classification None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)
 Are Soil or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No _____
 Vegetation _____
 Are Soil or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)
 Vegetation _____

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <u>X</u> No _____	Is the Sampled Area within a Wetland?	Yes _____ No <u>X</u>
Hydric Soil Present?	Yes _____ No <u>X</u>		
Wetland Hydrology Present?	Yes _____ No <u>X</u>		

Remarks:
 Upland paired point to SP4 - point taken to examine the riparian vegetation on the banks of the abandoned agricultural pond.

VEGETATION

Tree Stratum (Plot size: <u>30 x 30ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A) Total Number of Dominant Species Across All Strata: <u>5</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>60</u> (A/B)
1. <u>Salix laevigata</u>	<u>60</u>	<u>X</u>	<u>FACW</u>	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. <u>5</u>	_____	_____	_____	
Total Cover:	<u>0</u>			

Sapling/Shrub Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL Species _____ x 5 = _____ Column totals _____ (A) _____ (B) Prevalence Index = B/A = _____
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
Total Cover:	<u>0</u>			

Herb Stratum (Plot size: <u>10 x 10 ft.</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Indicators: ___ 1 – Rapid Test for Hydrophytic Vegetation <u>X</u> 2 – Dominance Text is >50% ___ 3 – Prevalence Index is ≤3.0 ¹ ___ 4 – Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ 5 – Wetland Non-vascular Plants ¹ (Explain) Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present.
1. <u>Holcus lanatus</u>	<u>60</u>	<u>X</u>	<u>FAC</u>	
2. <u>Vicia tetrasperma</u>	<u>30</u>	<u>X</u>	<u>UPL</u>	
3. <u>Festuca perennis</u>	<u>20</u>	<u>X</u>	<u>FAC</u>	
4. <u>Geranium molle</u>	<u><1</u>	_____	<u>UPL</u>	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
Total Cover:	<u>100</u>			

Woody Vine Stratum (Plot size: <u>30 x 30 ft.</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Present? Yes <u>X</u> No _____
1. <u>Rubus ursinus</u>	<u>5</u>	<u>X</u>	<u>FACU</u>	
2. _____	_____	_____	_____	
Total Cover:	<u>5</u>			

Remarks:
 Overstory willow cover is rooted at edge of marsh, the remainder of the riparian vegetation on the bank is dominated by FAC grasses.

SOIL

Sampling Point: **SP4**

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-16	2.5Y 5/3	100	7.5 YR 5/4	<1	C	M	clay loam	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains ²Location: PL=Pore Lining, RC=Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)		Indicators for Problematic Hydric Soils ³ :	
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)	
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)	
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)	
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)		
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)		
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)		
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)		

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (If present):
 Type: _____
 Depth (inches): _____

Hydric Soil Present? Yes _____ No

Remarks:
 Some very faint redox concentrations in the matrix. Soils are not in a landscape position (mid banks of a constructed pond) where they would be seasonally inundated.

HYDROLOGY

Wetland Hydrology Indicators:	
Primary Indicators (minimum of one required: check all that apply)	Secondary Indicators (2 or more required)
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Salt Crust (B11)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Aquatic Invertebrates (B13)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Presence of Reduced Iron (C4)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Recent Iron Reduction in Plowed Soils (C6)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Other (Explain in Remarks)
	<input type="checkbox"/> Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes _____ No Depth (inches): _____

Water Table Present? Yes _____ No Depth (inches): _____

Saturation Present? Yes _____ No Depth (inches): _____
 (includes capillary fringe)

Wetland Hydrology Present? Yes _____ No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
 Hillslope bank of artificial pond. All surface flow in the winter season would readily drain into the adjacent pond.

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys and Coast Region

Project Site: 880 Stone Pine Road Project City/County: Half Moon Bay, San Mateo Sampling Date: 6/12/2020
 Applicant/Owner: City of Half Moon Bay State: California Sampling Point: SP5
 Investigator(s): M. Bibbo Section/Township/Range: N/A
 Landform (hillslope, terrace, etc.): Terrace Local Relief (concave, convex, none): None Slope (%): 0
 Subregion (LRR): LRR-C Lat: 37.46825 Long: -122.42389 Datum: WGS84
 Soil Map Unit Name: Farallone loam, nearly level NWI classification None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)
 Are Soil or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No _____
 Vegetation _____
 Are Soil or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)
 Vegetation _____

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <u>X</u>	No _____	Is the Sampled Area within a Wetland?	Yes _____	No <u>X</u>
Hydric Soil Present?	Yes _____	No <u>X</u>			
Wetland Hydrology Present?	Yes _____	No <u>X</u>			

Remarks:
 Point taken to examine the willow/alder stands that occur on the site - may be considered "one-parameter CCC wetlands".

VEGETATION

Tree Stratum (Plot size: <u>30 x 30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Salix laevigata</u>	<u>90</u>	<u>X</u>	<u>FACW</u>
2. _____			
3. _____			
4. _____			
Total Cover:	<u>90</u>		

Sapling/Shrub Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1. _____			
2. _____			
3. _____			
4. _____			
5. _____			
Total Cover:	<u>0</u>		

Herb Stratum (Plot size: <u>30 x 30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Festuca perennis</u>	<u>2</u>	<u>X</u>	<u>FAC</u>
2. <u>Avena fatua</u>	<u>1</u>		<u>UPL</u>
3. <u>Bromus diandrus</u>	<u>1</u>		<u>UPL</u>
4. <u>Bromus catharticus</u>	<u>1</u>		<u>UPL</u>
5. _____			
6. _____			
7. _____			
8. _____			
9. _____			
10. _____			
11. _____			
Total Cover:	<u>5</u>		

Woody Vine Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1. _____			
2. _____			
Total Cover:			

% Bare Ground in Herb Stratum _____

Remarks:
 Wetland boundary defined by overstory canopy of willow. Understory is absent (i.e. bare) to very sparsely vegetated by FAC and UPL grasses.

Dominance Test worksheet:	
Number of Dominant Species That Are OBL, FACW, or FAC:	<u>2</u> (A)
Total Number of Dominant Species Across All Strata:	<u>2</u> (B)
Percent of Dominant Species That Are OBL, FACW, or FAC:	<u>100</u> (A/B)

Prevalence Index worksheet:	
Total % Cover of:	Multiply by:
OBL species _____ x 1 = _____	
FACW species _____ x 2 = _____	
FAC species _____ x 3 = _____	
FACU species _____ x 4 = _____	
UPL Species _____ x 5 = _____	
Column totals _____ (A)	_____ (B)
Prevalence Index = B/A = _____	

Hydrophytic Vegetation Indicators:

____ 1 – Rapid Test for Hydrophytic Vegetation
X 2 – Dominance Text is >50%
 ____ 3 – Prevalence Index is ≤3.0¹
 ____ 4 – Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
 ____ 5 – Wetland Non-vascular Plants¹ (Explain)
 Problematic Hydrophytic Vegetation¹ (Explain)

¹ Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present?	Yes <u>X</u>	No _____
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SOIL

Sampling Point: **SP5**

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-16	10YR 3/2	100					clay loam	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains ²Location: PL=Pore Lining, RC=Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)			Indicators for Problematic Hydric Soils³:		
<input type="checkbox"/>	Histosol (A1)	<input type="checkbox"/>	Sandy Redox (S5)	<input type="checkbox"/>	2 cm Muck (A10)
<input type="checkbox"/>	Histic Epipedon (A2)	<input type="checkbox"/>	Stripped Matrix (S6)	<input type="checkbox"/>	Red Parent Material (TF2)
<input type="checkbox"/>	Black Histic (A3)	<input type="checkbox"/>	Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/>	Very Shallow Dark Surface (TF12)
<input type="checkbox"/>	Hydrogen Sulfide (A4)	<input type="checkbox"/>	Loamy Gleyed Matrix (F2)	<input type="checkbox"/>	Other (Explain in Remarks)
<input type="checkbox"/>	Depleted Below Dark Surface (A11)	<input type="checkbox"/>	Depleted Matrix (F3)		
<input type="checkbox"/>	Thick Dark Surface (A12)	<input type="checkbox"/>	Redox Dark Surface (F6)		
<input type="checkbox"/>	Sandy Mucky Mineral (S1)	<input type="checkbox"/>	Depleted Dark Surface (F7)		
<input type="checkbox"/>	Sandy Gleyed Matrix (S4)	<input type="checkbox"/>	Redox Depressions (F8)		

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (If present):
 Type: _____
 Depth (inches): _____

Hydric Soil Present? Yes _____ No **X** _____

Remarks:
 No redox features observed.

HYDROLOGY

Wetland Hydrology Indicators:	
Primary Indicators (minimum of one required: check all that apply)	Secondary Indicators (2 or more required)
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Raised Ant Mounds (D6) (LLR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	
<input type="checkbox"/>	<input type="checkbox"/> Salt Crust (B11)
<input type="checkbox"/>	<input type="checkbox"/> Aquatic Invertebrates (B13)
<input type="checkbox"/>	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)
<input type="checkbox"/>	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)
<input type="checkbox"/>	<input type="checkbox"/> Presence of Reduced Iron (C4)
<input type="checkbox"/>	<input type="checkbox"/> Recent Iron Reduction in Plowed Soils (C6)
<input type="checkbox"/>	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)
<input type="checkbox"/>	<input type="checkbox"/> Other (Explain in Remarks)

Field Observations:

Surface Water Present? Yes _____ No **X** _____ Depth (inches): _____

Water Table Present? Yes _____ No **X** _____ Depth (inches): _____

Saturation Present? Yes _____ No **X** _____ Depth (inches): _____
 (includes capillary fringe)

Wetland Hydrology Present? Yes _____ No **X** _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
 The willow/alder patches are situated on a flat terrace that was previously leveled and in agricultural production. There may be a high water table that the roots are tapping into.

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys and Coast Region

Project Site: 880 Stone Pine Road Project City/County: Half Moon Bay, San Mateo Sampling Date: 6/12/2020
 Applicant/Owner: City of Half Moon Bay State: California Sampling Point: SP6
 Investigator(s): M. Bibbo Section/Township/Range: N/A
 Landform (hillslope, terrace, etc.): Terrace Local Relief (concave, convex, none): None Slope (%): 0
 Subregion (LRR): LRR-C Lat: 37.46822 Long: -122.42382 Datum: WGS84
 Soil Map Unit Name: Farallone loam, nearly level NWI classification None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)
 Are Soil or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No _____
 Are Soil or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)
 Vegetation _____

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No <u>X</u>	Is the Sampled Area within a Wetland?	Yes _____	No <u>X</u>
Hydric Soil Present?	Yes _____	No <u>X</u>			
Wetland Hydrology Present?	Yes _____	No <u>X</u>			

Remarks:
 Paired point to SP5.

VEGETATION

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1. _____	_____	_____	_____
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
Total Cover:	<u>0</u>		

Sapling/Shrub Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1. _____	_____	_____	_____
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
Total Cover:	<u>0</u>		

Herb Stratum (Plot size: <u>10 x 10 ft.</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Avena fatua</u>	<u>50</u>	<u>X</u>	<u>UPL</u>
2. <u>Bromus diandrus</u>	<u>25</u>	<u>X</u>	<u>UPL</u>
3. <u>Festuca myuros</u>	<u>10</u>		<u>UPL</u>
4. <u>Festuca perennis</u>	<u>10</u>		<u>FAC</u>
5. <u>Carduus pycnocephalus</u>	<u>3</u>		<u>UPL</u>
6. <u>Erigeron canadensis</u>	<u>2</u>		<u>UPL</u>
7. _____	_____	_____	_____
8. _____	_____	_____	_____
9. _____	_____	_____	_____
10. _____	_____	_____	_____
11. _____	_____	_____	_____
Total Cover:	<u>100</u>		

Woody Vine Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1. _____	_____	_____	_____
2. _____	_____	_____	_____
Total Cover:	_____		

% Bare Ground in Herb Stratum 0

Remarks:
 Dominated by upland grasses.

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

Prevalence Index worksheet:

Total % Cover of: Multiply by:

OBL species _____ x 1 = _____

FACW species _____ x 2 = _____

FAC species _____ x 3 = _____

FACU species _____ x 4 = _____

UPL Species _____ x 5 = _____

Column totals _____ (A) _____ (B)

Prevalence Index = B/A = _____

- Hydrophytic Vegetation Indicators:**
- ___ 1 – Rapid Test for Hydrophytic Vegetation
 - ___ 2 – Dominance Text is >50%
 - ___ 3 – Prevalence Index is ≤3.0¹
 - ___ 4 – Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
 - ___ 5 – Wetland Non-vascular Plants¹ (Explain) Problematic Hydrophytic Vegetation¹ (Explain)
- ¹ Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present?	Yes _____	No <u>X</u>
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SOIL

Sampling Point: **SP6**

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-16	10YR 3/2	100					Clay loam	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains ²Location: PL=Pore Lining, RC=Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)		Indicators for Problematic Hydric Soils³:	
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)	
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)	
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)	
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)		
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)		
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)		
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)		

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (If present):
 Type: _____
 Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:
 No redox features observed.

HYDROLOGY

Wetland Hydrology Indicators:	
Primary Indicators (minimum of one required: check all that apply)	Secondary Indicators (2 or more required)
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Plowed Soils (C6)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	

Field Observations:		Wetland Hydrology Present? Yes _____ No <u>X</u>
Surface Water Present? Yes _____ No <u>X</u>	Depth (inches): _____	
Water Table Present? Yes _____ No <u>X</u>	Depth (inches): _____	
Saturation Present? Yes _____ No <u>X</u>	Depth (inches): _____	

(includes capillary fringe)

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
 Level terrace, no indication of seasonal inundation.

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys and Coast Region

Project Site: 880 Stone Pine Road Project City/County: Half Moon Bay, San Mateo Sampling Date: 6/12/2020
 Applicant/Owner: City of Half Moon Bay State: California Sampling Point: SP7
 Investigator(s): M. Bibbo Section/Township/Range: N/A
 Landform (hillslope, terrace, etc.): Hillslope Local Relief (concave, convex, none): None Slope (%): 1
 Subregion (LRR): LRR-C Lat: 37.46808 Long: -122.42309 Datum: WGS84
 Soil Map Unit Name: Farallone coarse sandy loam, moderately steep, eroded NWI classification None
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)
 Are Soil or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No _____
 Vegetation _____
 Are Soil or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)
 Vegetation _____

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <u>X</u>	No _____	Is the Sampled Area within a Wetland?	Yes _____	No <u>X</u>
Hydric Soil Present?	Yes _____	No <u>X</u>		Yes _____	No <u>X</u>
Wetland Hydrology Present?	Yes _____	No <u>X</u>		Yes _____	No _____

Remarks:
 Point taken to examine poison hemlock infestation on terrace in southern portion of property.

VEGETATION

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:	
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC:	<u>1</u> (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata:	<u>1</u> (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC:	<u>100</u> (A/B)
4. _____	_____	_____	_____		
Total Cover:	<u>0</u>				
Sapling/Shrub Stratum (Plot size: _____)					
1. _____	_____	_____	_____	Prevalence Index worksheet:	
2. _____	_____	_____	_____	Total % Cover of: _____ Multiply by:	
3. _____	_____	_____	_____	OBL species _____ x 1 = _____	
4. _____	_____	_____	_____	FACW species _____ x 2 = _____	
5. _____	_____	_____	_____	FAC species _____ x 3 = _____	
Total Cover:	<u>0</u>			FACU species _____ x 4 = _____	
Herb Stratum (Plot size: <u>10 x 10 ft.</u>)					
1. <u>Conium maculatum</u>	<u>100</u>	<u>X</u>	<u>FAC</u>	UPL Species _____ x 5 = _____	
2. <u>Hirschfeldia incana</u>	<u>2</u>		<u>UPL</u>	Column totals _____ (A) _____ (B)	
3. _____	_____	_____	_____	Prevalence Index = B/A = _____	
4. _____	_____	_____	_____	Hydrophytic Vegetation Indicators:	
5. _____	_____	_____	_____	____ 1 – Rapid Test for Hydrophytic Vegetation	
6. _____	_____	_____	_____	<u>X</u> 2 – Dominance Text is >50%	
7. _____	_____	_____	_____	____ 3 – Prevalence Index is ≤3.0 ¹	
8. _____	_____	_____	_____	____ 4 – Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)	
9. _____	_____	_____	_____	____ 5 – Wetland Non-vascular Plants ¹ (Explain)	
10. _____	_____	_____	_____	Problematic Hydrophytic Vegetation ¹ (Explain)	
11. _____	_____	_____	_____	¹ Indicators of hydric soil and wetland hydrology must be present.	
Total Cover:	<u>100</u>				
Woody Vine Stratum (Plot size: _____)					
1. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes <u>X</u> No _____	
2. _____	_____	_____	_____		
Total Cover:	_____				
% Bare Ground in Herb Stratum <u>0</u>					

Remarks:
 Ruderal vegetation dominated by poison hemlock, a FAC plant. Hemlock is not "acting" like a wetland plant in this situation.

SOIL

Sampling Point: **SP7**

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-16	7.5 YR 4/2	100					Sandy loam	coarse

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains ²Location: PL=Pore Lining, RC=Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)	

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (If present):
 Type: _____
 Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:
 No redox features observed.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required: check all that apply)		Secondary Indicators (2 or more required)
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Plowed Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LLR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		

Field Observations:

Surface Water Present?	Yes _____ No <u>X</u>	Depth (inches): _____	Wetland Hydrology Present? Yes _____ No <u>X</u>
Water Table Present?	Yes _____ No <u>X</u>	Depth (inches): _____	
Saturation Present?	Yes _____ No <u>X</u>	Depth (inches): _____	
(includes capillary fringe)			

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
 Upland landscape position.

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys and Coast Region

Project Site: 880 Stone Pine Road Project City/County: Half Moon Bay, San Mateo Sampling Date: 6/12/2020
 Applicant/Owner: City of Half Moon Bay State: California Sampling Point: SP8
 Investigator(s): M. Bibbo Section/Township/Range: N/A
 Landform (hillslope, terrace, etc.): Terrace Local Relief (concave, convex, none): None Slope (%): 0
 Subregion (LRR): LRR-C Lat: 37.469925 Long: -122.42175 Datum: WGS84
 Soil Map Unit Name: Farallone coarse sandy loam, moderately steep, eroded NWI classification None
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)
 Are Soil or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No _____
 Vegetation _____
 Are Soil or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)
 Vegetation _____

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <u>X</u>	No _____	Is the Sampled Area within a Wetland?	Yes _____	No <u>X</u>
Hydric Soil Present?	Yes _____	No <u>X</u>		Yes _____	No <u>X</u>
Wetland Hydrology Present?	Yes _____	No <u>X</u>		Yes _____	No _____

Remarks:
 Point taken to examine the riparian corridor of Pilarcitos Creek.

VEGETATION

Tree Stratum (Plot size: <u>30 x 30ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Salix laevigata</u>	<u>100</u>	<u>X</u>	<u>FACW</u>
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
Total Cover:	<u>100</u>	_____	_____

Sapling/Shrub Stratum (Plot size: <u>30 x 30ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Rubus armeniacus</u>	<u>20</u>	<u>X</u>	<u>FAC</u>
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
Total Cover:	<u>20</u>	_____	_____

Herb Stratum (Plot size: <u>30 x 30ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Urtic dioica</u>	<u>5</u>	<u>X</u>	<u>FAC</u>
2. <u>Stachys rigida</u>	<u>5</u>	<u>X</u>	<u>FACW</u>
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
7. _____	_____	_____	_____
8. _____	_____	_____	_____
9. _____	_____	_____	_____
10. _____	_____	_____	_____
11. _____	_____	_____	_____
Total Cover:	<u>10</u>	_____	_____

Woody Vine Stratum (Plot size: <u>30 x 30ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Delairea odorata</u>	<u>75</u>	<u>X</u>	<u>FAC</u>
2. _____	_____	_____	_____
Total Cover:	<u>75</u>	_____	_____

% Bare Ground in Herb Stratum 0

Remarks:
 Willow-dominated, dense, multi-layered riparian vegetation.

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)
 Total Number of Dominant Species Across All Strata: 4 (B)
 Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of: Multiply by:

OBL species _____ x 1 = _____
 FACW species _____ x 2 = _____
 FAC species _____ x 3 = _____
 FACU species _____ x 4 = _____
 UPL Species _____ x 5 = _____
 Column totals _____ (A) _____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

- _____ 1 – Rapid Test for Hydrophytic Vegetation
- X 2 – Dominance Text is >50%
- _____ 3 – Prevalence Index is ≤3.0¹
- _____ 4 – Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
- _____ 5 – Wetland Non-vascular Plants¹ (Explain)
- _____ Problematic Hydrophytic Vegetation¹ (Explain)

¹ Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present?

Yes X No _____

SOIL

Sampling Point: **SP8**

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-16	10 YR 3/3	100					sandy loam	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains ²Location: PL=Pore Lining, RC=Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)	

Restrictive Layer (If present):
 Type: _____
 Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:
 Terrace soils, well-drained. No redoximorphic features observed.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required: check all that apply)		Secondary Indicators (2 or more required)
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Plowed Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LLR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		

Field Observations:

Surface Water Present?	Yes _____ No <u>X</u>	Depth (inches): _____	Wetland Hydrology Present? Yes _____ No <u>X</u>
Water Table Present?	Yes _____ No <u>X</u>	Depth (inches): _____	
Saturation Present?	Yes _____ No <u>X</u>	Depth (inches): _____	
(includes capillary fringe)			

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
 Upland landscape position - high terrace above Pilarcitos Creek.

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys and Coast Region

Project Site: 880 Stone Pine Road Project City/County: Half Moon Bay, San Mateo Sampling Date: 6/12/2020
 Applicant/Owner: City of Half Moon Bay State: California Sampling Point: SP9
 Investigator(s): M. Bibbo Section/Township/Range: N/A
 Landform (hillslope, terrace, etc.): Terrace Local Relief (concave, convex, none): None Slope (%): 0
 Subregion (LRR): LRR-C Lat: 37.46687 Long: -122.42311 Datum: WGS84
 Soil Map Unit Name: Farallone coarse sandy loam, moderately steep, eroded NWI classification None
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)
 Are Soil or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No _____
 Vegetation _____
 Are Soil or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)
 Vegetation _____

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <u>X</u> No _____	Is the Sampled Area within a Wetland?	Yes _____ No <u>X</u>
Hydric Soil Present?	Yes _____ No <u>X</u>		
Wetland Hydrology Present?	Yes _____ No <u>X</u>		

Remarks:
 Point taken to examine the riparian corridor of Pilarcitos Creek. Point taken in southwest corner of property.

VEGETATION

Tree Stratum (Plot size: <u>30 x 30ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Salix laevigata</u>	<u>60</u>	<u>X</u>	<u>FACW</u>
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
Total Cover:	<u>60</u>		
Sapling/Shrub Stratum (Plot size: <u>30 x 30ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Rubus armeniacus</u>	<u>60</u>	<u>X</u>	<u>FAC</u>
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
Total Cover:	<u>60</u>		
Herb Stratum (Plot size: <u>30 x 30ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Conium maculatum</u>	<u>20</u>	<u>X</u>	<u>FAC</u>
2. <u>Urtica dioica</u>	<u>10</u>	<u>X</u>	<u>FAC</u>
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
7. _____	_____	_____	_____
8. _____	_____	_____	_____
9. _____	_____	_____	_____
10. _____	_____	_____	_____
11. _____	_____	_____	_____
Total Cover:	<u>30</u>		
Woody Vine Stratum (Plot size: <u>30 x 30ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Delairea odorata</u>	<u>75</u>	<u>X</u>	<u>FAC</u>
2. _____	_____	_____	_____
Total Cover:	<u>75</u>		
% Bare Ground in Herb Stratum _____			

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 5 (A)

Total Number of Dominant Species Across All Strata: 5 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of: _____ Multiply by:

OBL species _____ x 1 = _____

FACW species _____ x 2 = _____

FAC species _____ x 3 = _____

FACU species _____ x 4 = _____

UPL Species _____ x 5 = _____

Column totals _____ (A) _____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

____ 1 – Rapid Test for Hydrophytic Vegetation

X 2 – Dominance Text is >50%

____ 3 – Prevalence Index is ≤3.0¹

____ 4 – Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)

____ 5 – Wetland Non-vascular Plants¹ (Explain)
 Problematic Hydrophytic Vegetation¹ (Explain)

¹ Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes X No _____

Remarks:
 Willow-dominated, dense, multi-layered riparian vegetation.

SOIL

Sampling Point: **SP9**

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-16	10 YR 3/2	100					sandy loam	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains ²Location: PL=Pore Lining, RC=Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)	

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (If present):
 Type: _____
 Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:
Terrace soils, well-drained. No redoximorphic features observed.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required: check all that apply)		Secondary Indicators (2 or more required)
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Plowed Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LLR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		

Field Observations:

Surface Water Present?	Yes _____ No <u>X</u>	Depth (inches): _____	Wetland Hydrology Present? Yes _____ No <u>X</u>
Water Table Present?	Yes _____ No <u>X</u>	Depth (inches): _____	
Saturation Present?	Yes _____ No <u>X</u>	Depth (inches): _____	
(includes capillary fringe)			

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
Upland landscape position - high terrace above Pilarcitos Creek.

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys and Coast Region

Project Site: 880 Stone Pine Road Project City/County: Half Moon Bay, San Mateo Sampling Date: 6/12/2020
 Applicant/Owner: City of Half Moon Bay State: California Sampling Point: SP10
 Investigator(s): M. Bibbo Section/Township/Range: N/A
 Landform (hillslope, terrace, etc.): Terrace Local Relief (concave, convex, none): None Slope (%): 0
 Subregion (LRR): LRR-C Lat: 37.46701 Long: -122.42410 Datum: WGS84
 Soil Map Unit Name: Farallone loam, nearly level NWI classification None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)
 Are Soil or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No _____
 Vegetation _____
 Are Soil or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)
 Vegetation _____

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <u>X</u>	No _____	Is the Sampled Area within a Wetland?	Yes _____	No <u>X</u>
Hydric Soil Present?	Yes _____	No <u>X</u>			
Wetland Hydrology Present?	Yes _____	No <u>X</u>			

Remarks:
 Point taken to examine poison hemlock infestation on terrace in south west portion of property. Hemlock is extensive on this portion of the property.

VEGETATION

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1. _____	_____	_____	_____
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
Total Cover:	<u>0</u>		

Sapling/Shrub Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1. _____	_____	_____	_____
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
Total Cover:	<u>0</u>		

Herb Stratum (Plot size: <u>10 x 10 ft.</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Conium maculatum</u>	<u>40</u>	<u>X</u>	<u>FAC</u>
2. <u>Festuca perennis</u>	<u>20</u>	<u>X</u>	<u>FAC</u>
3. <u>Bromus diandrus</u>	<u>35</u>	<u>X</u>	<u>UPL</u>
4. <u>Lotus corniculatus</u>	<u>5</u>		<u>FAC</u>
5. _____	_____	_____	_____
6. _____	_____	_____	_____
7. _____	_____	_____	_____
8. _____	_____	_____	_____
9. _____	_____	_____	_____
10. _____	_____	_____	_____
11. _____	_____	_____	_____
Total Cover:	<u>100</u>		

Woody Vine Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1. _____	_____	_____	_____
2. _____	_____	_____	_____
Total Cover:	_____		

% Bare Ground in Herb Stratum 0

Remarks:
 Ruderal vegetation dominated by poison hemlock and Italian rye-grass, FAC plants, though neither are "acting" like a wetland plants in this situation.

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 66 (A/B)

Prevalence Index worksheet:

Total % Cover of: _____ Multiply by:

OBL species _____ x 1 = _____

FACW species _____ x 2 = _____

FAC species _____ x 3 = _____

FACU species _____ x 4 = _____

UPL Species _____ x 5 = _____

Column totals _____ (A) _____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

____ 1 – Rapid Test for Hydrophytic Vegetation

X 2 – Dominance Text is >50%

____ 3 – Prevalence Index is ≤3.0¹

____ 4 – Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)

____ 5 – Wetland Non-vascular Plants¹ (Explain)

____ Problematic Hydrophytic Vegetation¹ (Explain)

¹ Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes X No _____

SOIL

Sampling Point: **SP10**

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-16	10YR 3/2	100					Clay loam	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains ²Location: PL=Pore Lining, RC=Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)	

Restrictive Layer (If present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:
Soils appear to be well-drained, no redoximorphic features present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required: check all that apply)		Secondary Indicators (2 or more required)
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Plowed Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LLR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		

Field Observations:

Surface Water Present?	Yes _____ No <u>X</u>	Depth (inches): _____	Wetland Hydrology Present? Yes _____ No <u>X</u>
Water Table Present?	Yes _____ No <u>X</u>	Depth (inches): _____	
Saturation Present?	Yes _____ No <u>X</u>	Depth (inches): _____	
(includes capillary fringe)			

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
Level terrace, no indication of seasonal inundation.

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys and Coast Region

Project Site: 880 Stone Pine Road Project City/County: Half Moon Bay, San Mateo Sampling Date: 6/12/2020
 Applicant/Owner: City of Half Moon Bay State: California Sampling Point: SP11
 Investigator(s): M. Bibbo Section/Township/Range: N/A
 Landform (hillslope, terrace, etc.): Terrace Local Relief (concave, convex, none): None Slope (%): 0
 Subregion (LRR): LRR-C Lat: 37.46938 Long: -122.42328 Datum: WGS84
 Soil Map Unit Name: Farallone loam, nearly level NWI classification None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)
 Are Soil or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No _____
 Are Soil or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)
 Vegetation _____

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No <u>X</u>	Is the Sampled Area within a Wetland?	Yes _____	No <u>X</u>
Hydric Soil Present?	Yes _____	No <u>X</u>			
Wetland Hydrology Present?	Yes _____	No <u>X</u>			

Remarks:
 Point taken to examine grassland in the northeastern corner of the property. This grassland is typical of the site.

VEGETATION

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1. _____	_____	_____	_____
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
Total Cover:	<u>0</u>		

Sapling/Shrub Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1. _____	_____	_____	_____
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
Total Cover:	<u>0</u>		

Herb Stratum (Plot size: <u>10 x 10 ft.</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Avena fatua</u>	<u>60</u>	<u>X</u>	<u>UPL</u>
2. <u>Bromus diandrus</u>	<u>30</u>	<u>X</u>	<u>UPL</u>
3. <u>Hirschfeldia incana</u>	<u>5</u>	_____	<u>UPL</u>
4. <u>Helminthotheca echioides</u>	<u>2</u>	_____	<u>FAC</u>
5. <u>Vicia sativa</u>	<u>2</u>	_____	<u>UPL</u>
6. <u>Rumex crispus</u>	<u><1</u>	_____	<u>FAC</u>
7. _____	_____	_____	_____
8. _____	_____	_____	_____
9. _____	_____	_____	_____
10. _____	_____	_____	_____
11. _____	_____	_____	_____
Total Cover:	<u>100</u>		

Woody Vine Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1. _____	_____	_____	_____
2. _____	_____	_____	_____
Total Cover:	_____		

% Bare Ground in Herb Stratum 0

Remarks:
 Dominated by upland grasses.

Dominance Test worksheet:	
Number of Dominant Species That Are OBL, FACW, or FAC:	<u>0</u> (A)
Total Number of Dominant Species Across All Strata:	<u>2</u> (B)
Percent of Dominant Species That Are OBL, FACW, or FAC:	<u>0</u> (A/B)

Prevalence Index worksheet:	
Total % Cover of:	Multiply by:
OBL species _____ x 1 = _____	
FACW species _____ x 2 = _____	
FAC species _____ x 3 = _____	
FACU species _____ x 4 = _____	
UPL Species _____ x 5 = _____	
Column totals _____ (A)	_____ (B)
Prevalence Index = B/A = _____	

- Hydrophytic Vegetation Indicators:**
- ___ 1 – Rapid Test for Hydrophytic Vegetation
 - ___ 2 – Dominance Text is >50%
 - ___ 3 – Prevalence Index is ≤3.0¹
 - ___ 4 – Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
 - ___ 5 – Wetland Non-vascular Plants¹ (Explain) Problematic Hydrophytic Vegetation¹ (Explain)
- ¹ Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present?	Yes _____	No <u>X</u>
--	-----------	-------------

SOIL

Sampling Point: **SP11**

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-16	10YR 3/2	100					Clay loam	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains ²Location: PL=Pore Lining, RC=Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)			Indicators for Problematic Hydric Soils³:		
<input type="checkbox"/>	Histosol (A1)	<input type="checkbox"/>	Sandy Redox (S5)	<input type="checkbox"/>	2 cm Muck (A10)
<input type="checkbox"/>	Histic Epipedon (A2)	<input type="checkbox"/>	Stripped Matrix (S6)	<input type="checkbox"/>	Red Parent Material (TF2)
<input type="checkbox"/>	Black Histic (A3)	<input type="checkbox"/>	Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/>	Very Shallow Dark Surface (TF12)
<input type="checkbox"/>	Hydrogen Sulfide (A4)	<input type="checkbox"/>	Loamy Gleyed Matrix (F2)	<input type="checkbox"/>	Other (Explain in Remarks)
<input type="checkbox"/>	Depleted Below Dark Surface (A11)	<input type="checkbox"/>	Depleted Matrix (F3)		
<input type="checkbox"/>	Thick Dark Surface (A12)	<input type="checkbox"/>	Redox Dark Surface (F6)		
<input type="checkbox"/>	Sandy Mucky Mineral (S1)	<input type="checkbox"/>	Depleted Dark Surface (F7)		
<input type="checkbox"/>	Sandy Gleyed Matrix (S4)	<input type="checkbox"/>	Redox Depressions (F8)		

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (If present): Type: _____ Depth (inches): _____	Hydric Soil Present? Yes _____ No <u>X</u>
--	--

Remarks:
Soils appear to be well-drained.

HYDROLOGY

Wetland Hydrology Indicators:	
Primary Indicators (minimum of one required: check all that apply)	Secondary Indicators (2 or more required)
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Plowed Soils (C6)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	

Field Observations: Surface Water Present? Yes _____ No <u>X</u> Depth (inches): _____ Water Table Present? Yes _____ No <u>X</u> Depth (inches): _____ Saturation Present? Yes _____ No <u>X</u> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes _____ No <u>X</u>
--	--

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
Level terrace, no indication of seasonal inundation.

Appendix D. Photographic Documentation of the Project Area



Photo 1. Riparian habitat along Pilarcitos Creek (SP8).



Photo 2. Emergent freshwater marsh habitat around the abandoned agricultural pond (FM-1; SP3).



Photo 3. Willow/Alder stands in the California annual grassland occupying the old agricultural terraces (SP5).



Photo 4. Portion of project area dominated by poison hemlock (SP7).



Photo 5. Upland grassland habitat typical of the site (SP11).



Photo 6. OWHM and streambed of Pilarcitos Creek forming the eastern edge of the project study area.

Appendix E. Aquatic Resources Table

Waters Name	State	Cowardin Code	HGM Code	Measurement Type	Amount	Units	Water Type	Latitude	Longitude	Local Waterway
R1	CALIFORNIA	R2UB	RIVERINE	Area	1.46 ac	ACRE	RPW	37.467987	-122.422659	Pilarcitos Creek
FM1	CALIFORNIA	PEM	DEPRESS	Area	1.17 ac	ACRE	RPWWN	37.468813	-122.425454	Pilarcitos Creek

Appendix F. Signed statement from the property owner(s) allowing USACE personnel to enter the property

I, John Doughty, will allow Corps personnel to enter the 880 Stone Pine Road Project property in San Mateo County, California to collect samples during normal business hours. The property is not land-locked, therefore permission from the adjacent property owner(s) in order to provide access is not necessary.

Thank you,

John Doughty
City of Half Moon Bay
jdoughty@hmbcity.com
(650) 726-8252

**BUSINESS OF THE PLANNING COMMISSION
OF THE CITY OF HALF MOON BAY**

AGENDA REPORT

For meeting of: **August 24, 2021**

TO: Honorable Chair and Planning Commissioners

FROM: Jill Ekas, Community Development Director
Scott Phillips, Associate Planner

TITLE: 341 Myrtle Street - Coastal Development Permit, Architectural Review, Combined Side Yard Setback Variance, Maximum Building Envelope Variance and Parking Exception, File No. PDP-19-096

RECOMMENDATION

Adopt Resolution P-21-__ to approve PDP-19-096 an application for a Coastal Development Permit, Architectural Review, Combined Side Yard Setback variance, and Parking Exception to allow the construction of a new two-story 1,195 square-foot, single-family residence on a 2,806 square-foot site at 341 Myrtle Street, as shown in Design A and modified by conditions of approval, based upon the Findings and Evidence contained in Exhibit A of the Draft Resolution, and subject to the Conditions of Approval in Exhibit B. Adopt Resolution P-21-__ to approve PDP-19-096 an application for a Coastal Development Permit, Architectural Review, Combined Side Yard Setback variance and Parking Exception to allow the construction of a new two-story 1,195 square-foot, single-family residence on a 2,806 square-foot site at 341 Myrtle Street, as shown in Design A and modified by conditions of approval, based upon the Findings and Evidence contained in Exhibit A of the Draft Resolution, and subject to the Conditions of Approval in Exhibit B.

PROJECT BACKGROUND

Summary of Project	
File Number	PDP-19-096
Requested Permits/Approvals	Coastal Development Permit, Architectural Review, Combined Side Yard Setback Variance, Maximum Building Envelope Variance and Parking Exception
Site Location	341 Myrtle Street/ APN: 064-061-280
Applicant/Property Owner	John T. Callan
Project Planner	Scott Phillips, Associate Planner; (650)726-8299; sphillips@hmbcity.com
Zoning District	R-1 Single Family Residential Zoning District

LCP Land Use Plan Designation	Residential Medium Density		
Water Service	One 5/8-inch, non-priority water connection currently assigned to the property		
Sewer Service (Sewer Authority Mid-Coast)	Two benefit sewer units required		
Street Improvements	In-lieu payment for construction of curb, gutter and sidewalk along the frontage		
Environmental Determination	Categorically Exempt pursuant to California Administrative Code Section 15303, New Construction or Conversion of Small Structures		
Heritage Trees	None		
Story Poles	Required	No	Yes if in Visual Resource Area, or those cited in code
		Yes	Variance or Exception required?
		No	Located in a largely undeveloped area?
Right of Appeal	Any aggrieved person may appeal the Planning Commission’s decision to the City Council within ten (10) working days of the decision.		
	The project is not located within the Coastal Commission Appeals Jurisdiction; therefore, City action is final.		

Previous Review

This project was previously reviewed at the January 12, 2021 Planning Commission meeting (refer to Attachment 2 for project Plans and Attachment 4 for the staff report). The plan set presented at the meeting included Design A, which is identical to Design A included with this report. Design B was also presented at the January meeting and is no longer proposed. At that meeting, the Planning Commission received a presentation, conducted a public hearing, and held a discussion. Public comment and Planning Commission discussion centered around the following:

- Evaluation of two house designs,
- Findings associated with the requested variances and parking exception,
- Privacy related to the second story deck and windows,
- Use of the new residence as a short-term rental.

Comments are referenced in the adopted minutes (Attachment 5). The Commission continued the item to a date uncertain and directed staff to work with the design team to revise the project to address the concerns that were brought up at the January meeting.

Revised Project Description

Several versions of project plans have been presented to the Planning Commission for this project as described in the following summary.

Design A: This design was presented to the Commission in January and is brought back as originally proposed for reference because staff continues to support Design A, with modifications, as described below. Design A consists of a new two-story residence with a floor area of 1,195 square feet. The proposed home contains two bedrooms, two bathrooms and a 224 square foot second story deck. The proposed house is characterized by a series of front and rear facing gable roof elements. One bay window and shed dormers are sited along the sides of the new residence. The proposed exterior materials include horizontal siding, and composition shingles. The color palette includes blue siding, off-white trim and a yellow front door (Attachment 6).

Design B: Design B was presented to the Planning Commission in January. It is no longer under consideration.

Design C: Based on Planning Commission direction in January, the applicant revised the plans, resulting in Design C (Figure 4 and Attachment 3). Design C includes modified roof angles to provide more symmetry when viewed from Myrtle Street. The shed dormers have also been enlarged to increase the ceiling height and functionality of the second story. Additionally, the second story rear deck has been reduced in size. The applicant is seeking approval of Design C.

Design A with Modifications – Staff Recommendation: Staff is recommending Design A with the following modifications:

- Increased setback of the shed dormer sheer walls to conform to the maximum building envelope standard
- Reduced rear deck area

Both suggested changes to Design A are discussed later in this staff report and included as required plan revisions in the draft condition of approval B4.

Story Poles

Project review includes story pole installation in conformance with the City Council Story Pole Policy. Story pole installation is required because two variances and a parking exception are being considered as part of this project. Story poles were installed on August 19th and a photograph is included in Figure 2.



Figure 2. Site Photo with Story Poles, dated August 19, 2021

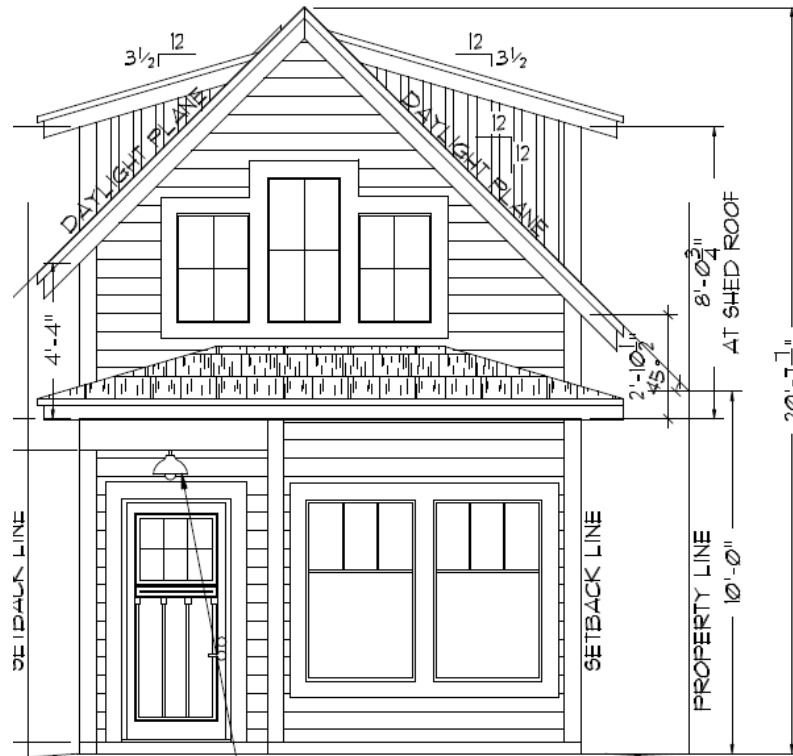


Figure 3. Front of Proposed Residence, Design A¹

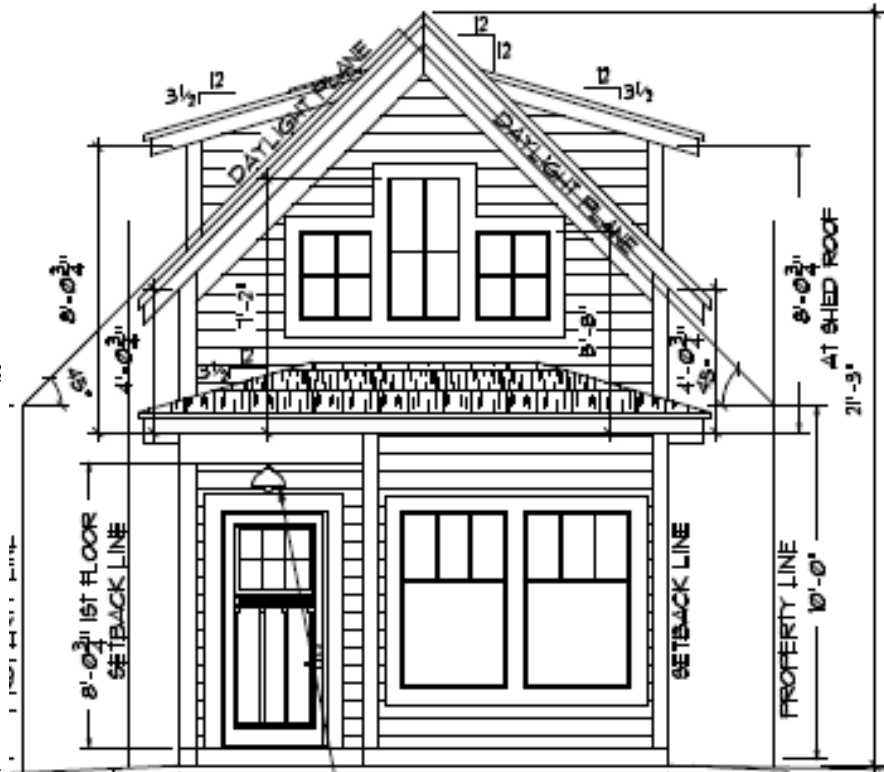


Figure 4. Front of Proposed Residence, Design C²

¹ Design A: The shed dormers shown in Figure 3 would be allowed encroachments if the sheer walls of the shed dormers were inset and separated from the first story sheer wall below. As shown in Figure 3, the sheer walls are vertically aligned, which is therefore the subject of the building envelope variance for Design A. If the sheer walls were inset at least 6-inches from the first floor walls, no building envelope variance would be required for Design A.

² Design C: The total width of the shed dormers exceeds 15 horizontal feet. The eastern roof area is outside of the building envelope and is therefore the subject of the variance request.

ANALYSIS

The key issues for this project are conformance with the General Plan/Local Coastal Land Use Plan, conformance with the Zoning Code/LCP Implementation Plan, and design compatibility with surrounding development.

Conformance with the General Plan/Local Coastal Program Land Use Plan and Zoning Code

With the exception of the requested variances and parking exception, the proposed residence meets the requirements of the Local Coastal Program. Single-family residential use is a principally permitted use in the R-1 Single-Family Residential Zoning District. The Housing Element of the City’s General Plan does not identify the site in the site inventory; however, the proposed home would meet Goal 2 of the Housing Element by providing high quality housing to range of income levels. Table 2 below summarizes the zoning regulations as they relate to the proposed development. Note that Design C includes slightly more floor area and higher ridge compared to Design A.

Table 2. Project Conformance with R-1 Zoning District Requirements for Severely Substandard Lots

Development Standards	Zoning Requirements	Proposed
Min. Site Area	5,000 sq. ft.	2,906 sq. ft. (existing)
Min. Average Site Width	50 ft.	17 ft. (existing)
Min. Front Setback	20 ft.	20 ft.
Min. Interior Side Setbacks	3 ft.	3 ft.
Min. Combined Side Yard Setback	8 ft.	6 ft. (Variance Required)
Min. Rear Setback	20 ft.	40 ft. 4 inches
Max. Two-Story Height	28 ft.	Design A: 20 ft. 8 inches Design C: 21 ft. 3 inches
Max. Two-Story Lot Coverage	35% (1,017sq. ft.)	26.3% (763 sq. ft.)
Max. Floor Area Ratio	0.5:1 +200 sq. ft. (1,653 sq. ft.)	Design A: 0.41:1 (1,195 sq. ft.) Design C: 0.41:1 (1,201 sq. ft.)
Min. Parking Spaces	1 garage and 1 uncovered space not in front yard setback	1 uncovered space (Parking Exception Required)
Maximum Building Envelope	Per Section 18.06.040G	Design A: Shed Dormer Sheer Wall (Variance Required) Design C: Eastern Roof and Dormers (Variance Required)

Variations

Two variations have been requested, one related to the combined side yard setback requirement and the other with the Maximum Building Envelope.

Combined Side Yard Setbacks: The minimum required side yard setback on a severely substandard lot is 3 feet. Both Design A and Design C have 3-foot side yard setbacks on both sides and thereby comply with the minimum setback standard, individually. It is important to note that 3 feet allows for full compliance with building and fire codes. However, the zoning code also specifies a standard for a minimum **combined** side yard setback (adding the setbacks together) of 8 feet for severely substandard lots. The combined side yard setback for both Design A and C is 6 feet, and this is where the Planning Commission is being asked to consider variance findings. Staff suggests that the required findings for the requested setback variance can be supported because both the narrowness and irregularity (which tapers down to only 10 ½ feet in the rear) are special circumstances applicable to the subject property. It is of particular note that this site was determined to be a legally subdivided lot following a thorough review of the submitted Chain of Title. The applicant has also submitted their interpretation of the findings and copy of their letter is included as Attachment 6. Staff drafted variance findings are provided in Exhibit A to the resolution.

Maximum Building Envelope: Design A (Attachment 2) includes a minor inconsistency with the Maximum Building Envelope requirements due to the lack of off-set between the first story sheer wall and the dormer walls. Design C includes an encroachment into the Maximum Building Envelope and larger dormers than normally would be allowed.

The Planning Commission previously indicated that the required findings might not be supportable for a variance to the Maximum Building Envelope standards. The Planning Commission has reviewed several proposals for development on severely substandard lots and has found that it is important to maintain the relative scale of building mass to lot size, lot width, and streetscape presence to ensure conformance with the Residential Design Guidelines and neighborhood compatibility. The Commission has also approved single-family development of severely substandard lots for several sites in the Arleta Park neighborhood. All recent approvals were for one-story homes, and none of these required variations from the maximum building envelope standard. As discussed above, staff supports the combined side yard setback variance, which provides a wider first floor footprint, because it does not result in a material increase in the bulk/mass of the structure relative to adjacent properties. The second story is a different matter. From the perspective of adjacent properties, second stories directly affect privacy and shading much more significantly than a one-story home or the first floor of a two-story home.

This project, if approved as a two-story home, may be the first such structure permitted on a severely substandard lot ever. It is known that no such residence has been permitted within the past decade. As such, a variance from these standards would be precedent setting. Staff agrees with the Commission's previous discussion indicating that a variance from the building envelope standard is not appropriate for this case. Note that the Commission did

express support for the combined side yard setback variance. This is further supported by the fact that a home of adequate size can be constructed without a variance. For these reasons, staff recommends Design A with the second story dormers setback at least 6-inches from the sheer walls below. With this modification, the design conforms to the building envelop standard and no variance from this standard is required. If the Commission approves Design A without modifications, or Design C, the resolution will need to be revised to provide findings in support of the building envelope variance.

Staff encourages the Planning Commission to review the story pole installation carefully. The roof ridgeline for Design C is depicted in the installation of the orange fencing between the story poles. As shown in Table 2, the overall height of Design A is 7 inches shorter than Design C.

Parking Exception

A parking exception was also requested because the design does not include a garage parking space with a driveway space. If granted, the exception would allow for one uncovered parking space within the front yard setback, which would function like a driveway space. Similar to the combined side yard variance findings, staff considers the parking exception to be justified due to the narrowness, irregular shape, and small size of the legal lot which presents site planning challenges. An electric vehicle charger is included with the uncovered parking space. Parking exception findings are provided in Exhibit A to the resolution.

Design Compatibility

The Single Family Residential Design Guidelines encourage flexibility in architectural design to reflect the community's eclectic character and seek to achieve compatible design within existing neighborhoods. The project proposes a neo-traditional design that is compatible with the existing pattern of development in the surrounding area in terms of building placement/orientation, massing, and materials and colors. The project consists of a two-story house that is located at the 20-foot front yard setback line and oriented to the street, consistent with the neighborhood pattern. At just over 20 feet in height, the two-story residence is only slightly higher than the maximum height of 20 feet for single story homes. The front of the residence includes a porch and presents an attractive front façade to Myrtle Street, consistent with recommendations of the Single Family Residential Design Guidelines and the Architectural Advisory Committee (AAC). The proposed building is well-articulated on all sides and materials and colors are consistent with the proposed architectural style, compatible with the surrounding area, and suitable to the coastal setting. The AAC has reviewed the massing, materials, colors, and neighborhood context and recommended the design to the Planning Commission for its consideration. Both Design A and C include many of the same elements and thus the AAC's recommendation is applicable to both versions, although one committee member previously expressed a preference for Design B relative to Design A because it provides more usable floor area on the second story.

The applicant included several changes to address privacy concerns in the revised plans for Design C summarized here:

Deck: In the previous review before the Planning Commission, community members and the Commissioners expressed concern about the second story deck proposed on the back of the home. Design C includes a reduced sized deck. Staff continues to recommend Design A, with modifications. In addition to setting back the second-story dormers as previously discussed, staff is also recommending the changes made to the deck in Design C. The deck as revised also allows for increased storage space as explained in the response letter (Attachment 6). Staff recommends this change as well because the home has very limited closet and storage areas.

Windows: In Design C, two first floor windows on the west side of the house are proposed to be treated with a decorative plastic film to obscure views from the new home to the property to the west. An example of the window covering is included in Attachment 6. Because these windows are on the first floor and second story bathroom, staff is unsure if this change is a substantial benefit to the neighbors and is not recommending this as a modification to Design A. That said, if the Planning Commission determines it to be appropriate to include in any version of the project if it is approved, it is a minor item to address and can be included as an added condition of approval. The applicant or any future occupants of the house could always choose to provide such window coverings.

Grading and Drainage

Grading has been limited to what is needed for the new home and stormwater detention basin installation. Pervious pavers would be utilized for the new driveway and downspouts would be directed to newly landscaped areas. Best Management Practices would be implemented throughout construction. Stormwater detention improvements, grading and drainage would meet the stormwater management requirements for a single-family residence. Engineering staff reviewed the grading, drainage and erosion control plan and are supportive of the approach.

Short-Term Vacation Rental Use

Previously, some neighbors expressed concern about the impacts of the development in the event it was to be used as a short-term vacation rental (STR). The home has very limited storage space and neighbors speculated that it may have been designed to be a full time STR. Currently the City Council is considering the STR ordinance, including establishing a minimum lot size. This could impact substandard lots. At this point, staff recommends that the Commission consider prohibiting this property from STR use.

Notification

At the January 2021 hearing, the Planning Commission considered the interests of the neighbors and requested the applicant to reach out and discuss design options before returning to the Commission. The applicant informed staff that he sent a courtesy notice to the surrounding neighbors when Design C was submitted to the City several months ago.

This hearing was noticed in the Half Moon Bay Review, via a site posting, and mailed notices to property owners and residents within 300 feet of the subject property.

Conclusion

Based on the above analysis, staff concludes that the proposed residence, with modifications and subject to a Planning Commission discretionary approval of a parking exception and combined side yard setback variance, is consistent with the General Plan/Local Coastal Land Use Plan, the Zoning Code/LCP Implementation Plan, and the Residential Design Guidelines; is compatible with surrounding development; and conforms to the requirements of the California Environmental Quality Act. Staff recommends approval of Design A based on the findings and draft conditions of approval (Exhibits A and B of the attached Draft Resolution). As of the drafting of this report, staff had not received any written comments directed to the Planning Commission for this project.

ATTACHMENTS

1. Draft Resolution with Findings and Evidence, Exhibit A and Conditions of Approval, Exhibit B.
2. Project Plans Design A
3. Project Plans Design C
4. Planning Commission Staff report, January 12, 2021 without Attachments
5. Adopted Planning Commission Minutes, January 12, 2021
6. Variance Findings, Colors and Materials Sample and Response from the Applicant

**PLANNING COMMISSION RESOLUTION PC-21-__
RESOLUTION FOR APPROVAL
PDP-19-096**

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF HALF MOON BAY APPROVING A COASTAL DEVELOPMENT PERMIT, ARCHITECTURAL REVIEW, COMBINED SIDE YARD SETBACK VARIANCE, AND PARKING EXCEPTION TO ALLOW THE CONSTRUCTION OF A NEW TWO STORY 1,195 SQUARE-FOOT SINGLE FAMILY RESIDENCE AT 341 MYRTLE STREET IN THE R-1 ZONING DISTRICT WITH A RESIDENTIAL MEDIUM DENSITY LAND USE PLAN DESIGNATION (APN 064-061-280)

WHEREAS, an application was submitted requesting approval of Coastal Development Permit, Architectural Review, Combined Side Yard Setback Variance, and Parking Exception to allow the construction of a new two-story 1,195 square foot single family residence at 341 Myrtle Street in the R-1 Zoning District and the Residential Medium Density Land Use designation (APN 064-061-280); and

WHEREAS, the procedures for processing the application have been followed as required by law; and

WHEREAS, the Planning Commission conducted a duly noticed public hearing on January 12 and August 24, 2021, at which time all those desiring to be heard on the matter were given an opportunity to be heard; and

WHEREAS, the Planning Commission considered all written and oral testimony presented for consideration; and

WHEREAS, the Planning Commission has determined that the project is exempt from CEQA pursuant to California Administrative Code Section 15303 New Construction or Conversion of Small Structures; and

WHEREAS, the Planning Commission has made the required findings for approval of the project as identified in Design A as modified by conditions of approval, dated July 15, 2020, set forth in Exhibit A to this resolution;

NOW, THEREFORE, BE IT RESOLVED that, based upon the Findings in Exhibit A and subject to the Conditions of Approval contained in Exhibit B, the Planning Commission approves PDP-19-096.

PASSED AND ADOPTED by the City of Half Moon Bay Planning Commission at a duly noticed public hearing held August 24, 2021.

AYES,
NOES,
ABSENT,
ABSTAIN,

APPROVED:

Steve Ruddock, Chair

Jill Ekas, Community Development Director

**EXHIBIT A
FINDINGS AND EVIDENCE
PLANNING COMMISSION RESOLUTION PC-21-___
PDP-19-096**

Coastal Development Permit – Findings for Approval

The required Coastal Development Permit for this project may be approved or conditionally approved only after the approving authority has made the following findings per Municipal Code Section 18.20.070:

1. **Local Coastal Program Land Use Plan (LUP)** – *The development as proposed or as modified by conditions, conforms to the Local Coastal Program as certified by the California Coastal Commission on April 15, 2021.*

Compliance: The project consists of construction of a new single-family residence on an infill site in an existing neighborhood where public services and infrastructure are provided or can be easily extended to the site, including sewer, water, gas and electric utilities. Myrtle Street is a developed street. With the implementation of the conditions of approval, the project conforms to City requirements, will not impact coastal resources and is consistent with the policies of the City’s Land Use Plan (LUP).

Policy 2-71. Residential Siting and Design Standards. Require development of new and remodeled structures within established neighborhoods to be sited and designed to be: a. Compatible within each unique neighborhood area, including infrastructure and streetscape provisions such as walkways, street trees, and parking. b. Scaled and appropriate for the limitations of non-conforming sites, such as smaller residences on substandard sized parcels and those that must accommodate natural resources, hazards, watercourses, coastal access, and visual resource requirements.

Compliance: The design of the new residence is compatible within its neighborhood area. The landscaping within the front of the residence will soften the appearance of the new home. The subject property is slightly less than 3,000 feet. The size and building footprint are appropriately scaled to the small lot size, yet provides a functional size for a new residence. Although two story, the new home exceeds the maximum height of a one story home by only a modest amount (less than one foot).

Policy 2-77. Neighborhood Infrastructure. Require new residential construction, additions and remodels to provide public service infrastructure concurrently with development or to commit to participation in a benefit assessment district or deferred infrastructure agreement. Neighborhood infrastructure improvements shall be sized so as to not be growth-inducing.

Policy 2-78. Residential Right of Way Improvements. Require new or significantly remodeled residences to provide frontage improvements including but not limited to walkway, sidewalk, curb, and gutter improvements where they do not yet exist or are in need of repair or replacement, or to provide an in lieu fee to the City to construct such improvements in the future.

Compliance: The conditions of approval require in-lieu fees for right-of-way improvements and all other infrastructure will be provided with the development.

Policy 3-25 Water Conservation Measures. Require water conservation measures for new development and redevelopment of residential and non-residential uses, including but not limited to, the use of high-efficiency fixtures and equipment, storm water capture, gray water collection and reuse, drip or microspray irrigation systems, and native drought-tolerant landscaping. For agricultural and horticultural business uses, water conservation policies in Chapter 4 are applicable.

Compliance: The project includes drought tolerant landscaping and will conform to the Water Efficient Landscape Ordinance.

Policy 6-83. Construction Best Management Practices (BMPs). Require new development proposals to include construction phase erosion control and polluted runoff control plans. These plans shall specify BMPs that will be implemented to minimize erosion and sedimentation, provide adequate sanitary and waste disposal facilities and prevent contamination of runoff by construction chemicals and materials.

Policy 6-84. Drainage and Runoff Control Plans. Require new development proposals to include post-construction phase drainage and polluted runoff control plans. Such plans shall: a. Specify site design, source control and treatment control BMPs that will be implemented to minimize post-construction polluted runoff, and shall include the monitoring and maintenance plans for these BMPs; b. Ensure that post-construction structural BMPs (or suites of BMPs) are designed to treat, infiltrate, or filter the amount of stormwater runoff produced by all storms up to and including the 10-year 2-hour storm event; c. Ensure dry weather runoff does not exceed the pre-development baseline flow rate to receiving waterbodies; d. Complement and utilize existing drainage patterns and systems where they are in proper functioning condition, conveying drainage from the developed area of the site in a non-erosive manner that avoids downstream cumulative impacts; and e. Restore disturbed or degraded natural drainage systems where feasible, except where there are geologic or public safety concerns.

Policy 6-91. Erosion Control Measures. Ensure that where grading is permitted during the rainy season (extending generally from October 15 to April 15), erosion control measures shall be implemented prior to and concurrent with grading operations. Such measures shall be maintained through final grading and until landscaping and permanent drainage is installed and established.

Compliance: Grading and drainage plans will comply for the construction phase and post-construction phases of the development including rainy season construction requirements.

Policy 9-9. Streetscapes. Streetscape improvements, whether they are required as a condition of new development or implemented as a City project, shall be designed and maintained with street trees, vegetation, and landscaping to enhance the visual experience of the streetscape without obstructing scenic views upon maturity.

Compliance: The project will contribute to future frontage improvements, but also includes street-oriented design features including a porch and landscaping suited to the neighborhood.

Policy 9-30. Dark Night Skies. Protect dark night skies as part of Half Moon Bay's scenic and visual character by preventing light pollution from development. Avoid impacts from exterior lighting on dark night skies, sensitive habitat areas, and agricultural operations by: a. Limiting exterior lighting to low-intensity fixtures that are shielded, down-cast, and concealed so that the light source is not directly visible from public viewing areas, with the exception of traffic lights, navigational lights, and other similar safety lighting; b. Limiting installation and use of high-intensity perimeter lighting and lighting for sports fields, other private recreational facilities, or public facilities in scenic areas, with the exception of safety lighting provided that any high-intensity lighting is down-cast, shielded, and minimizes spillover; and c. Reducing light pollution from greenhouses as a condition of approval for new development through shielding and other practices that minimize light spillover.

Policy 9-31. Lighting Plan Review. Require submittal of lighting plans with applications for new development, including subdivisions, for review of lighting characteristics

Compliance: Exterior lighting will be reviewed with submittal for building permit. All fixtures will comply with dark night skies requirements.

Coastal Act 30240(b) and Policy 6-12: *Development shall be sited and designed to avoid impacts to terrestrial ESHA, wetlands, and watercourses.*

Compliance: Seasonal wetlands and intermittent riparian features are located northeast of the subject property. The proposed project has been designed to comply with the Zoning Ordinance 100-foot wetland buffer requirement (18.38.080). The Zoning Ordinance also requires a 30-foot buffer from the centerline of the unnamed intermittent drainage feature which is characterized by riparian vegetation (18.38.070). The Land Use Plan includes consistent wetland and riparian buffer policies. Additionally, a Biological Resource Assessment was prepared for the site and surrounding area and included recommended mitigation measures. The mitigation measures have been incorporated into the project design, the Conditions of Approval, and the Mitigation Monitoring and Reporting Program in order to reduce or eliminate any potential impacts on biological resources to a less than significant level. Given the distance of the proposed improvements from the seasonal wetlands and the unnamed drainage feature and the implementation of the required mitigation measures for biological resources, any significant impacts on environmentally sensitive habitat areas would be avoided.

Policy 2-4: Sustainable Land Use Pattern: *Concentrate new development within the defined*

Urban Boundary by prioritizing development in the Town Center, allowing for infill development within established neighborhoods, and protecting the rural, open space, agricultural and habitat values of undeveloped areas.

Compliance: A Certificate of Compliance was issued and recorded verifying that the subject property is a legal lot. The site is an infill lot within the Urban Boundary and is predominately surrounded by existing homes. Establishing the new home on the subject property would promote a sustainable land use pattern by improving an infill site.

Policy 2-6: Housing Diversity and Affordability: *Encourage a diversity of housing types, including housing at a range of affordability levels, densities, sizes, and ownership types with equitable access to environmental benefits. Meet the needs of Half Moon Bay's diverse population, including young families, multi-generational families, students, young professionals, and seniors.*

Compliance: The new home is fairly modest in size for a two bedroom house (1,195 square feet). The smaller size will contribute the rang of affordability levels, yet provide a quality housing product.

Policy 6-76: Green Infrastructure: *Promote and prioritize the use of Low Impact Development (LID) strategies, Best Management Practices (BMPs), and on-site infiltration to create green infrastructure for treating and reducing stormwater runoff. In and adjacent to ESHA, use resource-dependent green infrastructure projects for natural restoration purposes and provision of buffer areas to allow for natural erosion, evolution of natural drainage flows, and sediment transport balance.*

Compliance: Several LID strategies have been integrated into the project, including stormwater runoff onto vegetated areas. Additionally, grading has been limited to what is needed for the new home and stormwater detention basin installation. Best Management Practices would be implemented throughout construction. Policy compliance is demonstrated through the limited grading, in combination with the best management practices and stormwater detention.

LUP Policy 9-10: Fences, Walls, and Landscaping. *Ensure that fences, walls, and landscaping shall not block public views of or from scenic and visual resource areas including along scenic corridors, at parks and beaches, and other scenic public viewing areas through height restrictions and required landscape maintenance.*

Compliance: The project includes new six-foot high solid fencing along the side and rear property lines. Permeable pavers have been selected for the vehicle parking surface and walking paths. Landscaping of various drought tolerant plants would be planted between the roadway, driveway and new house.

Coastal Act 30244: *Where development would adversely impact archaeological or*

paleontological resources as identified by the State Historic Preservation Officer, reasonable mitigation measures shall be required.

Compliance: The proposed residential development is not located at or near identified archaeological or paleontological resources. If cultural resources or paleontological resources are unexpectedly encountered during subsurface excavation, the permit has been conditioned to require that construction halt until the find can be evaluated and appropriate mitigation identified.

2. **Growth Management System** – *The development is consistent with the annual population limitation system established in the Land Use Plan and Zoning Ordinance.*

Evidence: The proposed project has been granted one valid Measure D Certificate for construction of the new residence on the undeveloped site; therefore the project conforms to the requirements of the City’s growth management system.

3. **Zoning Provisions** – *The development is consistent with the use limitations and property development standards of the base district as well as the other requirements of the Zoning Ordinance.*

Evidence: With the exception of the requested variance and parking exception, the project conforms to the requirements of the Residential Development Standards for Severely Substandard Lots. Zoning District, which conditionally allows for residential and commercial development.

4. **Adequate Services** – *The proposed development will be provided with adequate services and infrastructure in a manner that is consistent with the Local Coastal Program.*

Evidence: The site is located in an existing developed neighborhood where utilities and services are provided to the site. Coastside County Water District has provided comments indicating that there is sufficient water rights assigned to the property to allow for the proposed improvements. Verification of the sewer line easement in the rear of the property has been provided.

5. **California Coastal Act** – *Any development to be located between the sea and the first public road parallel to the sea conforms to the public access and public recreation policies of Chapter 3 of the California Coastal Act.*

Evidence: The developed site is not located between the sea and the first public road parallel to the sea.

6. **Design Review Criteria** – The community development director, planning commission, or city council has reviewed and considered each specific case and any and all of the following criteria in determining that the architectural and site design standards identified in Municipal Code Sections 14.37.035 and 18.20.070 (F) have been satisfactorily addressed.

Evidence: The Architectural Advisory Committee and the Planning Commission have reviewed Design A of the proposed project and the Planning Commission has determined that the design review criteria of Municipal Code Subsection 18.20.070(F) have been satisfactorily addressed. The proposed building design (including building scale, massing, detailing, colors, and materials) and the site design (including building location and orientation, site access, and landscaping) conform to most requirements of the Zoning Code and are consistent with the recommendations of the Residential Design Guidelines. A variance and a parking exception have been requested for items that are inconsistent with the Zoning Code for which the Planning Commission has considered and made the required findings.

Architectural Site and Design Review – Findings

The required Architectural and/or Site and Design Review for this project may be approved or conditionally approved only after the approving authority has made the findings per Municipal Code Section 14.37.040. In making these findings, the Planning Commission has considered the design approval criteria set forth in Municipal Code Section 14.37.035.

1. *That such buildings, structures, planting, paving and other improvements shall be so designed and constructed that they will not be of unsightly or obnoxious appearance to the extent that they will hinder the orderly and harmonious development of the city;*

Evidence: Zoning Code Section 18.06.010 states that the intent of the residential chapter is to establish residential districts and guide the orderly development within each district. It further states that the residential district regulations are intended to ensure provision of adequate light, air, privacy and open space for each dwelling by establishing reasonable development standards for the mass, scale and location on a building site for all new residential construction and to achieve a high standard of site and building design and design compatibility with surrounding neighborhoods. The proposed project has been designed in closest conformance as possible with the requirements of the R-1 Single-Family Residential Zoning District for severely substandard lots (Zoning Code Section 18.06.050, Table E). A variance and a parking exception have been requested for the items not in conformance. The project is also in conformance with the Single-Family Residential Design Guidelines, the objectives of which include ensuring compatible design within existing neighborhood contexts.

2. *That such buildings, structures, planting, paving and other improvements will not impair the desirability or opportunity to attain the optimum use and the value of the land and the improvements, or otherwise impair the desirability of living or working conditions in the same or adjacent areas; and*

Evidence: The proposed project includes a new two-story residence on an infill site within an existing neighborhood. The site has historically been used for parking and storage. The

proposed residence includes a design similar to the home at 390 Myrtle Street and would provide architectural interest to the neighborhood and reinforce the quality of the residential streetscape.

3. *The project has been designed in conformance and consistency with the Single-Family Residential Design Guidelines (where applicable).*

Evidence:

The Single Family Residential Design Guidelines (RDG) encourage flexibility in architectural design to reflect the community's eclectic character and seek to achieve compatible design within existing neighborhoods. The current project proposes a neo-traditional design that is compatible with the existing pattern of development in the surrounding area in terms of building placement/orientation, massing, and materials and colors. The surrounding neighborhood can be characterized as having an eclectic mixture of architectural styles and features. This project in particular involves the construction of a new single-story Craftsman inspired style home and has been reviewed by the Architectural Advisory Committee.

The materials and colors of the proposed home have been selected to enhance the aesthetics of the Craftsman inspired architectural style. For example, a variety of high quality exterior materials have been selected, including horizontal siding, wood trim, and double hung windows throughout the exterior of the proposed home. In conclusion, and per the recommendation of the Architectural Advisory Committee, the proposed home is well designed, compatible with the residences within the surrounding area and in compliance with the Single-Family Residential Design Guidelines.

Setback Variance – Findings

A Variance for a reduced combined side yard setback has been requested, for a combined side yard setback of 6 feet instead of the required 8 feet. In order to approve variance, the Planning Commission must make specific findings for a variance (pursuant to Municipal Code Section 18.23.040(B)):

1. That there are exceptional or extraordinary circumstances or conditions applying to the land, building or use referred to in the application which circumstances or conditions do not apply generally to the land, buildings and/or uses in the same district;

Evidence: The lot itself is triangular in shape and has a narrow average site width of 17 feet. A thorough review of the submitted Chain of Title was conducted and the conclusion of which was that the lot was legally created in compliance with the Subdivision Map Act. A Certificate of Compliance was subsequently issued for the lot. The narrowness, unique shape and small size of the lot is a special circumstance that is applicable to the subject property that does not necessarily apply to other properties within the vicinity.

2. That the granting of the application is necessary for the preservation and enjoyment of substantial property rights of the petitioner; and

Evidence: As mentioned in the analysis, the subject property was legally created in compliance with the Subdivision Map Act and prior to the California Coastal Act becoming effective. The requested encroachments are necessary for the preservation and enjoyment of substantial property rights because without the requested encroachments, an insufficient width of the lot (approximately 9 feet average buildable site width) would be allowed for development of the single-family home. Furthermore, the dormer elements result in a second-story that is substantially contained within the pitched roof volume and maintain a low overall building height of about 20 feet, which is the allowed building height for one-story residences in the R-1 zoning district.

3. That the granting of such application will not, under the circumstances of the particular case, materially affect adversely the health or safety of persons residing or working in the neighborhood of the property of the applicant, and will not, under the circumstances of the particular case, be materially detrimental to the public welfare or injurious to property or improvements in said neighborhood.

Evidence: The subject property is within an existing residential neighborhood where all public services and infrastructure are available. The development of one single family residence on the subject property is identified as an allowed use within the R-1, Single Family Residential Zoning District. The granting of the requested variance would not be materially detrimental to the public welfare or injurious to property or improvements in the surrounding neighborhood because similar setback configurations are permissible and have been approved for new homes constructed on similarly constrained lots within the Arleta Park neighborhood. It is also of note that the proposed residence, with an FAR of 0.41, and total floor area of 1,195 square feet is relatively modest in size, as well as in conformance with the other zoning ordinance development standards (except for parking), and does not represent a request that is excessive for a single-family residence. Furthermore, the project will not be allowed to be operated as a short-term vacation rental to ensure that on-going residential use of the property on this severely substandard lot with substandard setback combined side yard setbacks does not produce undue spillover impacts on the neighborhood or unduly impose noise or privacy impacts on the adjacent homes. Condition of approval A7 prohibits the use of short-term vacation rental.

Parking Exception – Findings

The project also requires a Parking Exception to reduce the required one car garage vehicle parking space and one uncovered space outside of the front yard setback in order to allow for a one uncovered space within the 20 foot front yard setback. In order to approve a Parking Exception for elimination of covered parking requirements, the Planning Commission must make specific findings for a Parking Exception (pursuant to Municipal Code Section 18.36.080).

1. That there are exceptional or extraordinary circumstances or conditions applying to the land, building or use referred to in the application which circumstances or conditions do not apply generally to the land, buildings and/or uses in the same district;

Evidence: The basis for this finding is substantially similar to the findings described for the setback variance, in that the average lot width of 17 feet and size of 2,906 square feet have a significant bearing on the subject property. The physical dimension of the building footprint is substantially constrained due to the narrowness of the lot. The remaining portion of the buildable width of the lot is less than 10 feet, which is insufficient for a one-car garage and entrance to the residence. The lot width and size are special circumstances or conditions applying to the land that limits development from complying with the off-street garage parking requirement.

2. That the granting of the application is necessary for the preservation and enjoyment of substantial property rights of the petitioner;

Evidence: The granting of the requested parking exception to eliminate the garage parking enclosure and uncovered parking spot outside of the front yard setback requirement is necessary because without the requested parking exception, the development potential of the modestly sized home (1,195 square feet of living space) on a 2,906 square foot lot would be severely compromised because one-car garage on the site would dominate the site and eliminate the porch-fronted facade. Therefore, the requested Parking Exception is necessary in order to develop a functional home on the site that is compatible with the surrounding neighborhood.

3. That the granting of such application will not, under the circumstances of the particular case, materially affect adversely the health or safety of persons residing or working in the neighborhood of the property of the applicant, and will not, under the circumstances of the particular case, be materially detrimental to the public welfare or injurious to property or improvements in said neighborhood. Furthermore, the project will not be allowed to be operated as a short-term vacation rental to ensure that on-going residential use of the property on this severely substandard lot with substandard setback with very limited on-site parking does not produce undue spillover parking impacts on the neighborhood or in a manner so as to interfere with coastal access.

Evidence: The granting of the requested Parking Exception for no garage parking spaces would not be materially detrimental to the general public or to property or improvements in the surrounding neighborhood because two uncovered parking spaces are still provided with the project. The off-street parking that is included in the front yard would provide sufficient off-street parking for the proposed residence. The proposed development, in terms of dwelling unit size and parking provisions, is also substantially similar to those of an accessory dwelling unit, a development form that is accommodated throughout the City's residential neighborhoods.

4. That the establishment, maintenance and/or conducting of the off-street parking facilities as proposed are as nearly in conformance with the requirements of the Half Moon Bay Zoning Code as are reasonably possible.

Evidence: As mentioned in the Planning Commission Evidence for Finding #3, one uncovered off-street parking space is included with the project. Given that the subject property is a legal lot, the elimination of the garage enclosure for one off-street parking space and one uncovered space outside of the front yard setback is as nearly in conformance with the parking requirement as reasonably possible.

Environmental Review – Finding

CEQA – The project will not have a significant effect on the environment.

Evidence: The project is Categorically Exempt from CEQA pursuant to California Administrative Code Section 15303, New Construction or Conversion of Small Structures.

EXHIBIT B
CONDITIONS OF APPROVAL
PLANNING COMMISSION RESOLUTION PC-21-__
PDP-19-096

A. The following Conditions shall apply to the subject site to the satisfaction of the Community Development Director:

1. CONFORMANCE WITH APPROVED PLANS. Development of the site shall conform to the approved plans entitled John and Kelly Callan with a City date stamp of July 15, 2020, except for any revisions required by this permit. The Community Development Director shall review and may approve any deviation from the approved plans that is determined minor in nature. Any other change shall require approval of a major modification per Title 18. (Planning)
2. CONFORMANCE WITH CONDITIONS OF APPROVAL. The Community Development Director shall review and may approve any deviation from the Conditions of Approval that is determined minor in nature. Any other change shall require approval of a major modification per Title 18. (Planning)
3. CONFORMANCE WITH THE MUNICIPAL CODE. No part of this approval shall be construed to permit a violation of any part of the Half Moon Bay Municipal Code. (Planning)
4. LIGHTING. All exterior lighting shall be fully shielded so that no light source is visible from outside the property, except as otherwise expressly approved. (Planning)
5. STREET FRONTAGE MAINTANENCE AND LIABILITY. It shall be the duty of the Property Owner(s) whose property is adjacent to any portion of a public street or place to maintain any sidewalks along the project frontage in a safe and non-dangerous condition. Sidewalk maintenance shall include removal and replacement of concrete to eliminate tripping hazards; and pruning and trimming of trees, shrubs, ground cover and other landscaping within the public right-of-way. The Property Owner has the primary and exclusive duty to fund and perform such maintenance and repair, whether or not the City has notified the property owner of the need for such maintenance or repairs or has performed similar maintenance or repairs in the past, pursuant to §12.18.020 and §12.18.030 of the Half Moon Bay Municipal Code. (Engineering)
6. LANDSCAPE MAINTENANCE. The applicant/owner shall ensure that all landscaped areas and/or fences are continuously maintained, and all plant material is maintained free of refuse and weeds and in a healthy growing condition. (Planning)
7. SHORT TERM RENTAL PROHIBITION. Use of the residence as a short-term vacation rental shall be prohibited. (Planning)

B. The following Conditions shall be fulfilled to the satisfaction of the Community Development Director prior to the issuance of building permits:

1. SIGNED CONDITIONS OF APPROVAL. The applicant/owner shall submit a signed copy of the conditions of approval to the Planning Division prior to issuance of a building permit. (Planning)
2. SCHOOL IMPACT FEES. The permittee shall provide proof of payment of required school Impact fees to Cabrillo Unified School District prior to issuance of building permits.
3. VALID MEASURE D CERTIFICATE. No building permit shall be issued unless the Measure D Certificate issued for the property has not expired and remains valid to the satisfaction of the Community Development Director. (Planning)
4. REQUIRED PLAN REVISIONS. Prior to issuance of building permits, the applicant shall submit revised plans providing the following:
 - a. The sheer walls of the two side shed dormers shall be relocated inward compared to the first story sheer walls to the satisfaction of the Community Development Director.
 - b. The second story deck shall be reduced in size and extension to the satisfaction of the Community Development Director.
5. CONSTRUCTION PLANS. File Number PDP-19-096 and the Conditions of Approval for this project shall be provided on the cover page of the building permit application plan submittal. All plans, specifications, engineering calculations, diagrams, reports, and other data for construction of the building and required improvements shall be submitted with the appropriate permit application to the City's Building and Engineering Divisions for review and approval. Computations and back-up data will be considered a part of the required plans. Structural calculations and engineering calculations shall be prepared, wet-stamped and signed by an engineer or architect licensed by the State of California. The plans must show the location of the sewer connection and property line sewer cleanout. (Planning)
6. WATER CONSERVATION IN LANDSCAPING. The permittee shall submit a detailed landscape plan to the satisfaction of the Community Development Director. If the project includes 500 square feet or more of irrigated landscaping (new or rehabilitated) the permittee shall submit landscape and irrigation plans and an Outdoor Water Efficiency Checklist that demonstrate compliance with the City's Water Conservation in Landscaping Ordinance (Chapter 13.04 of the Municipal Code) prior to issuance of building permits to the satisfaction of the Community Development Director. (Planning)
7. SURVEY REQUIRED. Submit a detailed topographic/site boundary survey certified by a licensed surveyor with building application plans. The survey shall include a baseline

elevation datum point on, or close to the construction site, indicating existing grade of the datum. This datum point shall be permanent, marked, shall remain fixed in the field, and shall not be disturbed throughout the building process. Examples of datum points include: fire hydrants, manhole covers, survey markers, and street curbs. This datum point shall be shown on all site plans including revised/resubmitted plans. The survey must show the footprint and roof plan of the proposed residence and identify the existing grade elevations at the corners and roof ridgeline of the residence. (Building)

8. EVIDENCE OF WATER CONNECTION CAPACITY. Prior to the issuance of building permits, the permittee shall submit a letter from Coastside County Water District certifying that the subject site has an adequately-sized water connection for this approved project. (Building)
9. SEWER CONNECTION CAPACITY FEE. The proposed development is subject to a sewer connection fee pursuant to Section 13.38 of the Half Moon Bay Municipal Code. The fee shall be paid to the City prior to issuance of building permits. (Engineering)
10. CONSTRUCTION PLANS. Construction plans submitted for building permit(s) shall include a plan sheet showing utility connections, trench restoration details, driveway apron (driveway apron width, spacing between driveways, slopes, etc.), and other improvements in the public right-of-way meeting City standards. (Engineering)
11. ACCESSIBILITY REQUIREMENTS. The proposed project, including street improvements, shall comply with State of California and federal (ADA) accessibility standards and with the line of sight requirements of Half Moon Bay Zoning Code Section 18.06.040(B).
12. LOT GRADING, MATERIALS, EQUIPMENT AND VEHICLE STORAGE. No lot site grading, preparation, storage, or placement of construction materials, equipment, or vehicles shall take place prior to issuance of a building permit. Any earth movement on or off the site in excess of 50 cubic yards shall require the submittal of a grading plan for review by the City Engineer and issuance of a grading permit. Lot Grading includes, but is not limited to, any leveling, scraping, clearing, or removal of lot surface area. Materials, Equipment, and Vehicles include, but are not limited to:
 1. All masonry, wood, and steel construction materials;
 2. All construction-related equipment and storage containers; and
 3. All construction-related vehicles, including temporary trailers. (Engineering)
13. STREET FRONTAGE IMPROVEMENTS. Prior to issuance of building permits, the permittee shall submit an estimate, for the City Engineer's review and approval, of the cost to design and construct improvements across the project frontage on Myrtle Street in conformance with the City Design Standards. The frontage improvements shall include the construction

of curb, gutter, sidewalk, and driveway apron. Permittee shall pay the total estimated amount of the frontage improvements prior to final inspection, as approved by the City Engineer.

14. COPPER BUILDING ELEMENTS. The building plans shall specify that all copper building elements will be pre-patinated at the factory, or if patination will occur on the site, the plans shall identify best management practices in conformance with the *San Mateo Countywide Water Pollution Prevention Program Requirements for Architectural Copper*, to the satisfaction of the City Engineer. (Engineering)
15. STORMWATER MANAGEMENT-TREATMENT (FOR NON-REGULATED PROJECTS). Non-regulated projects consist of single-family residences and other small projects that create and/or replace less than 5,000 square feet of impervious surface. Construction plans submitted for building permits shall include a storm water management-treatment plan showing implementation of at least one of the six Low Impact Development (LID) measures listed below:
 - i. Direct runoff into cisterns or rain barrels and use rainwater for irrigation or other non-potable use;
 - ii. Direct roof runoff into vegetated areas;
 - iii. Direct runoff from sidewalks, walkways, and/or patios into vegetated areas;
 - iv. Direct runoff from driveways and /or uncovered parking lots into vegetated areas;
 - v. Construct sidewalks, walkways, and/or patios with permeable surfaces; or
 - vi. Construct bike lanes, driveways, and/or uncovered parking lots with permeable surfaces.
 - vii. Permittee shall also submit the 'stormwater checklist for small projects' with the building plan submittal. (Engineering)
16. EROSION AND SEDIMENT CONTROL. An erosion and sediment control plan shall be submitted that shows effective Best Management Practices (BMP) and erosion and sediment control measures for the site. Construction plans shall also include the "construction best management practices" plan sheet. (Engineering)
17. UNDERGROUND UTILITIES/SERVICES. Electric, telecommunication, and cable and utility service to the property shall be through underground service connections only. No overhead utilities are allowed. Show locations of all utility service connections: sanitary sewer, storm drain (if applicable), water (domestic and fire), cable television, telephone, electrical, and gas. (Engineering)

18. FIRE CLEARANCE REQUIREMENTS. The permittee shall comply with all applicable fire and building codes and standards relating to fire and panic safety as identified by the Coastside Fire Protection District during the building permit process. (Fire)
19. FIRE SPRINKLERS AND FIRE DISTRICT REQUIREMENTS. Pursuant to Fire District ordinance, the permittee shall install an automatic fire sprinkler system **throughout** the new mixed use building and the two new residential units within the existing building. All areas that are accessible for storage purposes shall be equipped with fire sprinklers. The plans for this system must be submitted to the City of Half Moon Bay Building Division to the satisfaction of the Building Official prior to issuance of building permits. Upon submission of plans, the City will forward a complete set to the Coastside County Fire Protection District for review. Fees for automatic fire sprinkler systems shall be paid to the City prior to plan review. (Fire)
20. HARD-WIRED SMOKE DETECTORS/ALARMS. Pursuant to the 2019 California Building and Residential Code, State Fire Marshal regulations and current Coastside Fire District Ordinance, the permittee shall install smoke detectors which are hard-wired, interconnected and have battery backup in each new or reconditioned sleeping room and at a point centrally located in the corridor or area giving access to each separate sleeping area. A minimum of one detector per floor is required. For alterations: If there is an attic, basement, crawl space or removal of a wall or ceiling that provides access, then all smoke alarms shall be hardwired and interconnected. Building plan submittals shall demonstrate conformance with these requirements to the satisfaction of the Building Official prior to issuance of building permits. (Fire)
21. COASTSIDE COUNTY WATER DISTRICT - REGULATIONS. The project shall comply with all applicable regulations and requirements of the Coastside County Water District. Water service shall not be in the same trench as other utilities. (Water District)

C. The following conditions shall be implemented to the satisfaction of the Community Development Director prior to and during construction:

1. ARCHAEOLOGY-DISCOVERY OF HUMAN REMAINS. Pursuant to Section 7050.5 of the Health and Safety Code, and Section 5097.94 of the Public Resources Code of the State of California, in the event of the discovery of human remains during construction, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains. The County Coroner shall be notified and shall make a determination as to whether the remains are Native American. If the Coroner determines that the remains are not subject to his authority, he shall notify the California Native American Heritage Commission who shall attempt to identify descendants of the deceased Native American(s). If no satisfactory agreement can be reached as to the disposition of the remains pursuant to this State law, then the permittee shall re-enter the

human remains and items associated with Native American burials on the property in a location not subject to further subsurface disturbance. (Planning)

2. ARCHAEOLOGY-DISCOVERY OF RESOURCES. If subsurface historic or archaeological resources are uncovered during construction, all work shall stop, the applicant shall notify the Community Development Director and retain a qualified archaeologist to perform an archaeological reconnaissance and identify any mitigation measures required to protect archaeological resources. Subsurface excavation shall not resume until expressly authorized by the Director. (Building)
3. AIR QUALITY BEST MANAGEMENT PRACTICES. The project shall implement the following standard BAAQMD dust control measures during all phases of construction on the project site:
 - All active construction areas shall be watered twice daily or more often if necessary. Increased watering frequency shall be required whenever wind speeds exceed 15 miles-per-hour.
 - Pave, apply water three times daily, or apply non-toxic soil stabilizers on all unpaved access roads and parking and staging areas at construction sites.
 - Cover stockpiles of debris, soil, sand, and any other materials that can be windblown. Trucks transporting these materials shall be covered.
 - 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 or as often as necessary to keep them free of dust and debris associated with site construction. The use of dry power sweeping is prohibited.
 - Subsequent to clearing, grading, or excavating, exposed portions of the site shall be watered, landscaped, treated with soil stabilizers, or covered as soon as possible. Hydroseed or apply (non-toxic) soil stabilizers to inactive construction areas and previously graded areas inactive for 10 days or more.
 - Installation of sandbags or other erosion control measures to prevent silt runoff to public roadways.
 - Replanting of vegetation in disturbed areas as soon as possible after completion of construction.
 - Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to five minutes. Clear signage shall be provided for construction workers at all access points.
 - All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.
 - Post a publicly visible sign with the telephone number and person to contact at the City of Half Moon Bay regarding dust complaints. This person shall respond and take corrective action within 48 hours. The BAAQMD's phone number shall also be visible to ensure compliance with applicable regulations.

4. HAZARDOUS MATERIALS. Any materials deemed hazardous by the San Mateo County Department of Health that are uncovered or discovered during the course of work under this permit shall be disposed in accordance with regulations of the San Mateo County of Health. (Building)
5. COMPLIANCE WITH CBC. All structures shall be constructed in compliance with the standards of the 2019 California Codes of Regulations Title 24, including Building Code, Residential Code, Administrative Code, Mechanical Code, Plumbing Code, Electrical Code, Energy Code, Fire Code and Green Building Code to the satisfaction of the Building Official. (Building)
6. OVERALL PROJECT HEIGHT. Maximum overall height of the project, including any grading, foundation, pad, and building elevations shall be calculated using the elevation points indicated on the topographic survey map submitted at the time of application. The approved height of all projects developed in the City will be measured from existing grade as indicated on the submitted topographical survey. (Building)
7. COMPLETION OF UTILITIES. Any public utilities requiring relocation as a result of the construction of the building(s) or improvements under this permit shall be relocated at the owner's expense. (Building)
8. CONSTRUCTION HOURS. Construction work shall be limited to the hours of 7:00 a.m. to 6:00 p.m. Monday through Friday; 8:00 a.m. to 6:00 p.m. Saturdays; and 10:00 a.m. to 6:00 p.m. Sundays and holidays, except as expressly authorized by the City Engineer in conformance with Section 14.40.020 of the Half Moon Bay Municipal Code. (Engineering)
9. NOTICE OF DISRUPTION. The permittee shall provide written notice to affected property and business owners and a copy of such notice to the City Engineer a minimum of two business days prior to any planned disruption of pedestrian or vehicular traffic, parking, or public service facilities. (Engineering)
10. CONSTRUCTION MATERIAL STORAGE. Construction material shall not be stored in the street right-of-way without issuance of a Temporary Encroachment Permit. (Engineering)
11. ENCROACHMENT PERMIT. The permittee shall obtain an Encroachment Permit prior to starting any construction activity, including storage of construction material, within the City right-of-way or affecting City improvements. No construction activity shall occur and no pedestrian and vehicular traffic control shall be installed within the City right-of-way or affecting the City's improvements prior to obtaining an encroachment permit from the City. All improvements constructed within the City right-of-way shall conform to City standards to the satisfaction of the City Engineer. Traffic control shall conform to Caltrans/MUTCD Standard Plans for Traffic Control in Construction and Maintenance Zones. (Engineering)

D. The following conditions shall be implemented to the satisfaction of the Community Development Director prior to issuance of an occupancy permit:

1. EXTERIOR COLORS AND MATERIALS. Exterior building colors and materials shall be in substantial conformance with those shown on the approved color and materials board date-stamped 07/15/20 to the satisfaction of the Director of Community Development. (Planning)
2. CONSTRUCTION OF STREET IMPROVEMENTS. If a deferred street agreement is not executed prior to issuance of building permits, all street improvements shall be constructed in conformance with approved plans and permits prior to issuance of a certificate of occupancy to the satisfaction of the City Engineer. (Engineering)
3. DISPLAY OF SINGLE-FAMILY STREET ADDRESS. Prior to issuance of an Certificate of Occupancy, the residential dwelling shall display an internally-illuminated street address number in a prominent location on the dwelling, visible from the street (a minimum of 6 feet above the surface of the driveway), and with contrasting background and letters/numbers that are 4 inches in height with a minimum 3/4-inch stroke. Where a building is set back from the street or otherwise obscured, a street address with 3-inch reflective numbers/letters shall also be provided near the driveway entrance leading to the dwelling. (Fire/Building)

E. Validity and Expiration of Permits

1. EFFECTIVE DATE. The site is not located within the Coastal Commission Appeal Zone. This approval shall take effect after expiration of all City appeal periods. (Planning)
2. ACCURACY OF APPLICATION MATERIALS. The permittee shall be responsible for the completeness and accuracy of all forms and material submitted for this application. Any errors or discrepancies found therein may be grounds for the revocation or modification of this permit and/or any other City approvals. (Planning)
3. PERMIT EXPIRATION. The Coastal Development Permit (CDP) and Architectural Review shall expire one year from its date of final approval if the use/development has not commenced in conformance with this permit or the applicant has not obtained an extension of the permit.
4. PERMIT EXTENSION. The Community Development Director may, at the Director's discretion, approve a Minor Amendment for a single one-year extension of this permit based on a written request and fee submitted to the Director prior to expiration of the permit. Submittal of a Building Permit application with development plans prior to expiration of the permit shall constitute an extension of this permit until the building permit is issued or until the Building Official determines the applicant is no longer

diligently pursuing the required building permit. Any other extension shall require approval of a Major Permit Amendment prior to expiration of the permit. Any Major Permit Amendment Application to extend the permit shall be filed a minimum of ninety (90) days prior to permit expiration to ensure adequate processing time. (Planning)

- 5. PERMIT RUNS WITH THE LAND. The approval runs with the land and the rights and obligations thereunder, including the responsibility to comply with conditions of approval, shall be binding upon successors in interest in the real property unless or until such permits are expressly abandoned or revoked. (Planning)
- 6. HOLD HARMLESS. The permittee agrees as a condition of approval of this application to indemnify, protect, defend with counsel selected by the City, and hold harmless, the City, and any agency or instrumentality thereof, and its elected and appointed officials, officers, employees and agents, from and against an and all liabilities, claims, actions, causes of action, proceedings, suits, damages, judgments, liens, levies, costs and expenses of whatever nature, including reasonable attorney’s fees and disbursements (collectively, “Claims”) arising out of or in any way relating to the approval of this application, any actions taken by the City related to this entitlement, any review by the California Coastal Commission conducted under the California Coastal Act Public Resources Code Section 30000 et seq., or any environmental review conducted under the California Environmental Quality Act, Public Resources Code Section 210000 et seq., for this entitlement and related actions. The indemnification shall include any Claims that may be asserted by any person or entity, including the permittee, arising out of or in connection with the approval of this application, whether or not there is concurrent, passive or active negligence on the part of the City, and any agency or instrumentality thereof, and its elected and appointed officials, officers, employees and agents. The permittee’s duty to defend the City shall not apply in those instances when the permittee has asserted the Claims, although the permittee shall still have a duty to indemnify, protect and hold harmless the City. (City Attorney).

OWNER’S/PERMITTEE’S CERTIFICATION:

I have read and understand and hereby accept and agree to implement the foregoing conditions of approval of the Coastal Development Permit.

APPLICANT:

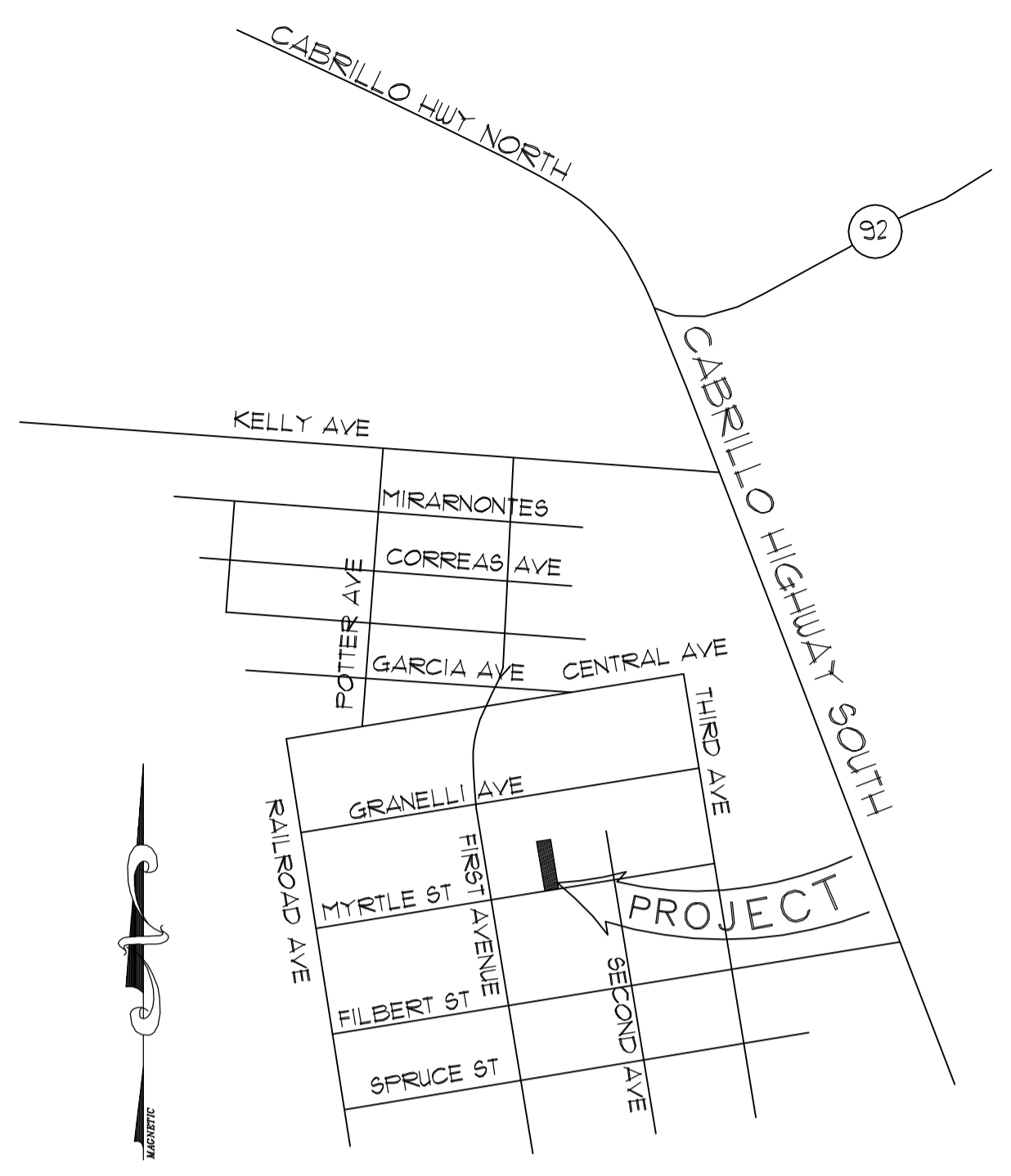
(Signature)

(Date)

PROJECT INFORMATION

LOT AREA: 2,906 SQ. FT.
 MAXIMUM LOT COVERAGE: 35% OF LOT AREA (.35 x 2,906 = 1,011 SQ. FT.)
 PROPOSED LOT COVERAGE: 163 SQ. FT.
 MAXIMUM BUILDING FLOOR AREA: 50% OF LOT AREA + 200# FOR SEVERLY SUBSTANDARD LOT (.50 x 2,906 + 200 = 1,653 SQ. FT.)
 PROPOSED FLOOR AREA: 1,195 SQ. FT.
 MAXIMUM IMPERVIOUS SURFACE: 10% OF LOT AREA (.10 x 2,906 = 290 SQ. FT.)
 PROPOSED IMPERVIOUS SURFACE: 130 SQ. FT.
 FRONT SET BACKS: 20'
 REAR SET BACKS: 20'
 SIDE SET BACKS: 8' MIN. COMBINED (MIN. 3' ONE SIDE)
 REQUESTING SIDE SETBACK VARIANCE FOR MIN. 6' SET BACK: (3' EACH SIDE)
 MAXIMUM HEIGHT PERMITTED: 28'
 PROPOSED MAX. HEIGHT: 20'-1 1/2"

ATTACHMENT 2



VICINITY MAP
NO SCALE

NOTES

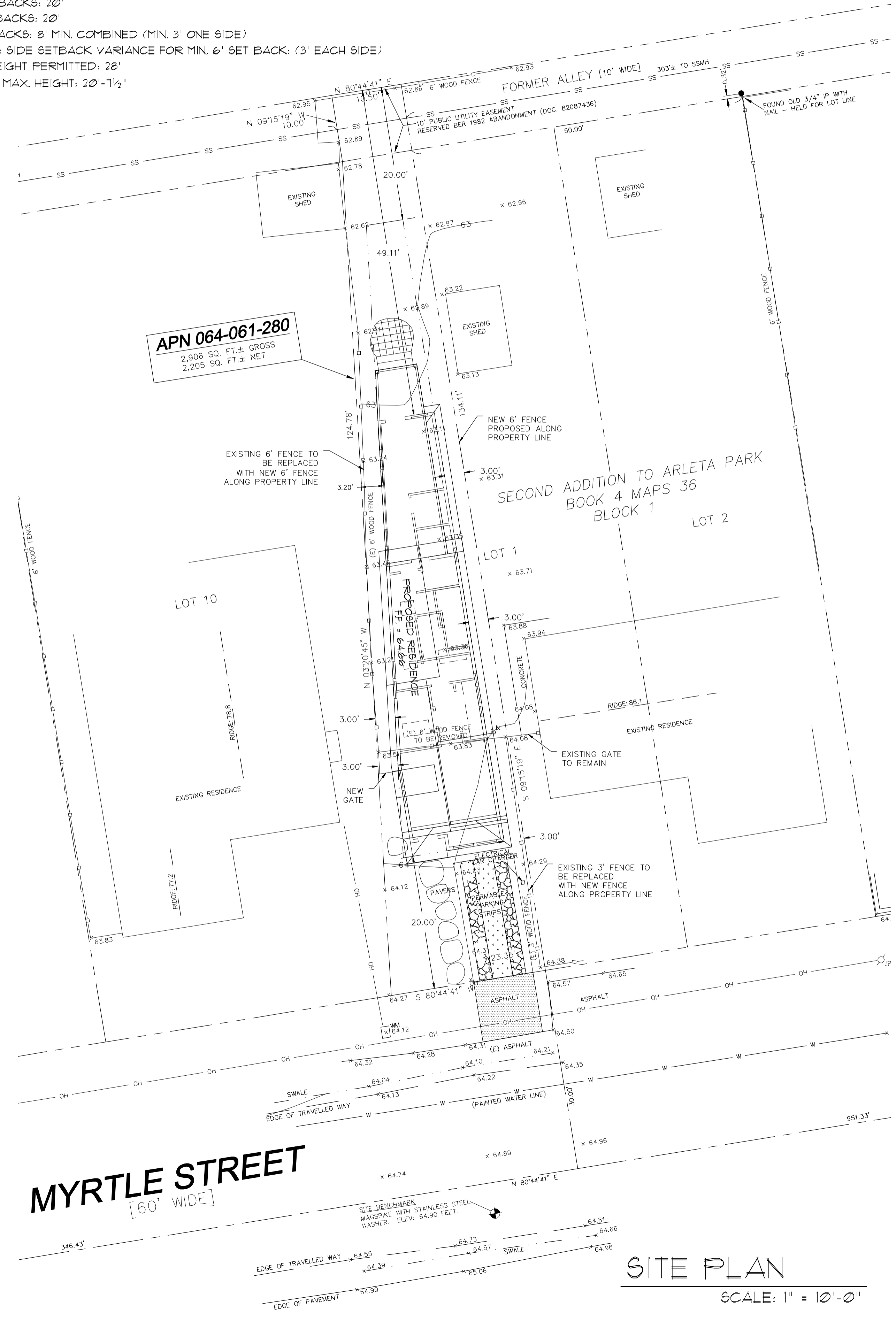
1. NEW RESIDENTIAL BUILDINGS SHALL HAVE INTERNALLY ILLUMINATED ADDRESS NUMBERS CONTRASTING WITH THE BACKGROUND SO AS TO BE SEEN FROM THE PUBLIC WAY FRONTING THE BUILDING. RESIDENTIAL ADDRESS NUMBERS SHALL BE AT LEAST SIX FEET ABOVE THE FINISHED SURFACE OF THE DRIVEWAY.
2. THE RESIDENCE AND GARAGE SHALL BE PROTECTED BY AN AUTOMATIC FIRE SPRINKLER SYSTEM, WHICH WILL BE SUBMITTED UNDER A SEPARATE PERMIT.
3. A FUELBREAK OR DEFENSIBLE SPACE IS REQUIRED AROUND THE PERIMETER OF ALL STRUCTURES, EXISTING AND NEW, TO A DISTANCE OF NOT LESS THAN 30 FEET AND MAY BE REQUIRED TO A DISTANCE OF 100 FEET OR TO THE PROPERTY LINE. THIS IS NEITHER A REQUIREMENT NOR AN AUTHORIZATION FOR THE REMOVAL OF LIVING TREES.
4. TREES LOCATED WITHIN THE DEFENSIBLE SPACE SHALL BE PRUNED TO REMOVE DEAD AND DYING PORTIONS, AND LIMBED UP TO 6 FEET ABOVE THE GROUND. NEW TREES PLANTED IN THE DEFENSIBLE SPACE SHALL BE LOCATED NO CLOSER THAN 10 FEET TO ADJACENT TREES WHEN FULLY GROWN OR AT MATURITY.
5. REMOVE THAT PORTION OF ANY EXISTING TREES, WHICH EXTENDS WITHIN 10 FEET OF THE OUTLET OF A CHIMNEY OF STOVEPIPE OR IS WITHIN 5 FEET OF ANY STRUCTURE. REMOVE THAT PORTION OF ANY EXISTING TREES, WHICH EXTENDS WITHIN 10 FEET OF THE OUTLET OF A CHIMNEY OR STOVEPIPE OR IS WITHIN 5 FEET OF ANY STRUCTURE. MAINTAIN ANY TREE ADJACENT TO OR OVERHANGING A BUILDING FREE OF DEAD OR DYING WOOD.
6. DIVERT A MINIMUM OF 65% OF THE CONSTRUCTION WASTE TO RECYCLE OR SALVAGE PER SECTION 4.408.1.
7. PROVIDE A COPY OF AN OPERATION AND MAINTENANCE MANUAL TO REMAIN WITH THE BUILDING PER 4.410.1, 1 THRU 10
8. FIRE SPRINKLERS WILL BE UNDER A SEPARATE SUBMITTAL TO THE COASTSIDE FIRE PROTECTION DISTRICT. NO PERMIT WILL BE ISSUED PRIOR TO APPROVAL OF THE FIRE PROTECTED SYSTEMS.
9. UNDERGROUND ELECTRICAL SERVICE SHALL BE PROVIDED | ALL NEW CONSTRUCTION. UNDERGROUND SERVICE SHALL BE INSTALLED IN ACCORDANCE WITH THE MOST RECENT EDITION OF THE PACIFIC GAS AND ELECTRIC COMPANY ELECTRIC AND GAS SERVICE REQUIREMENTS, SECTION 5, ELECTRIC SERVICE UNDERGROUND.
10. CLEANOUTS IN BUILDING SEWERS SHALL BE PROVIDED IN ACCORDANCE WITH THE RULES REGULATIONS AND ORDINANCES OF THE CITY . ALL CLEANOUTS SHALL BE MAINTAINED WATERTIGHT.
11. HIGH QUALITY INSULATION INSTALLATION (QII) WILL BE USED IN THIS PROJECT.

SITE STATEMENT

THE INFORMATION SHOWN ON THIS PLOT PLAN WAS PROVIDED BY BGT LAND SURVEYING. NO FIELD SURVEY OR VERIFICATION WAS MADE. REFER TO BGT LAND SURVEYING SHEET FOR SURVEY AND SITE PLAN.

THE BEARING, NORTH 80°45'00" EAST, OF THE CENTERLINE OF FILBERT STREET, AS SHOWN ON THAT CERTAIN RECORD OF SURVEY BY BGT WHICH WAS FILED FOR RECORD IN VOLUME 39 OF LL'S MAPS AT PAGE 3 ON OCTOBER 16, 2013, SAN MATEO COUNTY RECORDS, WAS USED AS THE BASIS OF BEARINGS FOR THIS SURVEY.

VERIFY SETBACKS AS APPROVED BY THE PLANNING DEPARTMENT.



MYRTLE STREET
[60' WIDE]

SITE PLAN

SCALE: 1" = 10'-0"

DEFERRED SUBMISSION

FIRE SPRINKLER PLAN

GENERAL INFORMATION

OWNER: JOHN & KELLY CALLAN
 P.O. BOX 164
 KENTFIELD, CA 94014

SITE ADDRESS: 341 MYRTLE STREET
 HALF MOON BAY, CA 94019

PHONE: (415) 847-6282
 FAX: (415) 482-8801

PROJECT: NEW RESIDENCE

BUILDING INFORMATION

OCCUPANCY CODE: R-1
 2016 CALIFORNIA RESIDENTIAL CODE, BUILDING, PLUMBING, MECHANICAL, FIRE, ELECTRICAL CODES, CALIFORNIA TITLE 24 ENERGY CODE, GREEN BUILDING STANDARDS CODE.

FLOOR AREA	
FIRST FLOOR AREA	153#
SECOND FLOOR AREA	442#
TOTAL FLOOR AREA :	1,195#
1ST FLOOR COVERED PORCH	50#
2ND FLOOR OPEN DECK	224#

BUILDING TYPE: V-B
 DESIGN LOADS: ROOF 20 psf LIVE, FLOOR 40 psf LIVE

SITE INFORMATION

JURISDICTION: CITY OF HALF MOON BAY
 ASSESSOR'S PARCEL NO.: 064-061-280
 SITE AREA: 2,806 SQ. FT. (SEVERALLY SUBSTANDARD LOT)

ZONE: R-1
 WATER: PUBLIC
 SEWAGE DISPOSAL: PUBLIC

ENERGY STATEMENT

THE BUILDING SHOWN ON THESE PLANS SUBSTANTIALLY CONFORMS TO THE REQUIREMENTS OF TITLE 24 PART 2, CHAPTER 2-53, OF THE CALIFORNIA ADMINISTRATION CODE. SEE CALCULATIONS.

OWNER & BUILDER'S NOTE

THESE PLANS WERE PREPARED BY SUE TAYLOR, DESIGNER, FOR THE EXCLUSIVE USE OF HER CLIENT AT THE SPECIFIC SITE SHOWN. NO OTHER USE OR DUPLICATION OF THESE PLANS IS PERMITTED WITHOUT HER PERMISSION.

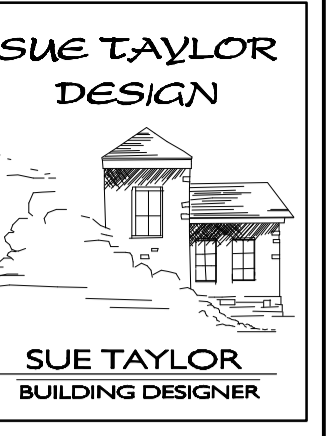
THESE PLANS SHALL NOT BE USED FOR CONSTRUCTION UNTIL STAMPED BY ENGINEER FOR NON-CONVENTIONAL STRUCTURAL FEATURES AND APPROVED BY THE LOCAL BUILDING DEPARTMENT. THE BUILDER IS EXPECTED TO FOLLOW THESE PLANS, APPLICABLE BUILDING CODES, AND LOCAL ORDINANCES. HE SHALL VERIFY THAT SITE CONDITIONS ARE CONSISTENT WITH THESE PLANS BEFORE STARTING WORK. WHILE THESE PLANS ARE DRAWN TO SHOW THE PROPOSED WORK AS ACCURATELY AS POSSIBLE, SCHEMATIC DETAILS MAY BE USED IN SOME CASES FOR CLARITY. WORK NOT SPECIFICALLY DETAILED SHALL BE CONSTRUCTED TO THE SAME QUALITY AS SIMILAR WORK THAT IS DETAILED.

WRITTEN DIMENSIONS AND SPECIFIC NOTES SHALL TAKE PRECEDENCE OVER SCALED DIMENSIONS AND GENERAL NOTES. IF CONFLICTING INFORMATION IS SHOWN, THE MORE STRINGENT SHALL GOVERN. THE ENGINEER/DESIGNER SHALL BE CONSULTED FOR CLARIFICATION IF EXISTING CONDITIONS ARE ENCOUNTERED THAT ARE DIFFERENT THAN SHOWN, IF DISCREPANCIES ARE FOUND IN THE PLANS OR NOTES, OR IF A QUESTION ARISES OVER THE INTENT OF THE PLANS OR NOTES.

THE ENGINEER/DESIGNER ASSUMES NO RESPONSIBILITY FOR SCHEDULING, FABRICATION, CONSTRUCTION TECHNIQUES (INCLUDING SHORING), OR MATERIALS, OR QUANTITIES USED IN THE WORK. THE ENGINEER/DESIGNER ASSUMES NO RESPONSIBILITY FOR FIELD CHANGES, SITE VARIANCES OR DISCREPANCIES NOT BROUGHT TO HIS/HER ATTENTION FOR CLARIFICATION. LIABILITY TO THE DESIGNER SHALL BE LIMITED TO THE DESIGN FEE.

SHEET INDEX

PAGE #	TITLE	SHEET #
1.)	COVER SHEET / SITE PLAN	C-1.1
2.)	LANDSCAPE PLAN	C-1.2
3.)	BMP SHEET	C-1.3
4.)	PRELIMINARY GRADING & DRAINAGE PLAN BY SIGMA PRIME	C-1.4
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6.)	ELEVATIONS	A1-2.1
7.)	BUILDING SECTIONS & ROOF PLAN	A1-3.1



P.O. BOX 961
 CAMINO, CA 95109
 (530) 391-2190
 suetaylor@comcast.net

NEW RESIDENCE
 COVER SHEET
 SITE PLAN

JOHN & KELLY CALLAN
 341 MYRTLE STREET
 HALF MOON BAY, CA 94019

REVISION	DATE	DESCRIPTION

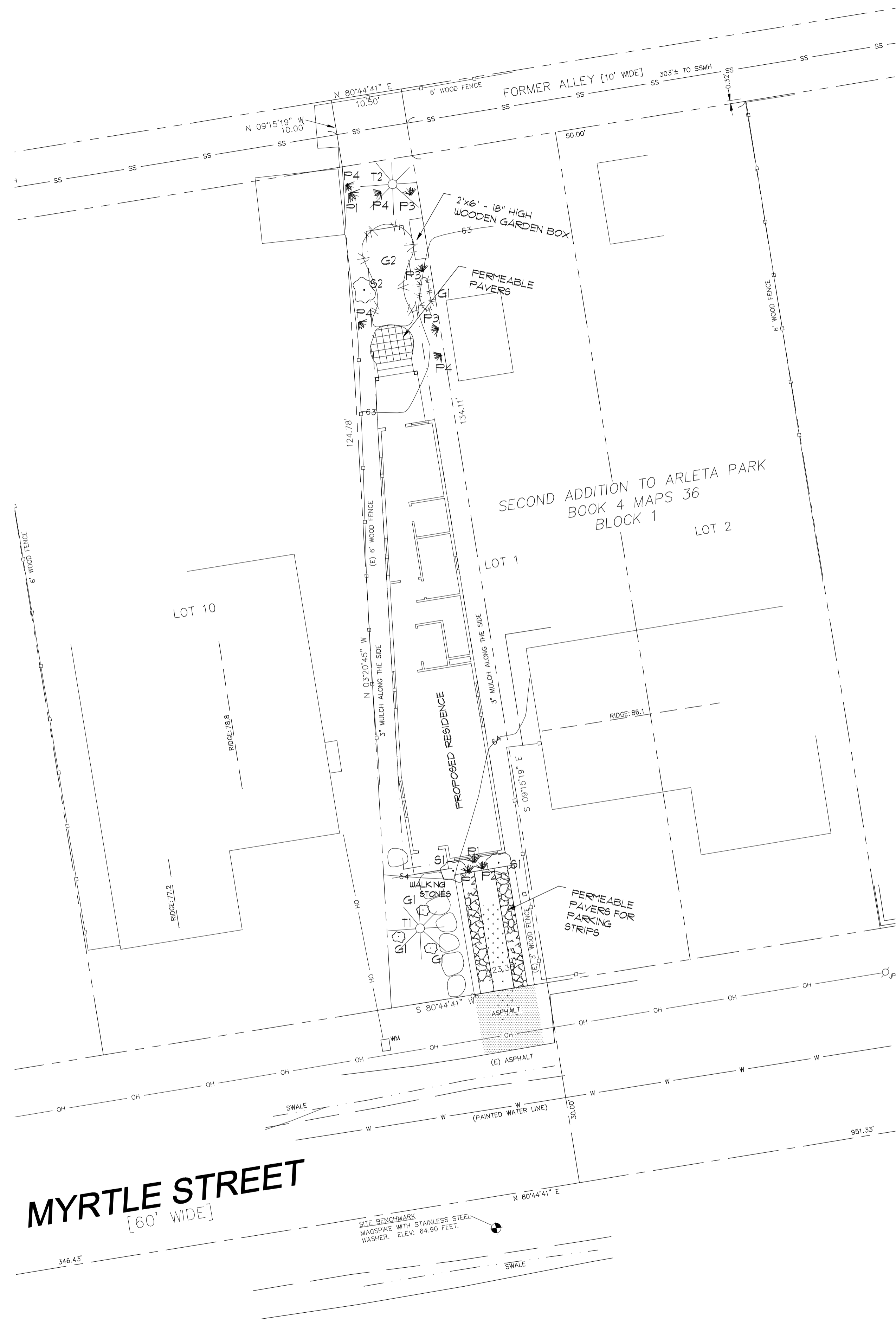
Sue Taylor

DATE: JULY 15, 2020

DESIGNED BY: SRT
DRAWN BY: SRT
CHECKED BY: SRT
FILE: PROJECTS/2019/001/001C11
PROJECT #: 19001

PAGE 1 OF 7

SHEET NO. C-1.1 251



MYRTLE STREET
[60' WIDE]

LANDSCAPING PLAN
SCALE: 1" = 10'-0"

PLANT LIST:										
SYMBOL	TREES:	QTY	SIZE	NAME	COMMON NAME	GROWTH RATE	AVG. SIZE	DECID/EVERGRN	CA. NATIVE	COASTAL
✳	T1	1	24" BOX	ACER CIRCINATUM	VINE MAPLE	MODERATE	10HT x 10 FT	DECIDUOUS		X
	T2	1	5 GAL.	PRUNUS PLUM / APRICOT	FLUOT	MODERATE	15HT x 15 FT	DECIDUOUS		
SCRUBS:										
☁	S1	2	1 GAL.	ZAUSCHNERIA (EPILOBIUM) CALIFORNIA 'MEXICANA'	CALIFORNIA FUSHIA	MODERATE	2HT x 2 FT	EVERGREEN	X	X
	S2	2	1 GAL.	CEANOTHUS GRISAEUS HORIZONTALIS 'YANKEE POINT'	CARMEL CREEPER	FAST	10HT x 10 FT	EVERGREEN	X	X
PERINNEALS										
✳	P1	1	1 GAL.	IRIS DOUGLASHIANA	DOUGLAS IRIS	SLOW	2 HT x 4 FT	HERB	X	X
	P2	2	4"	SISYRINCHIUM CALIFORNICUM	YELLOW-EYED GRASS		1 HT x 1 FT	HERB	X	X
	P3	3	1 GAL.	CAMPANULA MURALLS	BELLFLOWER	MODERATE	8 HT x 1 FT	EVERGREEN	X	X
	P4	4	1 GAL.	SALVIA SPATHACEA	HUMMINGBIRD SAGE	MODERATE	1' HT SPREADING	PERENNIAL	X	X
GROUND COVER:										
☁	G1	4	1 GAL.	WALDSTEINIA FRAGARIOIDES	BARREN STRAWBERRY	FAST	6" HT x 1 FT	EVERGREEN		
	G2			CA NATIVE FESCUE MIX SOURCE: DELTA BLUEGRASS	SOD - NATIVE NO MOW	FAST	N/A	EVERGREEN	X	X

NOTES:
NO OUTSIDE IRRIGATION TO BE USED
3" OF MULCH REQUIRED WITHIN THE AREAS THAT NO PLANTINGS ARE PROPOSED

SUE TAYLOR DESIGN
SUE TAYLOR BUILDING DESIGNER
P.O. BOX 961
CAMINO, CA 95109
(530) 391-2190
suetaylordesign@comcast.net

NEW RESIDENCE COVER SHEET LANDSCAPE PLAN

JOHN & KELLY CALLAN
341 MYRTLE STREET
HALF MOON BAY, CA 94019

REVISION	DATE	DESCRIPTION

Sue Taylor

DATE: JULY 15, 2020

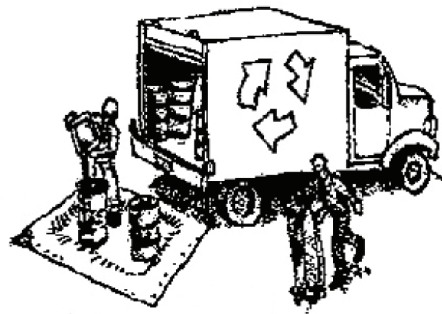
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DRAWN BY:	SRT
CHECKED BY:	SRT
FILE:	PROJECTS/2019/001/001/01
PROJECT #:	19001
PAGE:	2 OF 7

SHEET NO. C-1.2 252

Construction Best Management Practices (BMPs)

Construction projects are required to implement the stormwater best management practices (BMP) on this page, as they apply to your project, all year long.

Materials & Waste Management



Non-Hazardous Materials

- Berm and cover stockpiles of sand, dirt or other construction material with tarps when rain is forecast or if not actively being used within 14 days.
- Use (but don't overuse) reclaimed water for dust control.

Hazardous Materials

- Label all hazardous materials and hazardous wastes (such as pesticides, paints, thinners, solvents, fuel, oil, and antifreeze) in accordance with city, county, state and federal regulations.
- Store hazardous materials and wastes in water tight containers, store in appropriate secondary containment, and cover them at the end of every work day or during wet weather or when rain is forecast.
- Follow manufacturer's application instructions for hazardous materials and be careful not to use more than necessary. Do not apply chemicals outdoors when rain is forecast within 24 hours.
- Arrange for appropriate disposal of all hazardous wastes.

Waste Management

- Cover waste disposal containers securely with tarps at the end of every work day and during wet weather.
- Check waste disposal containers frequently for leaks and to make sure they are not overfilled. Never hose down a dumpster on the construction site.
- Clean or replace portable toilets, and inspect them frequently for leaks and spills.
- Dispose of all wastes and debris properly. Recycle materials and wastes that can be recycled (such as asphalt, concrete, aggregate base materials, wood, gyp board, pipe, etc.)
- Dispose of liquid residues from paints, thinners, solvents, glues, and cleaning fluids as hazardous waste.

Construction Entrances and Perimeter

- Establish and maintain effective perimeter controls and stabilize all construction entrances and exits to sufficiently control erosion and sediment discharges from site and tracking off site.
- Sweep or vacuum any street tracking immediately and secure sediment source to prevent further tracking. Never hose down streets to clean up tracking.

Equipment Management & Spill Control



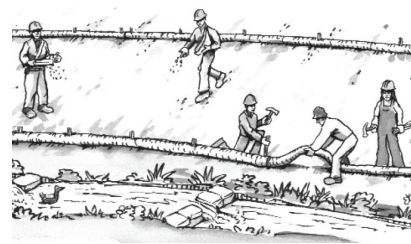
Maintenance and Parking

- Designate an area, fitted with appropriate BMPs, for vehicle and equipment parking and storage.
- Perform major maintenance, repair jobs, and vehicle and equipment washing off site.
- If refueling or vehicle maintenance must be done onsite, work in a bermed area away from storm drains and over a drip pan or drop cloths big enough to collect fluids. Recycle or dispose of fluids as hazardous waste.
- If vehicle or equipment cleaning must be done onsite, clean with water only in a bermed area that will not allow rinse water to run into gutters, streets, storm drains, or surface waters.
- Do not clean vehicle or equipment onsite using soaps, solvents, degreasers, or steam cleaning equipment.

Spill Prevention and Control

- Keep spill cleanup materials (e.g., rags, absorbents and cat litter) available at the construction site at all times.
- Inspect vehicles and equipment frequently for and repair leaks promptly. Use drip pans to catch leaks until repairs are made.
- Clean up spills or leaks immediately and dispose of cleanup materials properly.
- Do not hose down surfaces where fluids have spilled. Use dry cleanup methods (absorbent materials, cat litter, and/or rags).
- Sweep up spilled dry materials immediately. Do not try to wash them away with water, or bury them.
- Clean up spills on dirt areas by digging up and properly disposing of contaminated soil.
- Report significant spills immediately. You are required by law to report all significant releases of hazardous materials, including oil. To report a spill: 1) Dial 911 or your local emergency response number, 2) Call the Governor's Office of Emergency Services Warning Center, (800) 852-7550 (24 hours).

Earthmoving



- Schedule grading and excavation work during dry weather.
- Stabilize all denuded areas, install and maintain temporary erosion controls (such as erosion control fabric or bonded fiber matrix) until vegetation is established.
- Remove existing vegetation only when absolutely necessary, and seed or plant vegetation for erosion control on slopes or where construction is not immediately planned.
- Prevent sediment from migrating offsite and protect storm drain inlets, gutters, ditches, and drainage courses by installing and maintaining appropriate BMPs, such as fiber rolls, silt fences, sediment basins, gravel bags, berms, etc.
- Keep excavated soil on site and transfer it to dump trucks on site, not in the streets.

Contaminated Soils

- If any of the following conditions are observed, test for contamination and contact the Regional Water Quality Control Board:
 - Unusual soil conditions, discoloration, or odor.
 - Abandoned underground tanks.
 - Abandoned wells
 - Buried barrels, debris, or trash.

Paving/Asphalt Work



- Avoid paving and seal coating in wet weather or when rain is forecast, to prevent materials that have not cured from contacting stormwater runoff.
- Cover storm drain inlets and manholes when applying seal coat, tack coat, slurry seal, fog seal, etc.
- Collect and recycle or appropriately dispose of excess abrasive gravel or sand. Do NOT sweep or wash it into gutters.
- Do not use water to wash down fresh asphalt concrete pavement.

Sawcutting & Asphalt/Concrete Removal

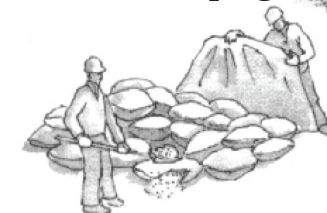
- Protect nearby storm drain inlets when saw cutting. Use filter fabric, catch basin inlet filters, or gravel bags to keep slurry out of the storm drain system.
- Shovel, absorb, or vacuum saw-cut slurry and dispose of all waste as soon as you are finished in one location or at the end of each work day (whichever is sooner!).
- If sawcut slurry enters a catch basin, clean it up immediately.

Concrete, Grout & Mortar Application



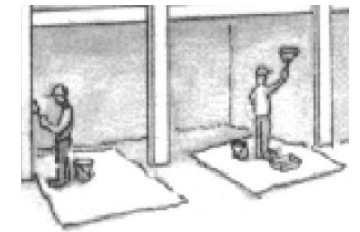
- Store concrete, grout, and mortar away from storm drains or waterways, and on pallets under cover to protect them from rain, runoff, and wind.
- Wash out concrete equipment/trucks offsite or in a designated washout area, where the water will flow into a temporary waste pit, and in a manner that will prevent leaching into the underlying soil or onto surrounding areas. Let concrete harden and dispose of as garbage.
- When washing exposed aggregate, prevent washwater from entering storm drains. Block any inlets and vacuum gutters, hose washwater onto dirt areas, or drain onto a bermed surface to be pumped and disposed of properly.

Landscaping



- Protect stockpiled landscaping materials from wind and rain by storing them under tarps all year-round.
- Stack bagged material on pallets and under cover.
- Discontinue application of any erodible landscape material within 2 days before a forecast rain event or during wet weather.

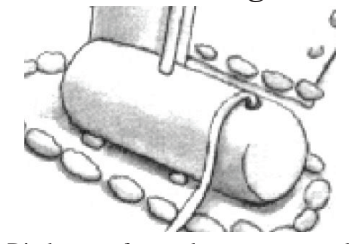
Painting & Paint Removal



Painting Cleanup and Removal

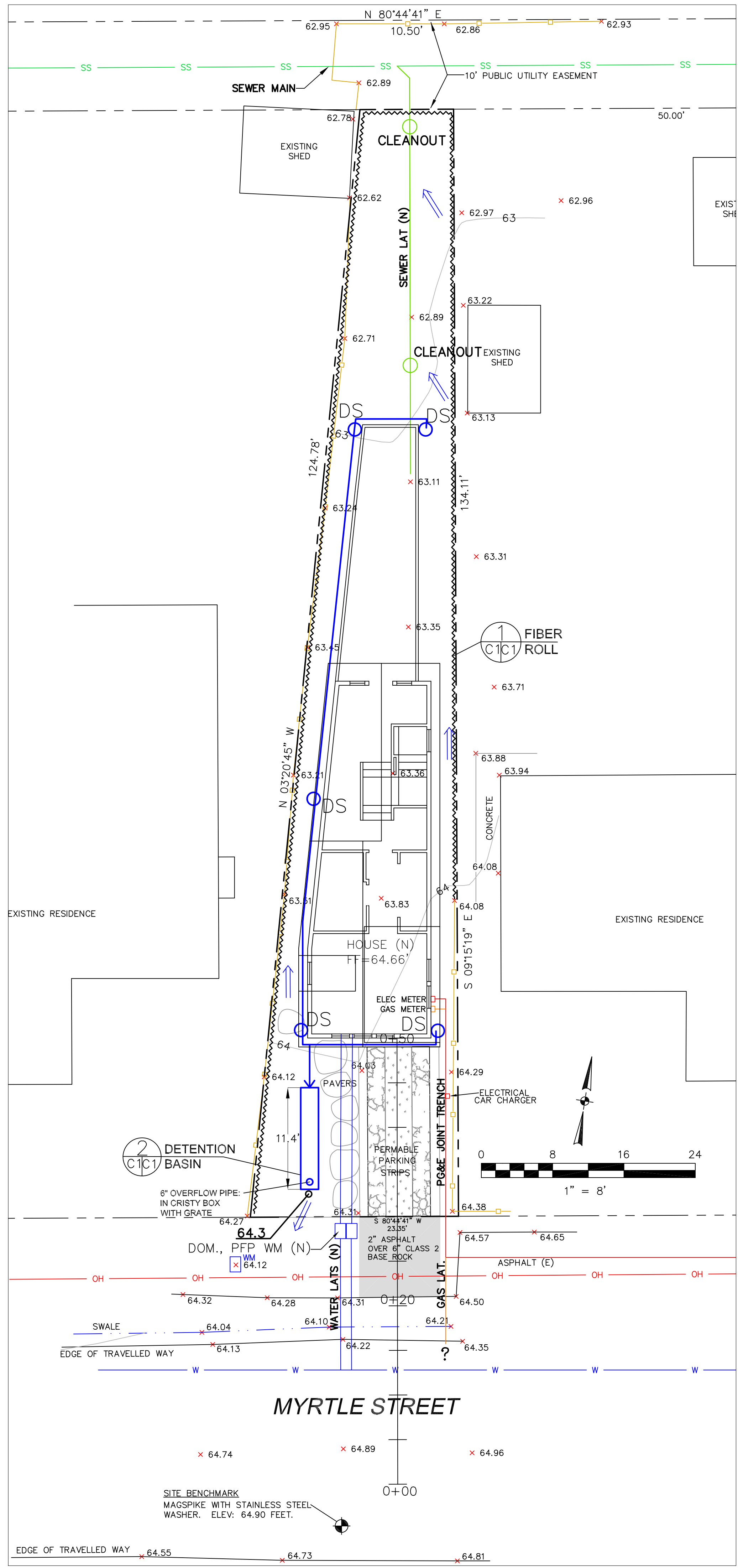
- Never clean brushes or rinse paint containers into a street, gutter, storm drain, or stream.
- For water-based paints, paint out brushes to the extent possible, and rinse into a drain that goes to the sanitary sewer. Never pour paint down a storm drain.
- For oil-based paints, paint out brushes to the extent possible and clean with thinner or solvent in a proper container. Filter and reuse thinners and solvents. Dispose of excess liquids as hazardous waste.
- Paint chips and dust from non-hazardous dry stripping and sand blasting may be swept up or collected in plastic drop cloths and disposed of as trash.
- Chemical paint stripping residue and chips and dust from marine paints or paints containing lead, mercury, or tributyltin must be disposed of as hazardous waste. Lead based paint removal requires a state-certified contractor.

Dewatering



- Discharges of groundwater or captured runoff from dewatering operations must be properly managed and disposed. When possible send dewatering discharge to landscaped area or sanitary sewer. If discharging to the sanitary sewer call your local wastewater treatment plant.
- Divert run-on water from offsite away from all disturbed areas.
- When dewatering, notify and obtain approval from the local municipality before discharging water to a street gutter or storm drain. Filtration or diversion through a basin, tank, or sediment trap may be required.
- In areas of known or suspected contamination, call your local agency to determine whether the ground water must be tested. Pumped groundwater may need to be collected and hauled off-site for treatment and proper disposal.

Storm drain polluters may be liable for fines of up to \$10,000 per day!



LEGEND

- x 63.48 EXISTING SPOT ELEVATION
- 64.5 PROPOSED SPOT ELEVATION
- ← SURFACE DRAINAGE FLOW
- DS DOWNSPOUT
- 4" MIN SOLID PVC DRAIN PIPE

GENERAL NOTES

1. PLANS PREPARED AT REQUEST OF: JOHN CALLAN, OWNER
2. ELEVATION DATUM: NAVD 88
3. SITE SURVEYED BY BGT LAND SURVEYING, JANUARY 2019.
4. THIS IS NOT A BOUNDARY SURVEY.
5. AN ENCROACHMENT PERMIT SHALL BE REQUIRED FOR ANY WORK IN THE CITY RIGHT OF WAY.

GRADING NOTES

CUT VOLUME : 20 CY (FOR FOUNDATION)
FILL VOLUME: 0 CY

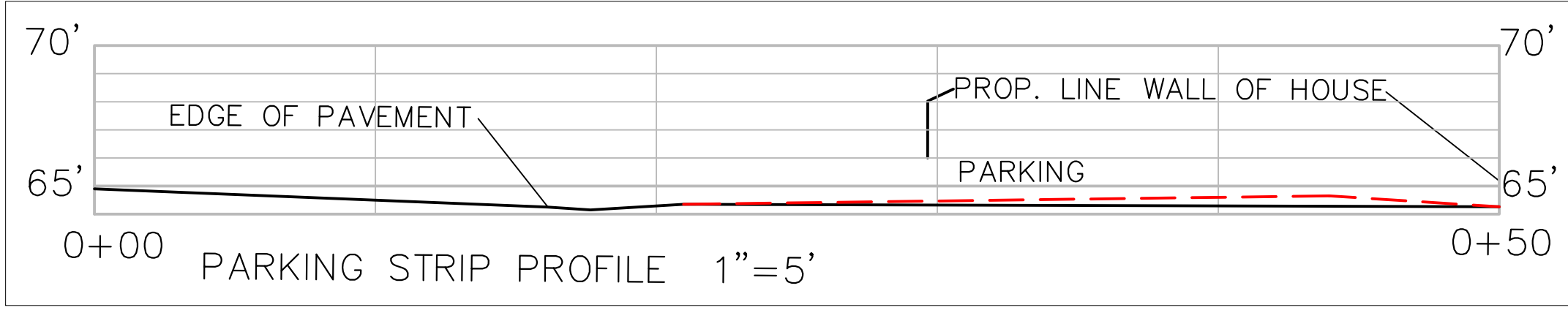
ABOVE VOLUMES ARE APPROXIMATE.

ALL GRADING SHALL CONFORM TO LOCAL CODES AND ORDINANCES.

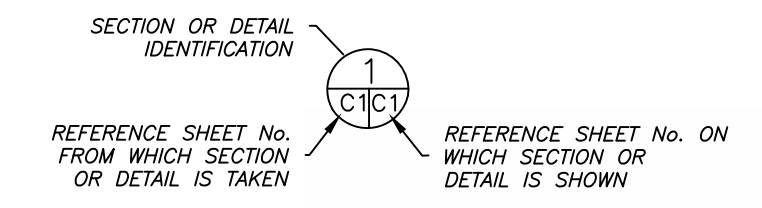
ALL TRENCHES UNDER PROPOSED PAVED AREAS OR CONCRETE SHALL BE BACKFILLED TO SUBGRADE ELEVATION WITH COMPACTED APPROVED GRANULAR MATERIALS. IF TRENCHES ARE IN PROPOSED LANDSCAPE AREAS, THEY SHALL BE BACKFILLED WITH COMPACTED APPROVED GRANULAR MATERIAL TO WITHIN ONE FOOT OF FINISHED GRADE, AND THEN FILLED WITH HAND TAMPED SOILS.

DRAINAGE NOTES

1. DRAINAGE INTENT: IT IS THE INTENT OF THE DRAINAGE SYSTEM TO CONVEY ROOF AND DRIVEWAY RUNOFF TO A SAFE LOCATION, TO MINIMIZE EXCESSIVE MOISTURE AROUND FOUNDATIONS, AND TO PREVENT AN INCREASE IN RUNOFF TO NEIGHBORING PROPERTIES.
2. DOWNSPOUTS SHALL LEAD TO DETENTION BASIN, AS SHOWN.
3. CREATE SHALLOW SWALE BETWEEN DETENTION BASIN OVERFLOW AND NEARBY EXISTING SWALE TO FACILITATE DRAINAGE TO STREET.

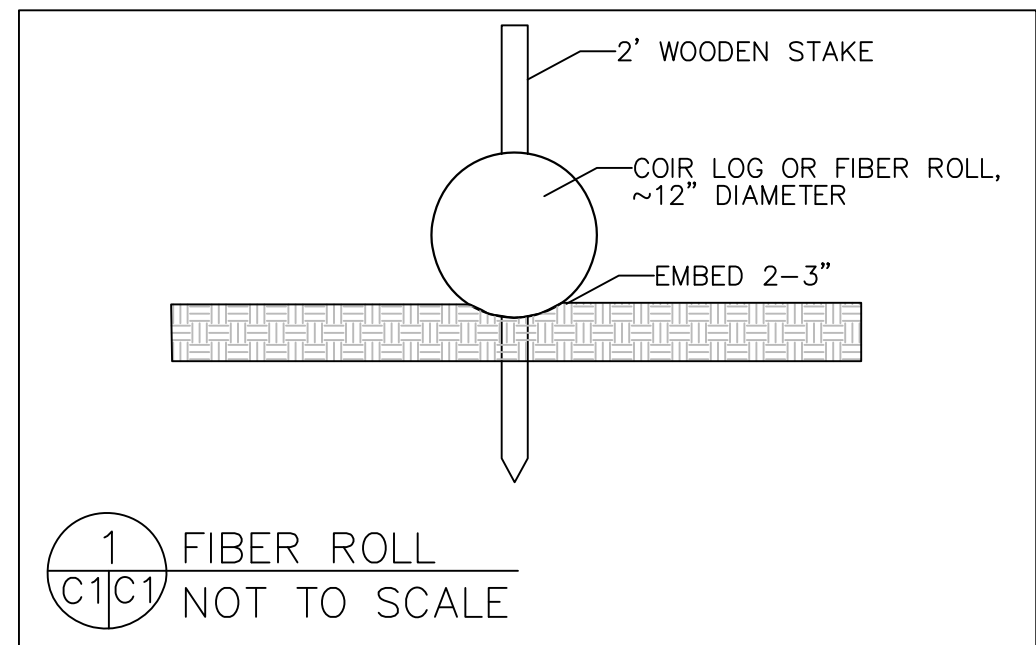
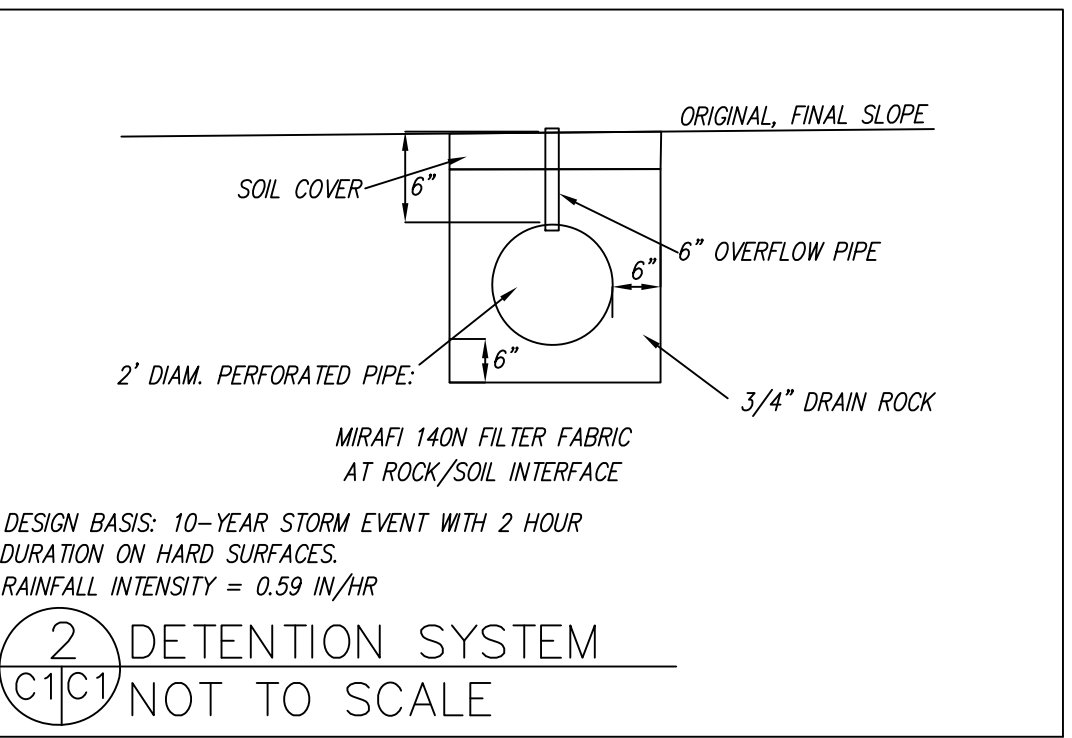


SECTION AND DETAIL CONVENTION



EROSION AND SEDIMENT CONTROL NOTES

- FIBER ROLL: INSTALL AT LOCATIONS SHOWN. AFFIX AS SHOWN IN DETAIL 1.
- 1. FOR CONSTRUCTION DURING DRY SEASON, ALL EXPOSED SURFACES SHALL BE WETTED PERIODICALLY TO PREVENT SIGNIFICANT DUST.
- 2. ALL EXPOSED SOIL SHALL BE PROTECTED FROM EROSION AT ALL TIMES. SUCH PROTECTION SHALL CONSIST OF JUTE MATTING ON SLOPES.
- 3. ALL STOCKPILED SOIL SHALL BE COVERED DURING PERIODS OF RAIN.
- 4. BEFORE COMPLETION OF PROJECT ALL EXPOSED OR DISTURBED SURFACES SHALL BE PERMANENTLY PROTECTED FROM EROSION.
- 5. AREAS TO RECEIVE NATURAL VEGETATION SHALL BE SEEDED PRIOR TO OCT 15 WITH 75# PER ACRE OF ANNUAL RYEGRASS OR APPROVED SUBSTITUTE, AS PER LANDSCAPE PLAN. SEED MAY BE COVERED WITH STRAW MULCH AT RATE OF 2 TONS/ACRE.



GRADING, DRAINAGE, EROSION CONTROL PLAN

SHEET C-1

DATE: 12-12-19
DRAWN BY: CMK
CHECKED BY: AZG
REV. DATE: 6-29-20
REV. DATE: 7-27-20

Sigma Prime Geosciences, Inc.
SIGMA PRIME GEOSCIENCES, INC.
332 PRINCETON AVENUE
HALF MOON BAY, CA 94019
(650) 728-3880
FAX: 728-3885

CALLAN PROPERTY
341 MYRTLE STREET
HALF MOON BAY, CALIFORNIA
APN 064-061-280

GENERAL NOTES

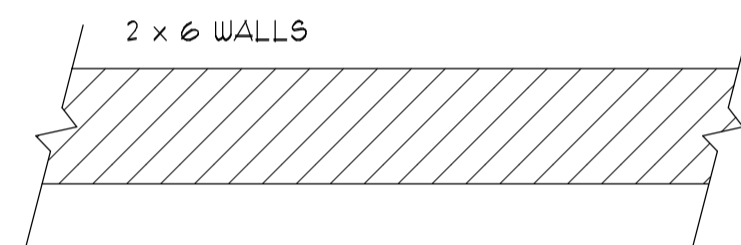
REFERENCE THE ELECTRICAL PLAN FOR LOCATION AND SPECIFICATIONS OF SMOKE DETECTORS AND OTHER ELECTRICAL REQUIREMENTS.

CALGREEN MANDATORY MEASURES

- DUCT SYSTEMS ARE SIZED, DESIGNED, AND EQUIPMENT IS SELECTED PER SECTION 4501.2 HVAC SYSTEM INSTALLERS MUST BE TRAINED AND CERTIFIED AND SPECIAL INSPECTORS EMPLOYED BY THE ENFORCING AGENCY MUST BE QUALIFIED.
- PROTECT ANNULAR SPACES AROUND PIPES, ELECTRIC CABLES, CONDUITS AT EXTERIOR WALLS AGAINST THE PASSAGE OF RODENTS (4.406.1)
- COVER DUCT OPENINGS AND OTHER RELATED AIR DISTRIBUTION COMPONENT OPENINGS DURING CONSTRUCTION (4.504.1)
- ADHESIVES, SEALANTS AND CAULKS SHALL BE COMPLIANT WITH VOC LIMITS AND OTHER TOXIC COMPOUNDS DURING CONSTRUCTION (4.504.2.1)
- PAINTS, STAINS AND OTHER COATING SHALL BE COMPLIANT WITH VOC LIMITS (4.504.2.2)
- AEROSOL PAINTS AND COATINGS SHALL BE COMPLIANT WITH PRODUCT WEIGHTED MIR LIMITS FOR VOC AND OTHER TOXIC COMPOUNDS (4.504.2.3) DOCUMENTATIONS SHALL BE PROVIDED TO VERIFY COMPLIANCE
- CARPET AND CARPET SYSTEMS SHALL BE COMPLIANT WITH VOC LIMITS (4.504.3)
- MINIMUM 80% OF FLOOR AREA RECEIVING RESILIENT FLOORING SHALL COMPLY WITH THE VOC-EMISSION LIMITS PER SECTIONS 4.504.4
- PARTICLEBOARD, MEDIUM DENSITY FIBERBOARD (MDF) AND HARDWOOD PLYWOOD USED IN INTERIOR FINISH SYSTEM SHALL COMPLY WITH LOW FORMALDEHYDE EMISSION STANDARDS (4.504.5)
- INSTALL CAPILLARY BREAK AND VAPOR RETARDER AT SLAB ON GRADE FOUNDATIONS (4.505.2)
- CHECK MOISTURE CONTENT OF BUILDING MATERIALS USED IN WALL AND FLOOR FRAMING BEFORE ENCLOSURE (4.505.3)

WALL SCHEDULE

EXTERIOR WALLS TO BE 2x6 ALL INTERIOR WALLS TO BE 2x4 UNLESS NOTED AS BELOW.



LANDING

PROVIDE A MIN. 36" DEEP LANDING ON EACH SIDE OF EACH EXTERIOR DOOR. EACH LANDING SHALL HAVE A DIMENSION OF NOT LESS THAN 36 INCHES MEASURED IN THE DIRECTION OF TRAVEL. THE SLOPE AT EXTERIOR LANDINGS SHALL NOT EXCEED 2%. LANDINGS OR FINISHED FLOORS AT THE REQUIRED EGRESS DOOR SHALL NOT BE MORE THAN 1/2" LOWER THAN THE TOP OF THE THRESHOLD, EXCEPT ON THE EXTERIOR SIDE SHALL NOT BE MORE THAN 3/4" BELOW THE TOP OF THE THRESHOLD PROVIDED THE DOOR DOES NOT SWING OVER THE LANDING OR FLOOR. ALL OTHER EXTERIOR DOORS SHALL BE PROVIDED WITH LANDING NOT MORE THAN 3/4" BELOW THE TOP OF THE THRESHOLD.

WINDOW SCHEDULE

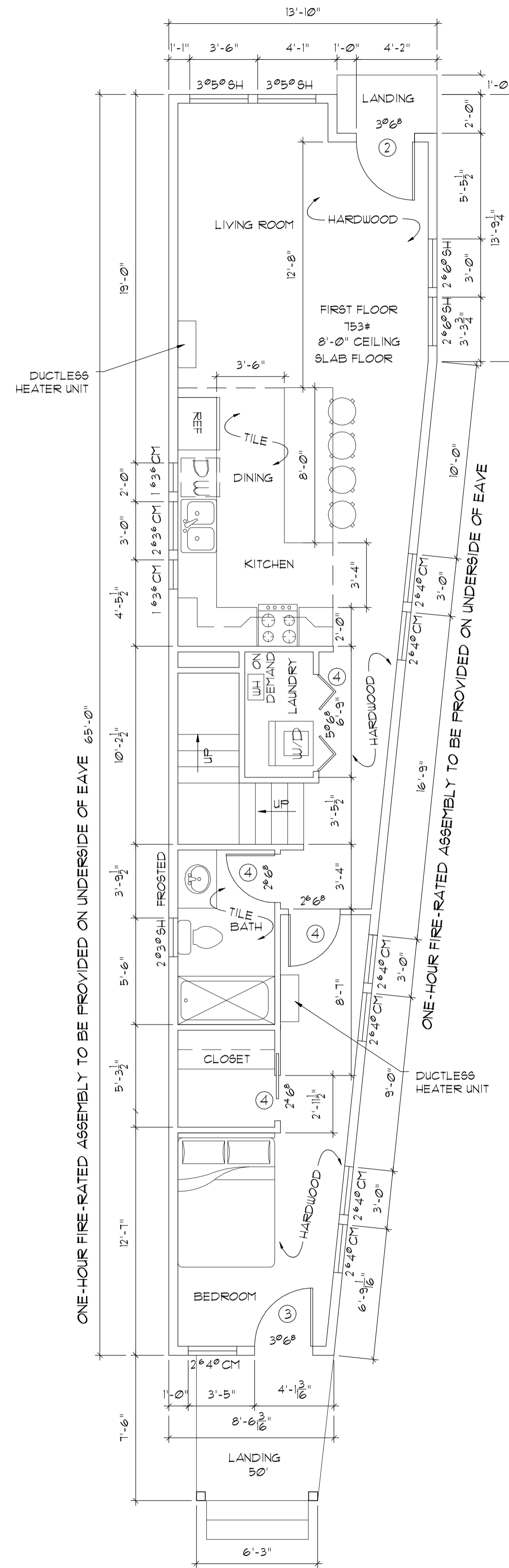
SH	SINGLE HUNG	SG	SAFETY GLAZED
SL	SLIDER	AW	AWNING
CM	CASEMENT	SDLT	SIDELIGHT
DCM	DOUBLE CASEMENT		
TR	TRANSOM		
F	FIXED		

VENTILATION
SEE SHEET A1-2.1

TILE FLOORS REQUIRE THINSET, 1/4" HARDIEBACKER CEMENT BOARD AND A MAXIMUM WEIGHT OF CERAMIC TILE OF 4.1 psf.

STAIR RAILING AND GUARDRAIL NOTES:

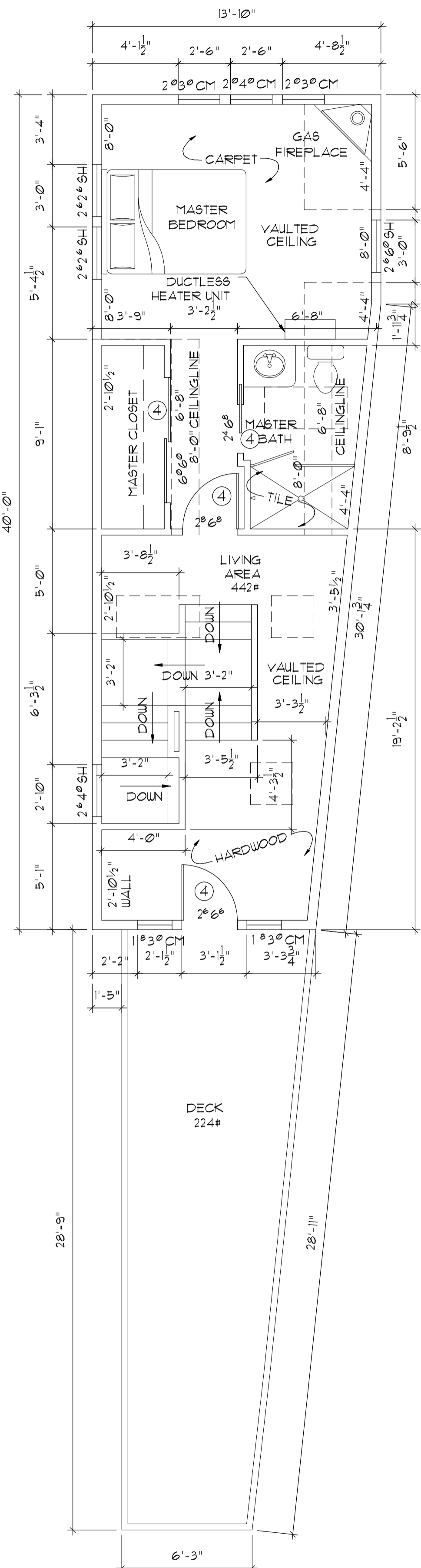
- STAIRWAYS SHALL HAVE A MINIMUM WIDTH OF 36". HAND RAILS MAY ENCROACH A MAXIMUM OF 3 1/2" INTO THE REQUIRED WIDTH.
- ENCLOSED ACCESSIBLE SPACE UNDER STAIRS SHALL HAVE WALLS, UNDER STAIR SURFACE AND ANY SOFFITS PROTECTED ON THE ENCLOSED SIDE WITH 1/2"-INCH GYPSUM BOARD, PER R302.1 OF 2016 CRC.
- TREADS SHALL HAVE A MINIMUM LENGTH OF 10".
- RISERS SHALL BE A MAXIMUM OF 7 1/4".
- A NOSING NOT LESS THAN 0.75" BUT NOT MORE THAN 125" SHALL BE PROVIDED ON STAIRWAYS WITH SOLID RISERS WHERE THE TREAD DEPTH IS LESS THAN 11".
- TOLERANCE LARGEST AND SMALLEST RISER HEIGHT OR TREAD DEPTH SHALL BE 0.375"
- STAIRWAYS SHALL HAVE A MINIMUM OF 6'-8" OF HEADROOM AT THE NOSE OF THE STAIR.
- STAIRWAYS HAVING LESS THAN 4 RISERS DO NOT REQUIRE A HAND RAIL.
- GUARDRAILS SHALL BE PROVIDED FOR AT PORCHES, DECKS, BALCONIES, STAIRWAYS AND LANDINGS WHERE THE ADJACENT SURFACE IS GREATER THAN 30" BELOW.
- HANDRAILS SHALL BE CONTINUOUS THE FULL LENGTH OF THE STAIRS.
- THE ENDS OF HANDRAILS SHALL RETURN TO WALL OR TERMINATE INTO A NEWEL POST OR SAFETY TERMINAL.
- GUARDRAILS SHALL BE AT NOT LESS THAN 42" IN HEIGHT, PER CRC R312.12
- GUARDS ON THE OPEN SIDES OF STAIRS OR SERVES AS A HANDRAIL, THE TOP OF THE GUARD SHALL HAVE A HEIGHT NOT LESS THAN 34" AND NO MORE THAN 38"
- REQUIRED GUARDS SHALL NOT HAVE OPENINGS FROM THE WALKING SURFACE TO THE REQUIRED GUARD HEIGHT THAT ALLOW PASSAGE OF A SPHERE 4" IN DIAMETER. (R312.3)
- THE TRIANGULAR OPENINGS AT THE OPEN SIDE OF A STAIR FORMED BY THE RISER, TREAD, AND BOTTOM RAIL, OF A GUARD, SHALL NOT ALLOW PASSAGE OF A SPHERE 6" IN DIAMETER. (R312.3 exception #1)
- TYPE 1 HANDRAILS WITH A CIRCULAR CROSS SECTION SHALL HAVE AN OUTSIDE DIAMETER OF NOT LESS THAN 1 1/4" AND NOT GREATER THAN 2". IF THE HANDRAIL IS NOT CIRCULAR, IT SHALL HAVE A PERIMETER DIMENSION OF NOT LESS THAN 4" AND NOT GREATER THAN 6 1/4" WITH A CROSS SECTION OF DIMENSION OF NOT MORE THAN 2 1/4". EDGES SHALL HAVE A RADIUS OF NOT LESS THAN 0.01". TYPE 2 HANDRAILS WITH A PERIMETER GREATER THAN 6 1/4" SHALL HAVE A GRASPABLE FINGER RECESS AREA ON BOTH SIDES OF THE PROFILE. THE FINGER RECESS SHALL BEGIN WITHIN A DISTANCE OF 3/4" MEASURED VERTICALLY FROM THE TALLEST PORTION OF THE PROFILE AND ACHIEVE A DEPTH OF NOT LESS THAN 5/16" WITHIN 3/8" BELOW THE WIDEST PORTION OF THE PROFILE. THIS REQUIRED DEPTH SHALL CONTINUE FOR NOT LESS THAN 3/8" TO A LEVEL THAT IS NOT LESS THAN 1 1/4" BELOW THE TALLEST PORTION OF THE PROFILE. THE WIDTH OF THE HANDRAIL ABOVE THE RECESS SHALL BE NOT LESS THAN 1/4" AND NOT MORE THAN 3/4". EDGES SHALL HAVE A RADIUS OF NOT LESS THAN 0.01".



FIRST FLOOR PLAN

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

ONE-HOUR FIRE-RATED ASSEMBLY TO BE PROVIDED ON UNDERSIDE OF EAVE



SECOND FLOOR PLAN

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

DOOR SCHEDULE

- SOLID WOOD DOORS NOT LESS THAN 1-3/8 INCHES (35 MM) IN THICKNESS, SOLID OR HONEYCOMB CORE STEEL DOORS NOT LESS THAN 1-3/8 INCHES (35 MM) THICK, OR 20-MINUTE FIRE-RATED DOORS. DOORS SHALL BE SELF-CLOSING AND SELF-LATCHING DEVICE. SEE GENERAL NOTES FOR EXCEPTION.
- 36" EXTERIOR EXIT DOOR - NET CLEAR DOOR WAY SHALL BE 32". DOOR SHALL BE OPENABLE FROM INSIDE WITHOUT THE USE OF A KEY OR ANY SPECIAL KNOWLEDGE OR EFFORT. DOOR SHALL SWING TO THE FULL OPEN POSITION WHEN AN OPENING FORCE NOT EXCEEDING 30 lbs. IS APPLIED TO THE LATCH SIDE. GLAZING IN DOORS SHALL BE DUAL PANE SAFETY GLASS WITH MIN. U-VALUE OF 0.60. PERIMETER OF DOOR SHALL BE WEATHER STRIPPED. GLAZING IN DOORS SHALL BE DUAL PANE SAFETY GLASS.
- EXTERIOR DOORS SHALL COMPLY WITH ONE OF THE FOLLOWING:
 - THE EXTERIOR SURFACE OR CLADDING SHALL BE OF NONCOMBUSTIBLE OR IGNITION-RESISTANT MATERIAL, OR
 - SHALL BE CONSTRUCTED OF SOLID CORE WOOD THAT COMPLY WITH THE FOLLOWING REQUIREMENTS:
 - STILES AND RAILS SHALL NOT BE LESS THAN 1 3/8" THICK
 - RAISED PANELS SHALL NOT BE LESS THAN 1/4" THICK, EXCEPT FOR THE EXTERIOR PERIMETER OF THE RAISED PANEL THAT MAY TAPE TO A TONGUE NOT LESS THAN 3/8" THICK.
 - SHALL HAVE A FIRE-RESISTANCE RATING OF NOT LESS THAN 20 MINUTES WHEN TESTED ACCORDING TO NFPA 252.
 - SHALL BE TESTED TO MEET THE PERFORMANCE REQUIREMENTS OF 8FM STANDARD 12-1A-1.
 - GLAZING IN DOORS SHALL BE DUAL PANE SAFETY GLASS.
- INTERIOR DOORS - HOLLOW CORE.

WINDOWS AND GLAZING

WINDOWS SHALL BE DUAL PANE
EMERGENCY AND ESCAPE RESCUE OPENINGS SHALL HAVE A NET CLEAR OPENING OF NOT LESS THAN 5.7 SQ. FT., 5.0 SQ. FT. ALLOWED AT GRADE. THE NET CLEAR OPENING DIMENSIONS REQUIRED BY THIS SECTION SHALL BE OBTAINED BY THE NORMAL OPERATION OF THE EMERGENCY ESCAPE AND RESCUE OPENING FROM THE INSIDE. THE NET CLEAR HEIGHT OPENINGS SHALL BE NOT LESS THAN 24" AND THE NET CLEAR WIDTH SHALL BE NOT LESS THAN 20 INCHES. FINISHED SILL HEIGHT SHALL BE NOT MORE THAN 44 INCHES ABOVE THE FINISHED FLOOR.

RESCUE WINDOWS IN BEDROOMS ARE LABELED AS EGRESS. CONTRACTOR / OWNER TO VERIFY THAT THEY MEET ALL REQUIREMENTS.

ALL GLAZING LESS THAN 60 INCHES ABOVE A SHOWER OR TUB FLOOR. GLAZING ADJACENT TO STAIRWAYS, LANDINGS AND RAMPS WITHIN 36 INCHES HORIZONTALLY OF A WALKING SURFACE WHEN THE EXPOSED SURFACE OF THE GLAZING IS LESS THAN 60 INCHES ABOVE THE PLANE OF THE ADJACENT WALKING SURFACES AND GLAZING IN ALL FIXED AND OPERABLE PANELS OF SWINGING, SLIDING AND BI-FOLD DOORS SHALL BE TEMPERED GLAZING PER 2016 CRC R308.4.

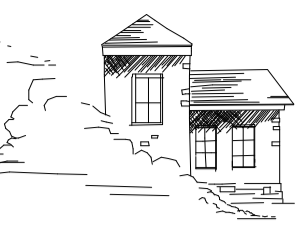
SHOWER COMPARTMENTS AND WALLS ABOVE BATHTUBS WITH INSTALLED SHOWER HEADS SHALL BE FINISHED WITH A NONABSORBENT SURFACE TO A HEIGHT OF NOT LESS THAN 6 FEET ABOVE THE FLOOR PER CRC 307.2.

PER CBC 308.4.3 GLAZING IN AN INDIVIDUAL FIXED OR OPERABLE PANEL THAT MEETS ALL OF THE FOLLOWING CONDITIONS SHALL BE CONSIDERED TO BE A HAZARDOUS LOCATION:

- THE EXPOSED AREA OF AN INDIVIDUAL PANE IS LARGER THAN 9 SQ. FT. AND
- THE BOTTOM EDGE OF THE GLAZING IS LESS THAN 18 INCHES ABOVE THE FLOORS AND
- THE TOP EDGE OF THE GLAZING IS MORE THAN 36 INCHES ABOVE THE FLOOR AND
- ONE OR MORE WALKING SURFACES ARE WITHIN 36 INCHES MEASURED HORIZONTALLY AND IN A STRAIGHT LINE, OF THE GLAZING.

FIRST FLOOR AREA	753#
SECOND FLOOR AREA	442#
TOTAL FLOOR AREA :	1195#
1ST FLOOR COVERED PORCH	50#
2ND FLOOR OPEN DECK	224#

SUE TAYLOR DESIGN



SUE TAYLOR BUILDING DESIGNER

P.O. BOX 961
CAMINO, CA 95109
(530) 391-2190

suetaylor@comcast.net

NEW RESIDENCE FLOOR PLANS

JOHN & KELLY CALLAN
341 MYRTLE STREET
HALF MOON BAY, CA 94019

REVISION	DATE	DESCRIPTION

Sue Taylor

DATE: JULY 15, 2020

DESIGNED BY:	SRT
DRAWN BY:	SRT
CHECKED BY:	SRT

FILE: PROJECTS/2019/001/001A111
PROJECT #: 19001

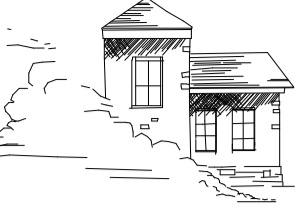
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SHEET NO.

A1-1.1

28' HEIGHT LIMIT

SUE TAYLOR DESIGN



SUE TAYLOR BUILDING DESIGNER

P.O. BOX 361
CAMINO, CA 95109
(530) 391-2190

suetaylor@comcast.net

NEW RESIDENCE ELEVATIONS

JOHN & KELLY CALLAN
341 MYRTLE STREET
HALF MOON BAY, CA 94019

REVISION	DATE	DESCRIPTION

DATE: JULY 15, 2020

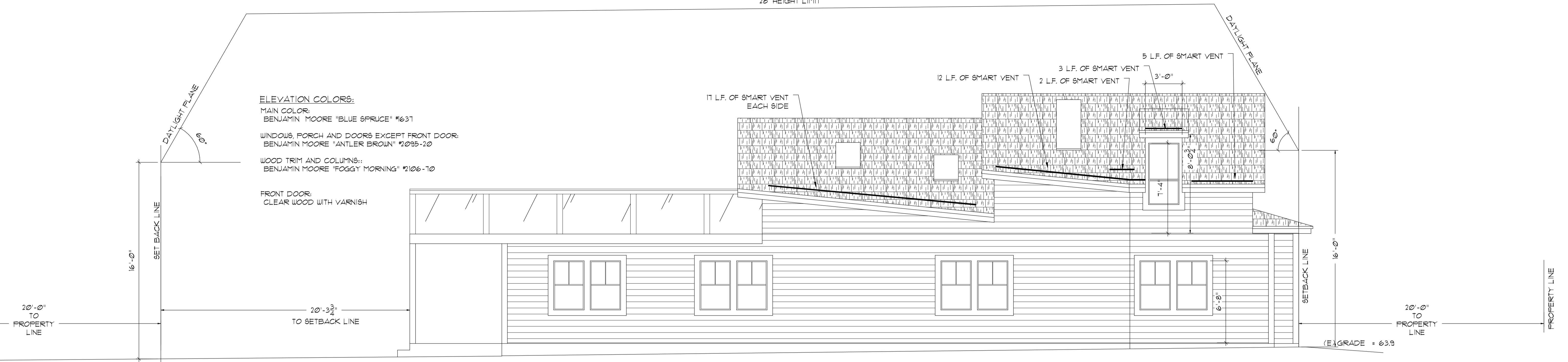
DESIGNED BY: SRT
DRAWN BY: SRT
CHECKED BY: SRT

FILE: PROJECTS\2019\001\001\AD1
PROJECT #: 19001

PAGE 6 OF 7

SHEET NO.

A1-21



WEST ELEVATION

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

ROOF VENTILATION

PER CRC SECTION R806.1: ENCLOSED ATTICS AND ENCLOSED RAFTER SPACES FORMED WHERE CEILINGS ARE APPLIED DIRECTLY TO THE UNDERSIDE OF ROOF RAFTERS SHALL HAVE CROSS VENTILATION FOR EACH SEPARATE SPACE BY VENTILATING OPENINGS PROTECTED AGAINST THE ENTRANCE OF RAIN OR SNOW VENTILATING OPENINGS SHALL HAVE A LEAST DIMENSION OF 1/16-INCH AND 1/4-INCH MAX. OPENINGS IN ROOF FRAMING MEMBERS SHALL CONFORM TO THE REQUIREMENTS OF SECTION R802.1.

PER CRC SECTION R806.2: THE TOTAL NET FREE VENTILATING AREA SHALL NOT BE LESS THAN 1/150 OF THE AREA OF THE SPACE VENTILATED EXCEPT THAT REDUCTION OF THE TOTAL AREA TO 1/300 IS PERMITTED PROVIDED THAT AT LEAST 40 PERCENT AND NOT MORE THAN 80 PERCENT OF THE REQUIRED VENTILATING AREA IS PROVIDED BY VENTILATORS LOCATED IN THE UPPER PORTION OF THE SPACE TO BE VENTILATED AT LEAST 3 FEET ABOVE THE EAVE OR CORNICE VENTS WITH THE BALANCE OF THE REQUIRED VENTILATION PROVIDED BY EAVE OR CORNICE VENTS. AS AN ALTERNATIVE, THE NET FREE CROSS-VENTILATING AREA MAY BE REDUCED TO 1/300 WHEN A CLASS 1 OR II VAPOR BARRIER IS INSTALLED ON THE WARM-IN-WINTER SIDE OF THE CEILING.

PER CRC SECTION R806.3: WHERE EAVE OR CORNICE VENTS ARE INSTALLED, INSULATION SHALL NOT BLOCK THE FREE FLOW OF AIR. A MINIMUM OF A 1-INCH SPACE SHALL BE PROVIDED BETWEEN THE INSULATION AND THE ROOF SHEATHING AND AT THE LOCATION OF THE VENT.

NECESSARY ROOF VENTILATION:

UPPER ROOF 285# / 150 = 1.9# OF VENTILATION REQUIRED
UPPER ROOF RIDGE (EXHAUST): 21 L.F. OF RIDGE VENT (.125 PER SQ. FT.) = 2.625#
UPPER ROOF EAST (INTAKE): 22' L.F. OF SMART VENT (.0625 PER FT.) = 1.375#
UPPER ROOF WEST (INTAKE): 22' L.F. OF SMART VENT (.0625 PER FT.) = 1.375#

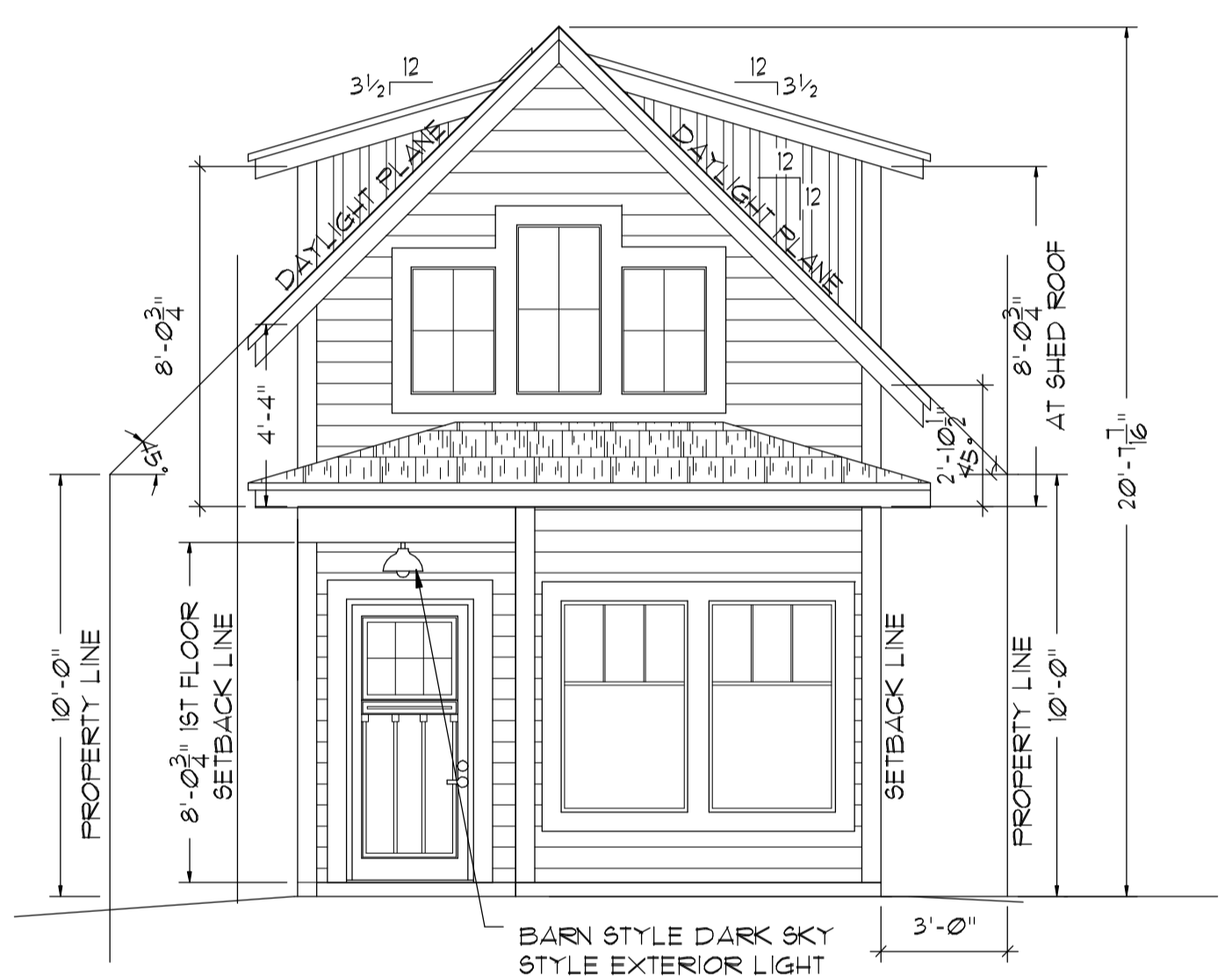
PROPOSED UPPER ROOF VENTILATION: 5.375#

LOWER ROOF 221# / 150 = 1.47# OF VENTILATION REQUIRED
LOWER ROOF RIDGE (EXHAUST): 16 L.F. OF RIDGE VENT (.125 PER SQ. FT.) = 2.0#
LOWER ROOF EAST (INTAKE): 11 L.F. OF SMART VENT (.0625 PER FT.) = 1.0625#
LOWER ROOF WEST (INTAKE): 11 L.F. OF SMART VENT (.0625 PER FT.) = 1.0625#

PROPOSED LOWER ROOF VENTILATION: 4.125#

SMALL ROOF 30# / 150 = .2# OF VENTILATION REQUIRED
SMALL ROOF (EXHAUST): 14 L.F. OF SMART VENT (.0625 PER FT.) = .9125#
SMALL ROOF (INTAKE): 15 L.F. OF SMART VENT (.0625 PER FT.) = .9375#

IN NO CASE SHOULD THE AMOUNT OF EXHAUST VENTILATION EXCEED THE AMOUNT OF INTAKE VENTILATION. 1.8125#

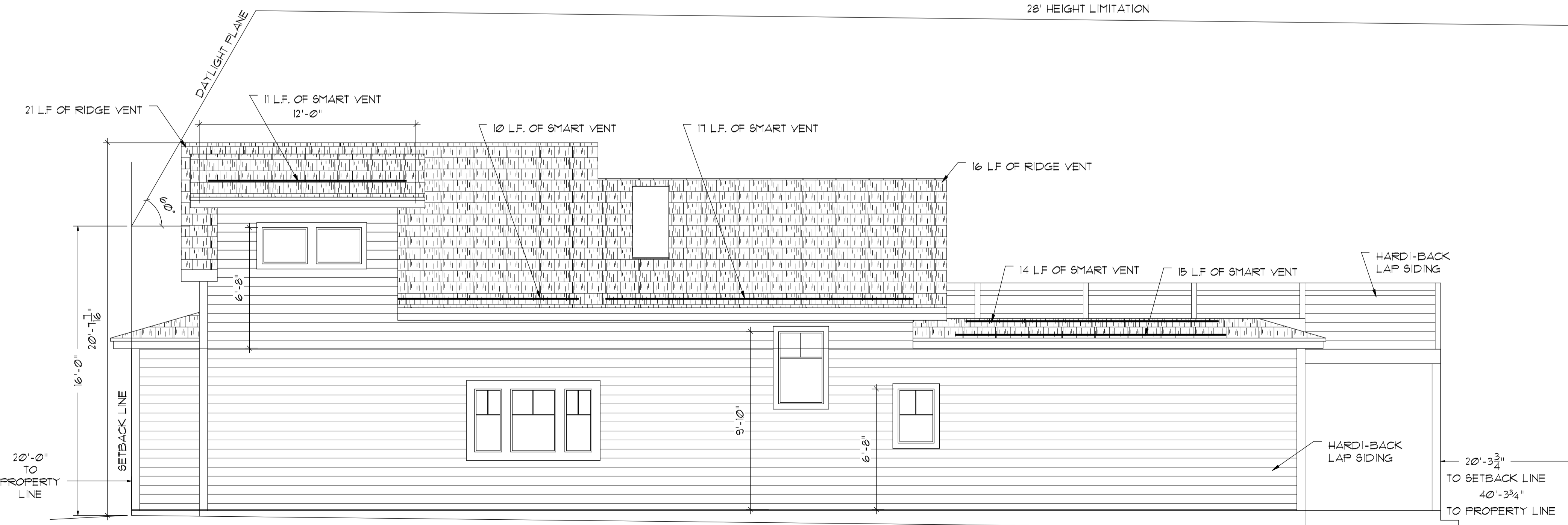


SOUTH ELEVATION

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

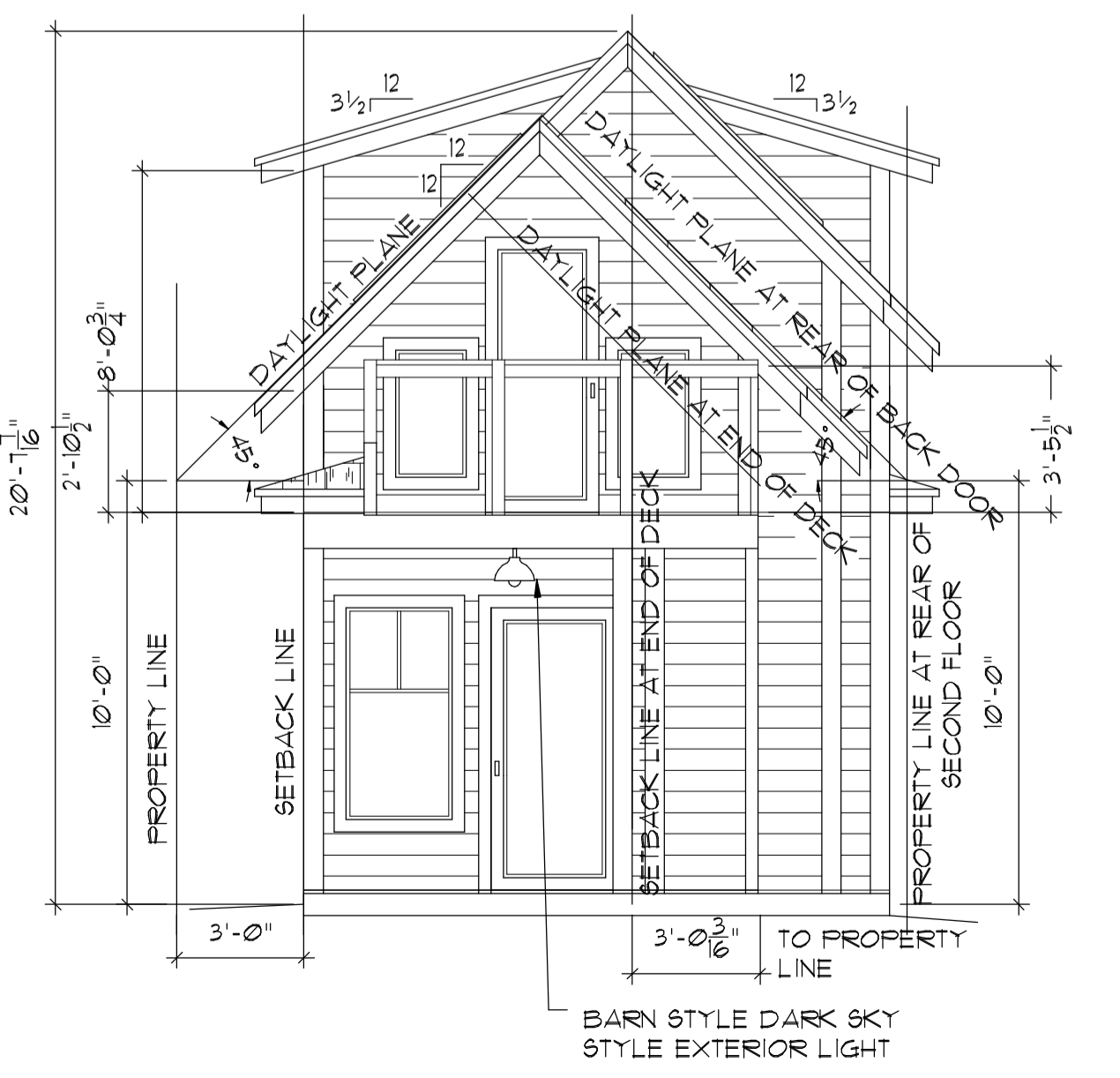
28' HEIGHT LIMITATION

28' HEIGHT LIMITATION



EAST ELEVATION

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



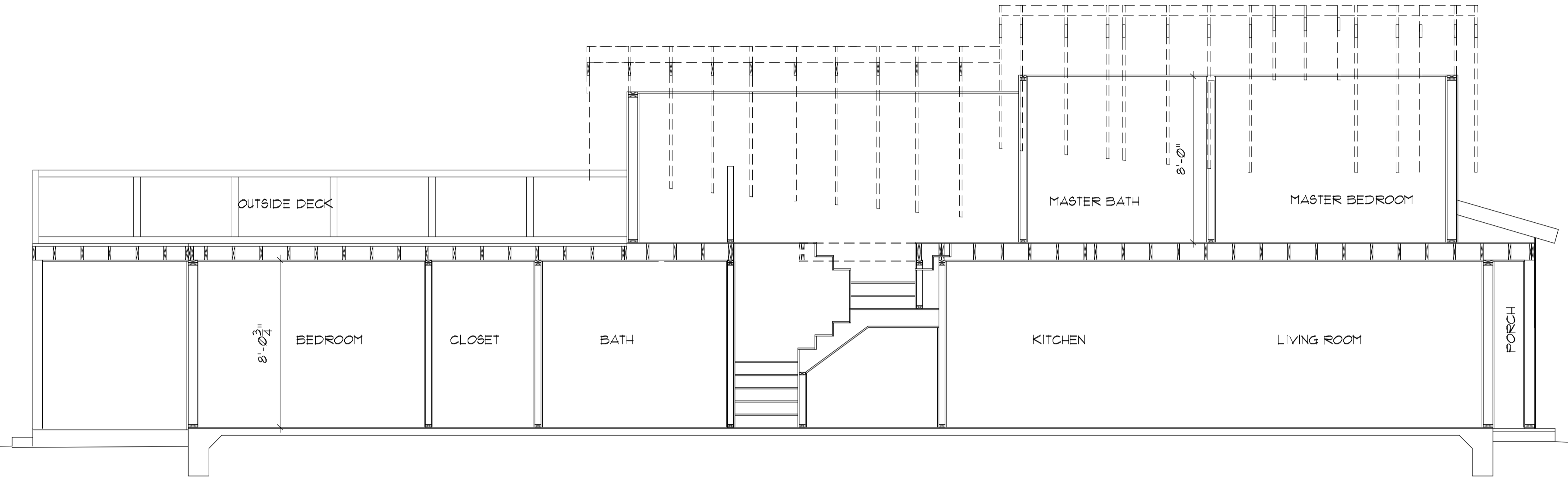
NORTH ELEVATION

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

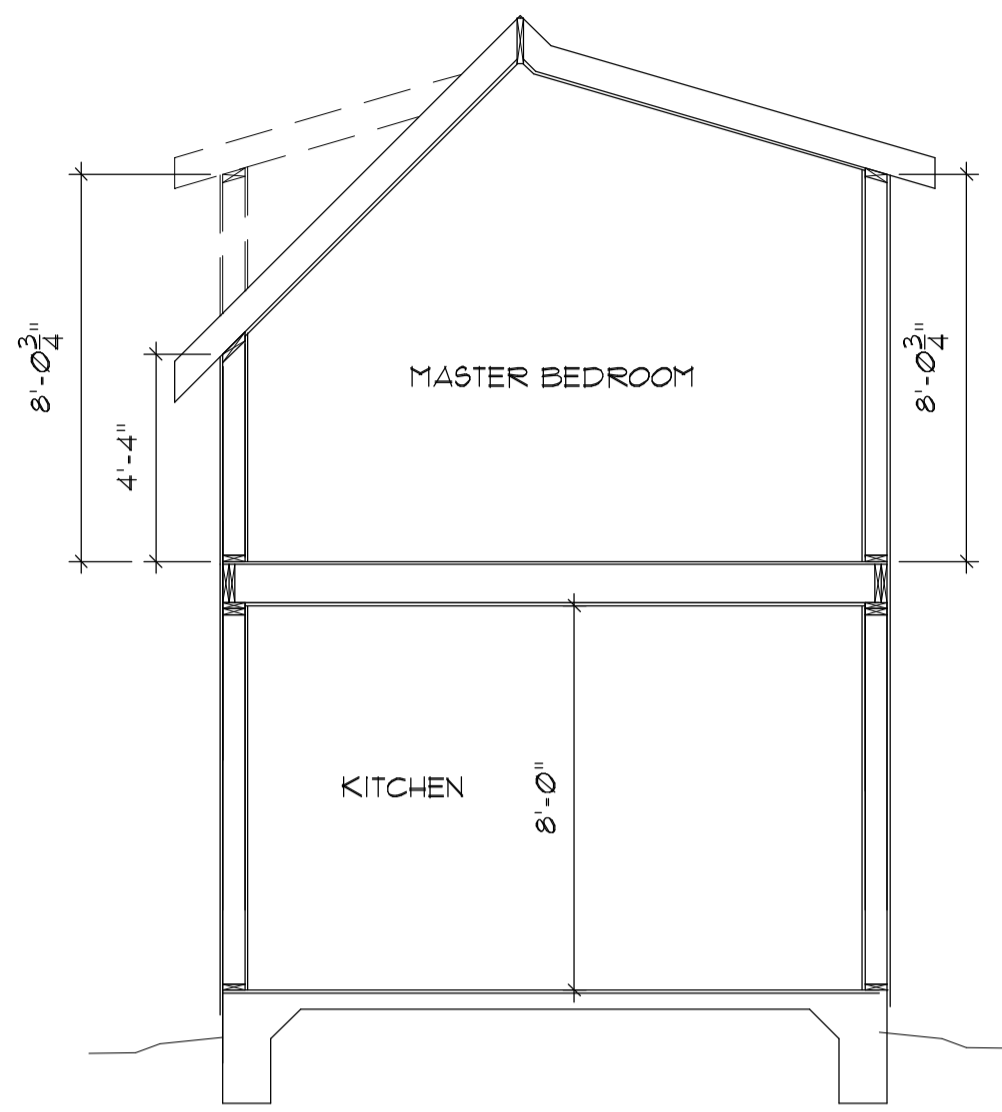
REVISION	DATE	DESCRIPTION

DATE:	JULY 15, 2020
DESIGNED BY:	SRT
DRAWN BY:	SRT
CHECKED BY:	SRT
FILE:	PROJECTS\2019\001\001\A1
PROJECT #:	19001

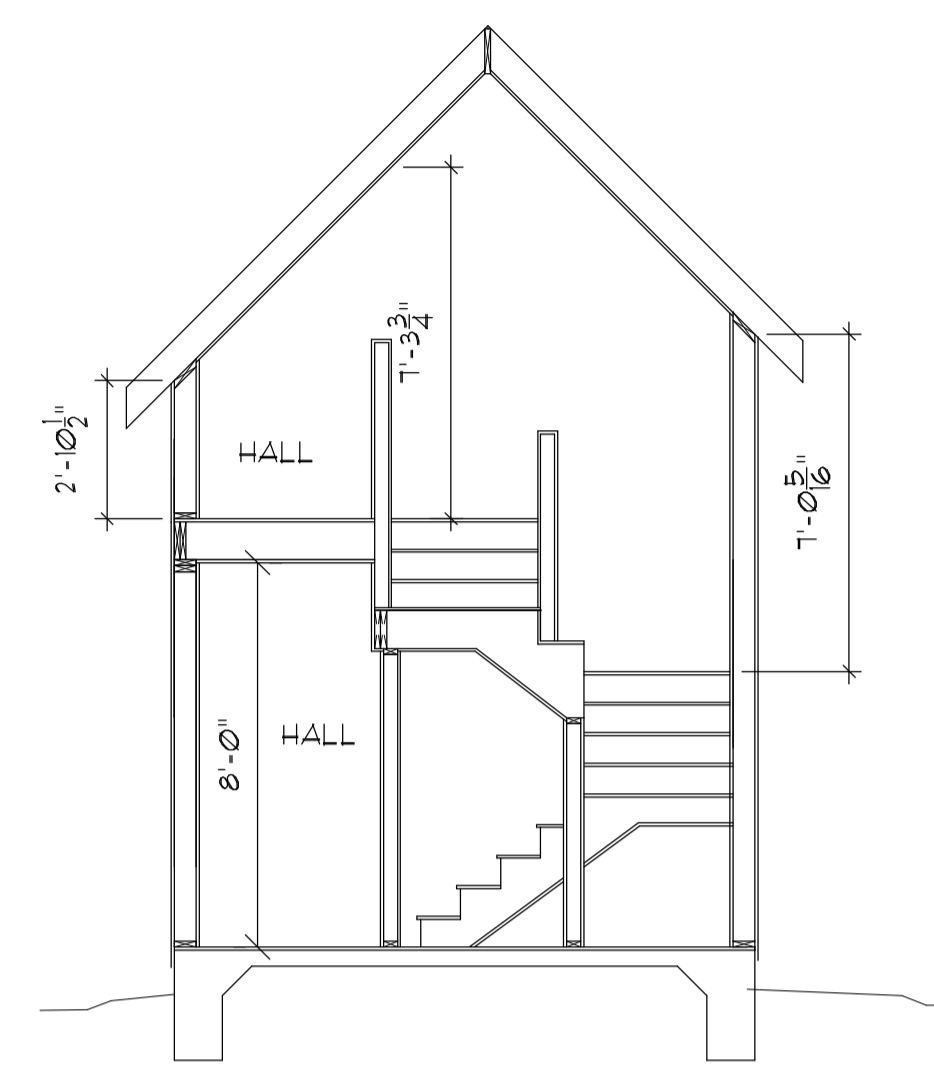
PAGE	7	OF	7
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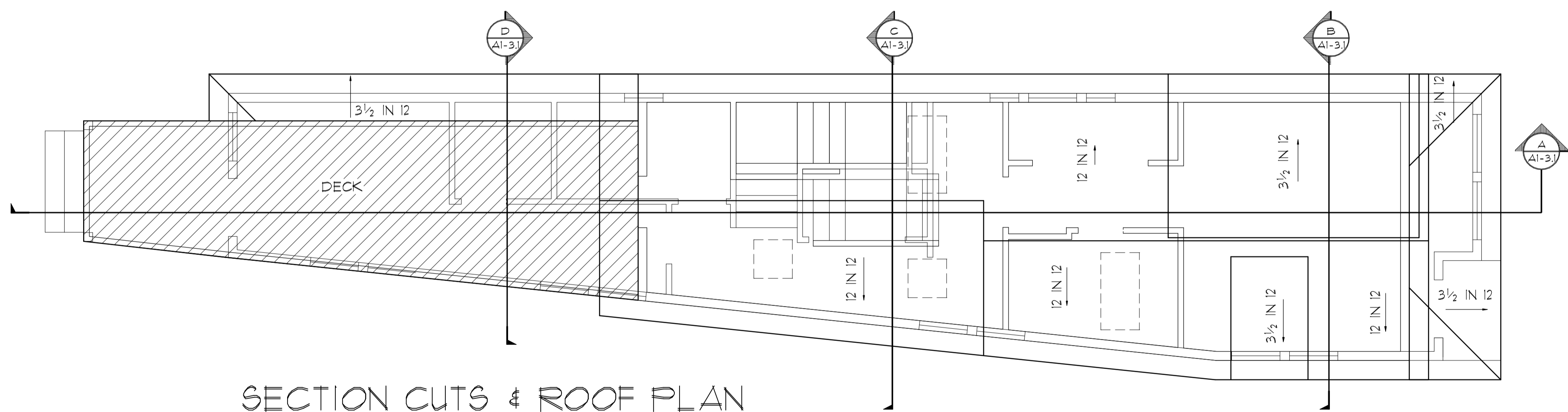
SECTION A
SCALE: 1/4" = 1'-0"



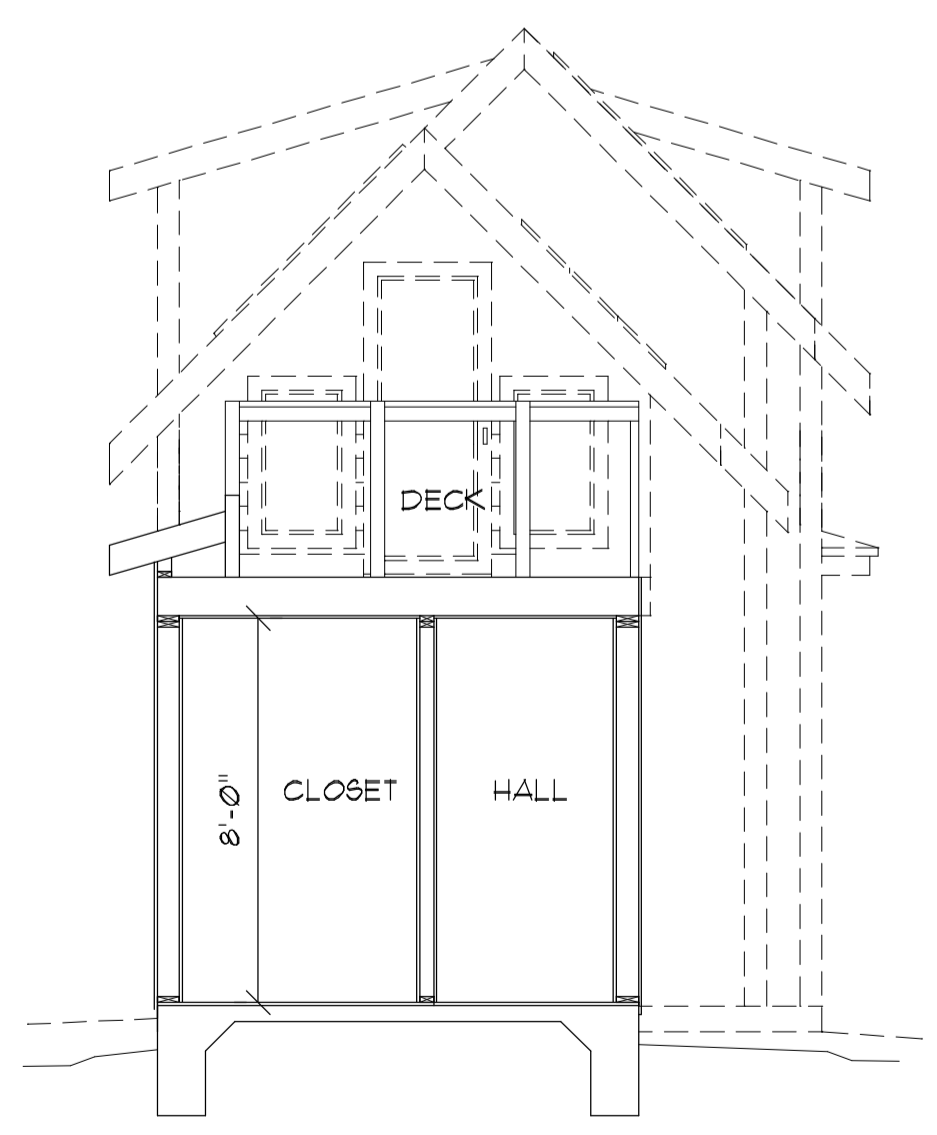
SECTION B
SCALE: 1/4" = 1'-0"



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



SECTION CUTS & ROOF PLAN
SCALE: 1/4" = 1'-0"



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

PROJECT INFORMATION

LOT AREA: 2,906 SQ. FT.
 MAXIMUM LOT COVERAGE: 35% OF LOT AREA (.35 x 2,906 = 1,011 SQ. FT.)
 PROPOSED LOT COVERAGE: 163 SQ FT
 MAXIMUM BUILDING FLOOR AREA: 50% OF LOT AREA + 200# FOR SEVERLY SUBSTANDARD LOT (.50x 2,906+200 = 1,653 SQ. FT.)
 PROPOSED FLOOR AREA: 1201 SQ. FT.
 MAXIMUM IMPERVIOUS SURFACE: 10% OF LOT AREA (.10 x 2,906 = 290 SQ. FT.)
 PROPOSED IMPERVIOUS SURFACE: 130 SQ. FT.
 FRONT SET BACKS: 20'
 REAR SET BACKS: 20'
 SIDE SET BACKS: 8' MIN. COMBINED (MIN. 3' ONE SIDE)
 REQUESTING SIDE SETBACK VARIANCE FOR MIN. 6' SET BACK: (3' EACH SIDE)
 MAXIMUM HEIGHT PERMITTED: 28'
 PROPOSED MAX. HEIGHT: 21'-3"

ATTACHMENT 3

GENERAL INFORMATION

OWNER: JOHN & KELLY CALLAN
 P.O. BOX 164
 KENTFIELD, CA 94014

SITE ADDRESS: 341 MYRTLE STREET
 HALF MOON BAY, CA 94019

PHONE: (415) 847-6282
 FAX: (415) 482-8801

PROJECT: NEW RESIDENCE

BUILDING INFORMATION

OCCUPANCY CODE: R-1
 2019 CALIFORNIA RESIDENTIAL CODE, BUILDING, PLUMBING, MECHANICAL, FIRE, ELECTRICAL CODES, CALIFORNIA TITLE 24 ENERGY CODE, GREEN BUILDING STANDARDS CODE.

FLOOR AREA	
FIRST FLOOR AREA	753#
SECOND FLOOR AREA	448#
TOTAL FLOOR AREA :	1201#
1ST FLOOR COVERED PORCH	50#
2ND FLOOR OPEN DECK	114#

BUILDING TYPE: V-B
 DESIGN LOADS: ROOF 20 psf LIVE, FLOOR 40 psf LIVE

SITE INFORMATION

JURISDICTION: CITY OF HALF MOON BAY
 ASSESSOR'S PARCEL NO.: 064-061-280
 SITE AREA: 2,806 SQ. FT. (SEVERALLY SUBSTANDARD LOT)

ZONE: R-1
 WATER: PUBLIC
 SEWAGE DISPOSAL: PUBLIC

ENERGY STATEMENT

THE BUILDING SHOWN ON THESE PLANS SUBSTANTIALLY CONFORMS TO THE REQUIREMENTS OF TITLE 24 PART 2, CHAPTER 2-53, OF THE CALIFORNIA ADMINISTRATION CODE. SEE CALCULATIONS.

OWNER & BUILDER'S NOTE

THESE PLANS WERE PREPARED BY SUE TAYLOR, DESIGNER, FOR THE EXCLUSIVE USE OF HER CLIENT AT THE SPECIFIC SITE SHOWN. NO OTHER USE OR DUPLICATION OF THESE PLANS IS PERMITTED WITHOUT HER PERMISSION.

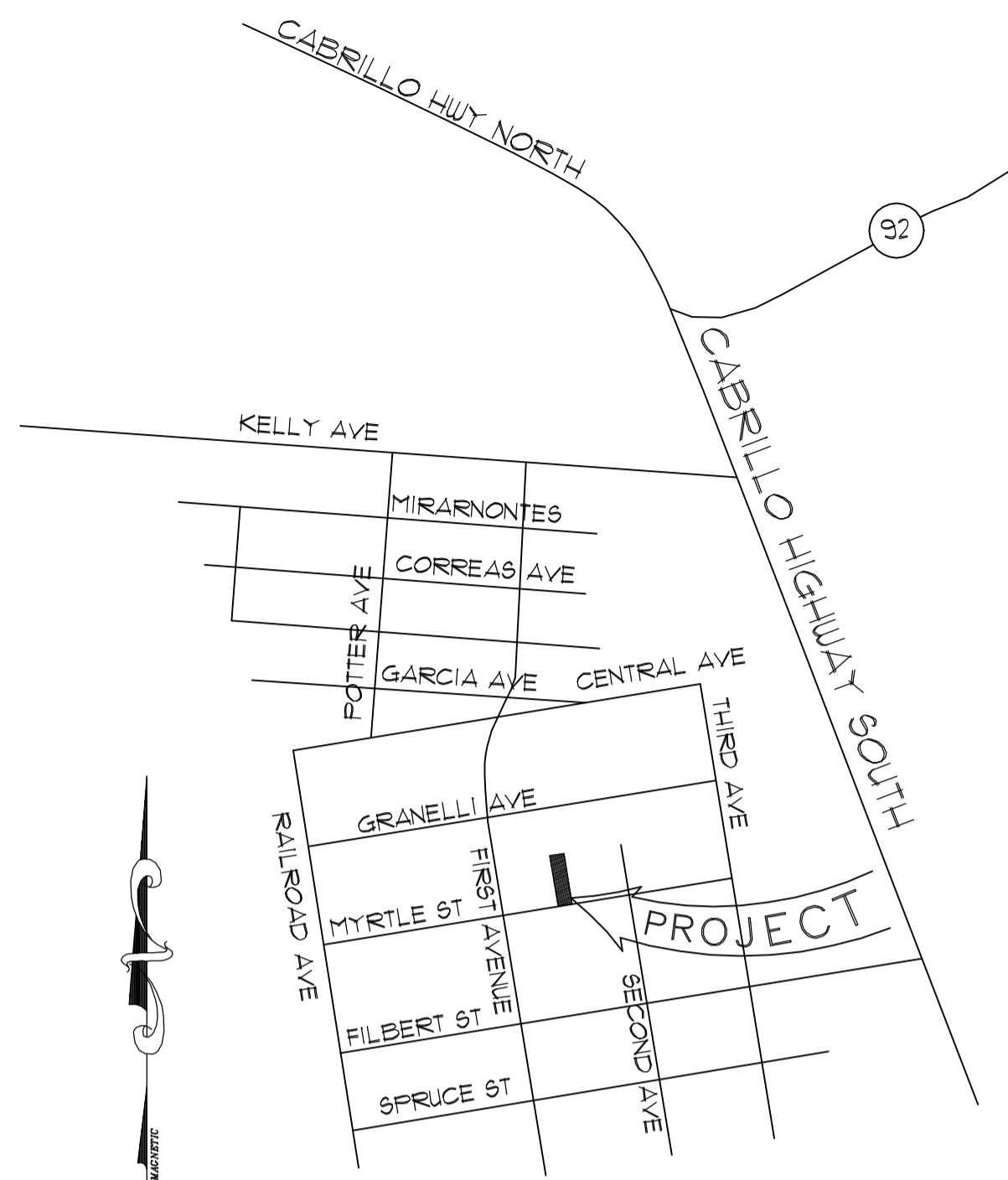
THESE PLANS SHALL NOT BE USED FOR CONSTRUCTION UNTIL STAMPED BY ENGINEER FOR NON-CONVENTIONAL STRUCTURAL FEATURES AND APPROVED BY THE LOCAL BUILDING DEPARTMENT. THE BUILDER IS EXPECTED TO FOLLOW THESE PLANS, APPLICABLE BUILDING CODES, AND LOCAL ORDINANCES. HE SHALL VERIFY THAT SITE CONDITIONS ARE CONSISTENT WITH THESE PLANS BEFORE STARTING WORK. WHILE THESE PLANS ARE DRAWN TO SHOW THE PROPOSED WORK AS ACCURATELY AS POSSIBLE, SCHEMATIC DETAILS MAY BE USED IN SOME CASES FOR CLARITY. WORK NOT SPECIFICALLY DETAILED SHALL BE CONSTRUCTED TO THE SAME QUALITY AS SIMILAR WORK THAT IS DETAILED.

WRITTEN DIMENSIONS AND SPECIFIC NOTES SHALL TAKE PRECEDENCE OVER SCALED DIMENSIONS AND GENERAL NOTES. IF CONFLICTING INFORMATION IS SHOWN, THE MORE STRINGENT SHALL GOVERN. THE ENGINEER/DESIGNER SHALL BE CONSULTED FOR CLARIFICATION IF EXISTING CONDITIONS ARE ENCOUNTERED THAT ARE DIFFERENT THAN SHOWN, IF DISCREPANCIES ARE FOUND IN THE PLANS OR NOTES, OR IF A QUESTION ARISES OVER THE INTENT OF THE PLANS OR NOTES.

THE ENGINEER/DESIGNER ASSUMES NO RESPONSIBILITY FOR SCHEDULING, FABRICATION, CONSTRUCTION TECHNIQUES (INCLUDING SHORING), OR MATERIALS, OR QUANTITIES USED IN THE WORK. THE ENGINEER/DESIGNER ASSUMES NO RESPONSIBILITY FOR FIELD CHANGES, SITE VARIANCES OR DISCREPANCIES NOT BROUGHT TO HIS/HER ATTENTION FOR CLARIFICATION. LIABILITY TO THE DESIGNER SHALL BE LIMITED TO THE DESIGN FEE.

SHEET INDEX

PAGE #	TITLE	SHEET #
1.)	COVER SHEET / SITE PLAN	C-1.1
2.)	LANDSCAPE PLAN	C-1.2
3.)	BMP SHEET	C-1.3
4.)	PRELIMINARY GRADING & DRAINAGE PLAN BY SIGMA PRIME	C-1
5.)	BOUNDARY & TOPOGRAPHIC SURVEY BY BGT LAND SURVEYING	SU-1
6.)	FIRST, SECOND, & DECK FLOOR PLANS	A1-1.1
7.)	ELEVATIONS	A1-2.1
8.)	BUILDING SECTIONS & ROOF PLAN	A1-3.1



VICINITY MAP
NO SCALE

NOTES

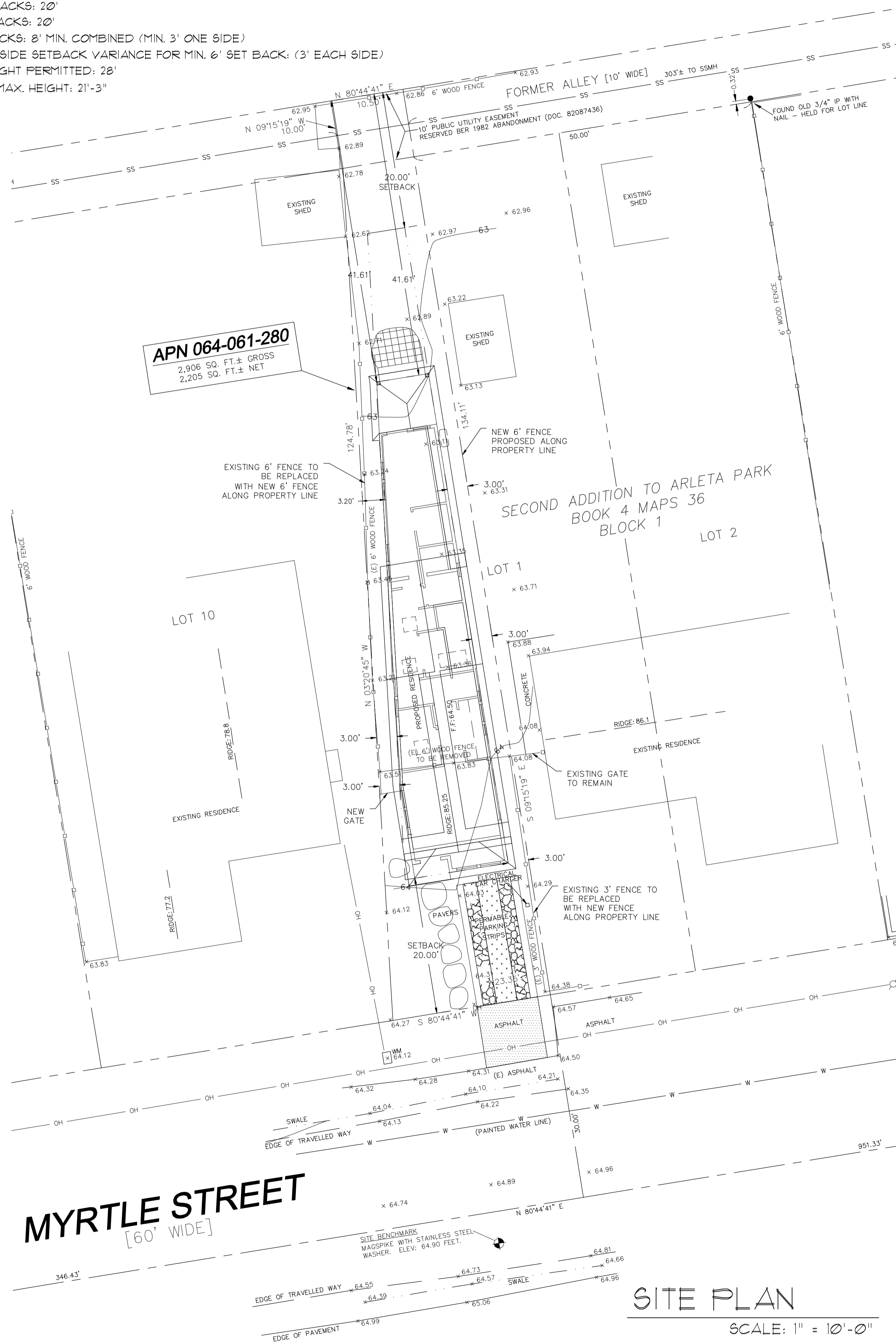
1. NEW RESIDENTIAL BUILDINGS SHALL HAVE INTERNALLY ILLUMINATED ADDRESS NUMBERS CONTRASTING WITH THE BACKGROUND SO AS TO BE SEEN FROM THE PUBLIC WAY FRONTING THE BUILDING. RESIDENTIAL ADDRESS NUMBERS SHALL BE AT LEAST SIX FEET ABOVE THE FINISHED SURFACE OF THE DRIVEWAY.
2. THE RESIDENCE AND GARAGE SHALL BE PROTECTED BY AN AUTOMATIC FIRE SPRINKLER SYSTEM, WHICH WILL BE SUBMITTED UNDER A SEPARATE PERMIT.
3. A FUELBREAK OR DEFENSIBLE SPACE IS REQUIRED AROUND THE PERIMETER OF ALL STRUCTURES, EXISTING AND NEW, TO A DISTANCE OF NOT LESS THAN 30 FEET AND MAY BE REQUIRED TO A DISTANCE OF 100 FEET OR TO THE PROPERTY LINE. THIS IS NEITHER A REQUIREMENT NOR AN AUTHORIZATION FOR THE REMOVAL OF LIVING TREES.
4. TREES LOCATED WITHIN THE DEFENSIBLE SPACE SHALL BE PRUNED TO REMOVE DEAD AND DYING PORTIONS, AND LIMBED UP TO 6 FEET ABOVE THE GROUND. NEW TREES PLANTED IN THE DEFENSIBLE SPACE SHALL BE LOCATED NO CLOSER THAN 10 FEET TO ADJACENT TREES WHEN FULLY GROWN OR AT MATURITY.
5. REMOVE THAT PORTION OF ANY EXISTING TREES, WHICH EXTENDS WITHIN 10 FEET OF THE OUTLET OF A CHIMNEY OR STOVEPIPE OR IS WITHIN 5 FEET OF ANY STRUCTURE. REMOVE THAT PORTION OF ANY EXISTING TREES, WHICH EXTENDS WITHIN 10 FEET OF THE OUTLET OF A CHIMNEY OR STOVEPIPE OR IS WITHIN 5 FEET OF ANY STRUCTURE. MAINTAIN ANY TREE ADJACENT TO OR OVERHANGING A BUILDING FREE OF DEAD OR DYING WOOD.
6. DIVERT A MINIMUM OF 65% OF THE CONSTRUCTION WASTE TO RECYCLE OR SALVAGE PER SECTION 4.408.1.
7. PROVIDE A COPY OF AN OPERATION AND MAINTENANCE MANUAL TO REMAIN WITH THE BUILDING PER 4.410.1, 1 THRU 10
8. FIRE SPRINKLERS WILL BE UNDER A SEPARATE SUBMITTAL TO THE COASTSIDE FIRE PROTECTION DISTRICT. NO PERMIT WILL BE ISSUED PRIOR TO APPROVAL OF THE FIRE PROTECTED SYSTEMS.
9. UNDERGROUND ELECTRICAL SERVICE SHALL BE PROVIDED | ALL NEW CONSTRUCTION. UNDERGROUND SERVICE SHALL BE INSTALLED IN ACCORDANCE WITH THE MOST RECENT EDITION OF THE PACIFIC GAS AND ELECTRIC COMPANY ELECTRIC AND GAS SERVICE REQUIREMENTS, SECTION 5, ELECTRIC SERVICE UNDERGROUND.
10. CLEANOUTS IN BUILDING SEWERS SHALL BE PROVIDED IN ACCORDANCE WITH THE RULES REGULATIONS AND ORDINANCES OF THE CITY. ALL CLEANOUTS SHALL BE MAINTAINED WATERTIGHT.
11. HIGH QUALITY INSULATION INSTALLATION (QII) WILL BE USED IN THIS PROJECT.

SITE STATEMENT

THE INFORMATION SHOWN ON THIS PLOT PLAN WAS PROVIDED BY BGT LAND SURVEYING. NO FIELD SURVEY OR VERIFICATION WAS MADE. REFER TO BGT LAND SURVEYING SHEET FOR SURVEY.

THE BEARING, NORTH 80°45'00" EAST, OF THE CENTERLINE OF FILBERT STREET, AS SHOWN ON THAT CERTAIN RECORD OF SURVEY BY BGT WHICH WAS FILED FOR RECORD IN VOLUME 39 OF LL8 MAPS AT PAGE 3 ON OCTOBER 16, 2013, SAN MATEO COUNTY RECORDS, WAS USED AS THE BASIS OF BEARINGS FOR THIS SURVEY.

VERIFY SETBACKS AS APPROVED BY THE PLANNING DEPARTMENT.



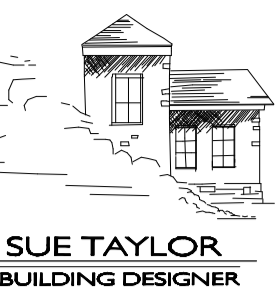
SITE PLAN

SCALE: 1" = 10'-0"

DEFERRED SUBMISSION

FIRE SPRINKLER PLAN
SOLAR SYSTEM

SUE TAYLOR DESIGN



P.O. BOX 961
CAMINO, CA 95109
(530) 391-2190

suetaylor@comcast.net

NEW RESIDENCE
COVER SHEET
SITE PLAN

JOHN & KELLY CALLAN
341 MYRTLE STREET
HALF MOON BAY, CA 94019

REVISION	DATE	DESCRIPTION

Sue Taylor

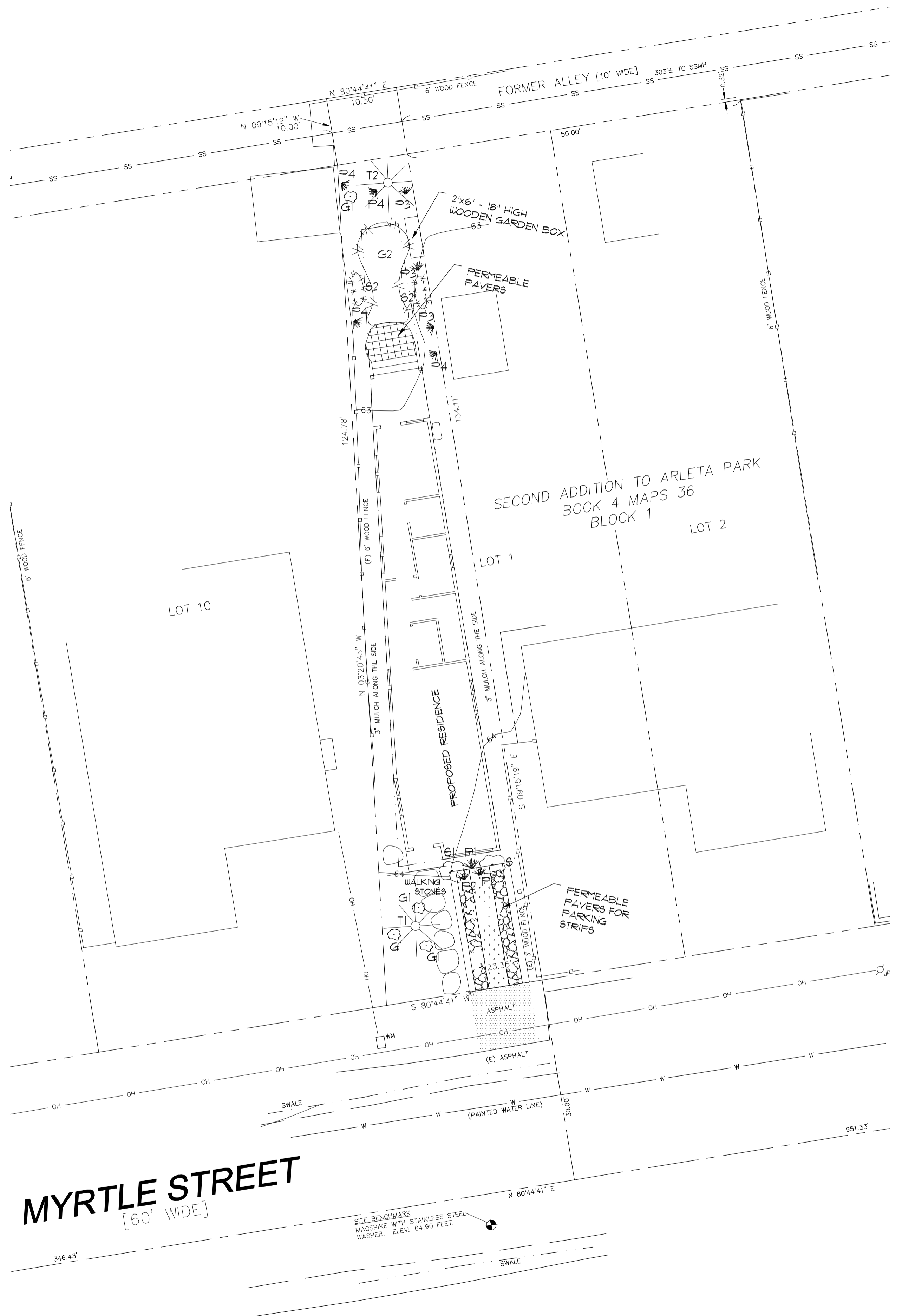
DATE: JUNE 7, 2021

DESIGNED BY: | SRT
 DRAWN BY: | SRT
 CHECKED BY: | SRT

FILE: PROJECTS/2019/001/001C11
 PROJECT #: 19001

PAGE 1 OF 8

SHEET NO. C-1.1



PLANT LIST:									
SYMBOL	TREES:			COMMON NAME	GROWTH RATE	AVG. SIZE	DECID/EVERGRN	CA. NATIVE	COASTAL
	QTY	SIZE	NAME						
* (Tree symbol)	T1	1	24" BOX ACER CIRCINATUM	VINE MAPLE	MODERATE	10 HT x 10 FT	DECIDUOUS		X
	T2	1	5 GAL. PRUNUS PLUM / APRICOT	PLUOT	MODERATE	15 HT x 15 FT	DECIDUOUS		
☁ (Shrub symbol)	SCRUBS:								
	S1	2	1 GAL. ZAUSCHNERIA (EPILOBIUM) CALIFORNIA 'MEXICANA'	CALIFORNIA FUSHIA	MODERATE	2 HT x 2 FT	EVERGREEN	X	X
	S2	2	1 GAL. CEANOTHUS GRISEUS HORIZONTALIS 'YANKEE POINT'	CARMEL CREEPER	FAST	10 HT x 10 FT	EVERGREEN	X	X
* (Perennial symbol)	PERINNEALS								
	P1	1	1 GAL. IRIS DOUGLASIANA	DOUGLAS IRIS	SLOW	2 HT x 4 FT	HERB	X	X
	P2	2	4" SISYRINCHUM CALIFORNICUM	YELLOW-EYED GRASS		1 HT x 1 FT	HERB	X	X
	P3	3	1 GAL. CAMPANULA MURALLS	BELLFLOWER	MODERATE	8 HT x 1 FT	EVERGREEN	X	X
	P4	4	1 GAL. SALVIA SPATHACEA	HUMMINGBIRD SAGE	MODERATE	1' HT 6SPRDG	PERENNIAL	X	X
☪ (Groundcover symbol)	GROUND COVER:								
	G1	4	1 GAL. WALDSTEINIA FRAGARIOIDES	BARREN STRAWBERRY	FAST	6" HT x 1 FT	EVERGREEN		
	G2		CA NATIVE FESCUE MIX SOURCE: DELTA BLUEGRASS	SOD - NATIVE NO MOW	FAST	N/A	EVERGREEN	X	X

NOTES:
 NO OUTSIDE IRRIGATION TO BE USED
 3" OF MULCH REQUIRED WITHIN THE AREAS THAT NO PLANTINGS ARE PROPOSED

LANDSCAPING PLAN
 SCALE: 1" = 10'-0"

REVISION	DATE	DESCRIPTION

Sue Taylor

DATE:	JUNE 7, 2021
DESIGNED BY:	SRT
DRAWN BY:	SRT
CHECKED BY:	SRT
FILE:	PROJECTS/2019/001/001/01
PROJECT #:	19001

PAGE 2 OF 8

SHEET NO. C-1.2 259



SAN MATEO COUNTYWIDE

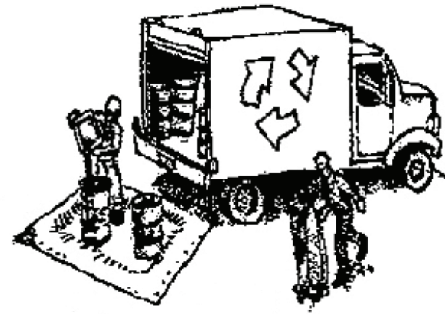
Water Pollution Prevention Program

Clean Water. Healthy Community.

Construction Best Management Practices (BMPs)

Construction projects are required to implement the stormwater best management practices (BMP) on this page, as they apply to your project, all year long.

Materials & Waste Management



Non-Hazardous Materials

- Berm and cover stockpiles of sand, dirt or other construction material with tarps when rain is forecast or if not actively being used within 14 days.
- Use (but don't overuse) reclaimed water for dust control.

Hazardous Materials

- Label all hazardous materials and hazardous wastes (such as pesticides, paints, thinners, solvents, fuel, oil, and antifreeze) in accordance with city, county, state and federal regulations.
- Store hazardous materials and wastes in water tight containers, store in appropriate secondary containment, and cover them at the end of every work day or during wet weather or when rain is forecast.
- Follow manufacturer's application instructions for hazardous materials and be careful not to use more than necessary. Do not apply chemicals outdoors when rain is forecast within 24 hours.
- Arrange for appropriate disposal of all hazardous wastes.

Waste Management

- Cover waste disposal containers securely with tarps at the end of every work day and during wet weather.
- Check waste disposal containers frequently for leaks and to make sure they are not overfilled. Never hose down a dumpster on the construction site.
- Clean or replace portable toilets, and inspect them frequently for leaks and spills.
- Dispose of all wastes and debris properly. Recycle materials and wastes that can be recycled (such as asphalt, concrete, aggregate base materials, wood, gyp board, pipe, etc.)
- Dispose of liquid residues from paints, thinners, solvents, glues, and cleaning fluids as hazardous waste.

Construction Entrances and Perimeter

- Establish and maintain effective perimeter controls and stabilize all construction entrances and exits to sufficiently control erosion and sediment discharges from site and tracking off site.
- Sweep or vacuum any street tracking immediately and secure sediment source to prevent further tracking. Never hose down streets to clean up tracking.

Equipment Management & Spill Control



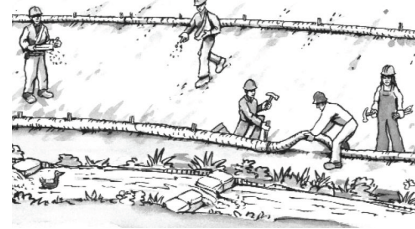
Maintenance and Parking

- Designate an area, fitted with appropriate BMPs, for vehicle and equipment parking and storage.
- Perform major maintenance, repair jobs, and vehicle and equipment washing off site.
- If refueling or vehicle maintenance must be done onsite, work in a bermed area away from storm drains and over a drip pan or drop cloths big enough to collect fluids. Recycle or dispose of fluids as hazardous waste.
- If vehicle or equipment cleaning must be done onsite, clean with water only in a bermed area that will not allow rinse water to run into gutters, streets, storm drains, or surface waters.
- Do not clean vehicle or equipment onsite using soaps, solvents, degreasers, or steam cleaning equipment.

Spill Prevention and Control

- Keep spill cleanup materials (e.g., rags, absorbents and cat litter) available at the construction site at all times.
- Inspect vehicles and equipment frequently for and repair leaks promptly. Use drip pans to catch leaks until repairs are made.
- Clean up spills or leaks immediately and dispose of cleanup materials properly.
- Do not hose down surfaces where fluids have spilled. Use dry cleanup methods (absorbent materials, cat litter, and/or rags).
- Sweep up spilled dry materials immediately. Do not try to wash them away with water, or bury them.
- Clean up spills on dirt areas by digging up and properly disposing of contaminated soil.
- Report significant spills immediately. You are required by law to report all significant releases of hazardous materials, including oil. To report a spill: 1) Dial 911 or your local emergency response number, 2) Call the Governor's Office of Emergency Services Warning Center, (800) 852-7550 (24 hours).

Earthmoving



- Schedule grading and excavation work during dry weather.
- Stabilize all denuded areas, install and maintain temporary erosion controls (such as erosion control fabric or bonded fiber matrix) until vegetation is established.
- Remove existing vegetation only when absolutely necessary, and seed or plant vegetation for erosion control on slopes or where construction is not immediately planned.
- Prevent sediment from migrating offsite and protect storm drain inlets, gutters, ditches, and drainage courses by installing and maintaining appropriate BMPs, such as fiber rolls, silt fences, sediment basins, gravel bags, berms, etc.
- Keep excavated soil on site and transfer it to dump trucks on site, not in the streets.

Contaminated Soils

- If any of the following conditions are observed, test for contamination and contact the Regional Water Quality Control Board:
 - Unusual soil conditions, discoloration, or odor.
 - Abandoned underground tanks.
 - Abandoned wells
 - Buried barrels, debris, or trash.

Paving/Asphalt Work



- Avoid paving and seal coating in wet weather or when rain is forecast, to prevent materials that have not cured from contacting stormwater runoff.
- Cover storm drain inlets and manholes when applying seal coat, tack coat, slurry seal, fog seal, etc.
- Collect and recycle or appropriately dispose of excess abrasive gravel or sand. Do NOT sweep or wash it into gutters.
- Do not use water to wash down fresh asphalt concrete pavement.

Sawcutting & Asphalt/Concrete Removal

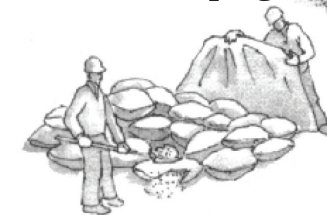
- Protect nearby storm drain inlets when saw cutting. Use filter fabric, catch basin inlet filters, or gravel bags to keep slurry out of the storm drain system.
- Shovel, absorb, or vacuum saw-cut slurry and dispose of all waste as soon as you are finished in one location or at the end of each work day (whichever is sooner!).
- If sawcut slurry enters a catch basin, clean it up immediately.

Concrete, Grout & Mortar Application



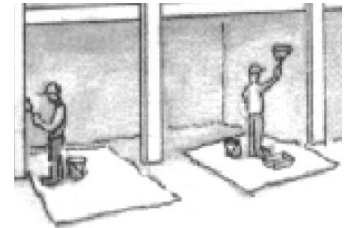
- Store concrete, grout, and mortar away from storm drains or waterways, and on pallets under cover to protect them from rain, runoff, and wind.
- Wash out concrete equipment/trucks offsite or in a designated washout area, where the water will flow into a temporary waste pit, and in a manner that will prevent leaching into the underlying soil or onto surrounding areas. Let concrete harden and dispose of as garbage.
- When washing exposed aggregate, prevent washwater from entering storm drains. Block any inlets and vacuum gutters, hose washwater onto dirt areas, or drain onto a bermed surface to be pumped and disposed of properly.

Landscaping



- Protect stockpiled landscaping materials from wind and rain by storing them under tarps all year-round.
- Stack bagged material on pallets and under cover.
- Discontinue application of any erodible landscape material within 2 days before a forecast rain event or during wet weather.

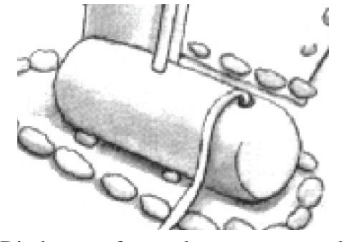
Painting & Paint Removal



Painting Cleanup and Removal

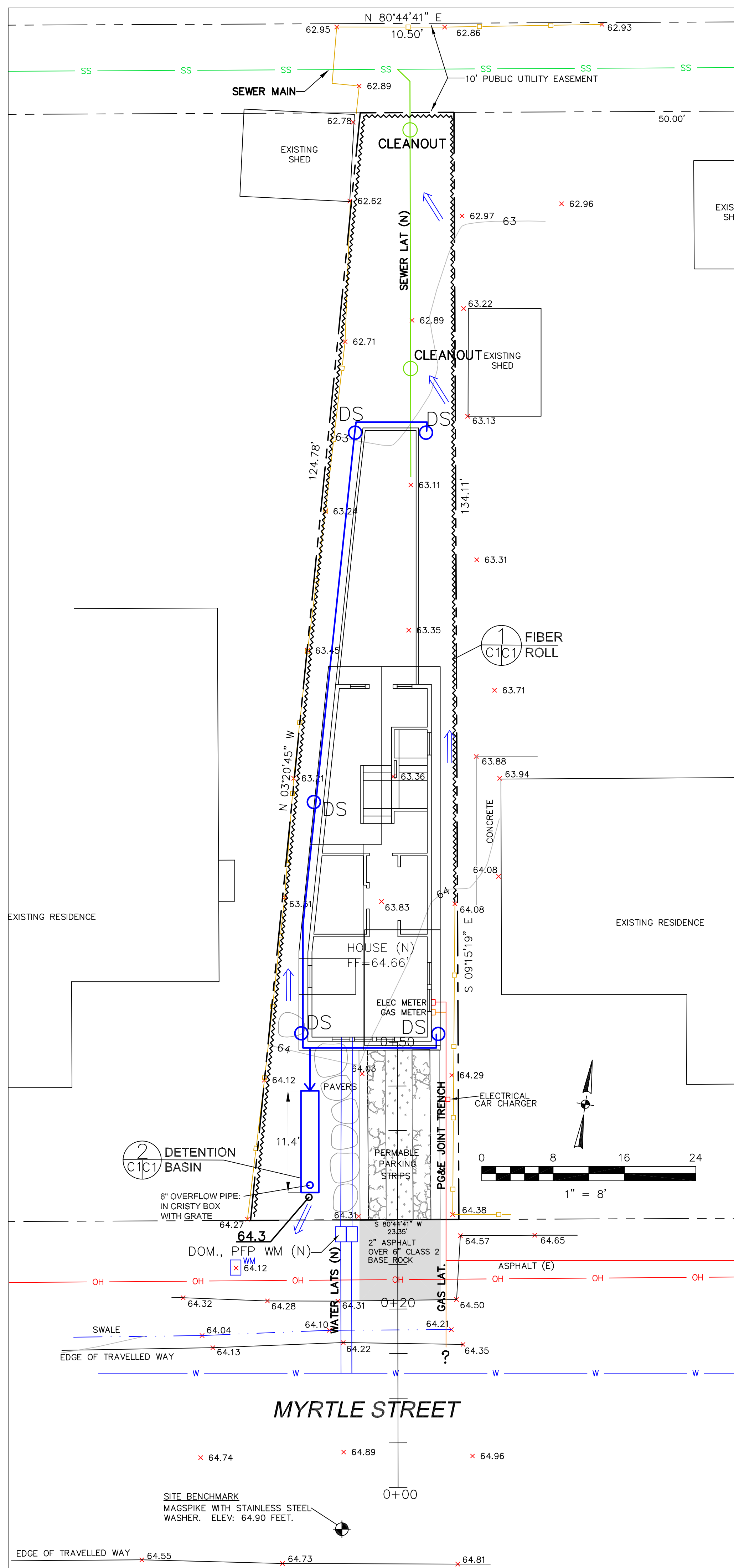
- Never clean brushes or rinse paint containers into a street, gutter, storm drain, or stream.
- For water-based paints, paint out brushes to the extent possible, and rinse into a drain that goes to the sanitary sewer. Never pour paint down a storm drain.
- For oil-based paints, paint out brushes to the extent possible and clean with thinner or solvent in a proper container. Filter and reuse thinners and solvents. Dispose of excess liquids as hazardous waste.
- Paint chips and dust from non-hazardous dry stripping and sand blasting may be swept up or collected in plastic drop cloths and disposed of as trash.
- Chemical paint stripping residue and chips and dust from marine paints or paints containing lead, mercury, or tributyltin must be disposed of as hazardous waste. Lead based paint removal requires a state-certified contractor.

Dewatering



- Discharges of groundwater or captured runoff from dewatering operations must be properly managed and disposed. When possible send dewatering discharge to landscaped area or sanitary sewer. If discharging to the sanitary sewer call your local wastewater treatment plant.
- Divert run-on water from offsite away from all disturbed areas.
- When dewatering, notify and obtain approval from the local municipality before discharging water to a street gutter or storm drain. Filtration or diversion through a basin, tank, or sediment trap may be required.
- In areas of known or suspected contamination, call your local agency to determine whether the ground water must be tested. Pumped groundwater may need to be collected and hauled off-site for treatment and proper disposal.

Storm drain polluters may be liable for fines of up to \$10,000 per day!



LEGEND

- x 63.48 EXISTING SPOT ELEVATION
- 64.5 PROPOSED SPOT ELEVATION
- ← SURFACE DRAINAGE FLOW
- DS DOWNSPOUT
- 4" MIN SOLID PVC DRAIN PIPE

GENERAL NOTES

1. PLANS PREPARED AT REQUEST OF: JOHN CALLAN, OWNER
2. ELEVATION DATUM: NAVD 88
3. SITE SURVEYED BY BGT LAND SURVEYING, JANUARY 2019.
4. THIS IS NOT A BOUNDARY SURVEY.
5. AN ENCROACHMENT PERMIT SHALL BE REQUIRED FOR ANY WORK IN THE CITY RIGHT OF WAY.

GRADING NOTES

CUT VOLUME : 20 CY (FOR FOUNDATION)
FILL VOLUME: 0 CY

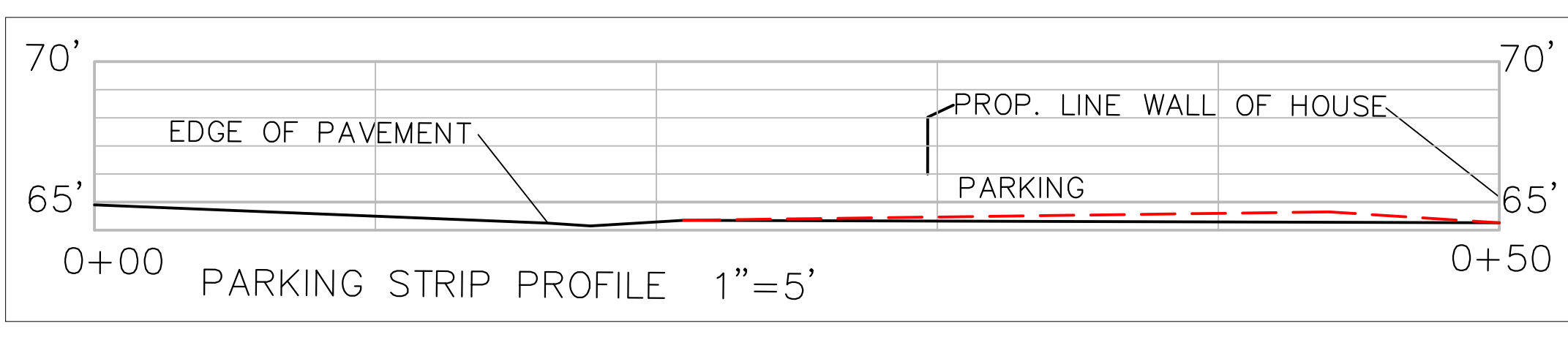
ABOVE VOLUMES ARE APPROXIMATE.

ALL GRADING SHALL CONFORM TO LOCAL CODES AND ORDINANCES.

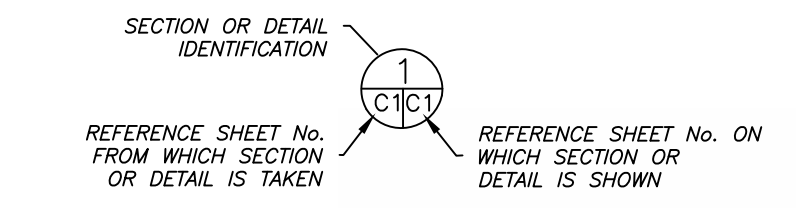
ALL TRENCHES UNDER PROPOSED PAVED AREAS OR CONCRETE SHALL BE BACKFILLED TO SUBGRADE ELEVATION WITH COMPACTED APPROVED GRANULAR MATERIALS. IF TRENCHES ARE IN PROPOSED LANDSCAPE AREAS, THEY SHALL BE BACKFILLED WITH COMPACTED APPROVED GRANULAR MATERIAL TO WITHIN ONE FOOT OF FINISHED GRADE, AND THEN FILLED WITH HAND TAMPED SOILS.

DRAINAGE NOTES

1. DRAINAGE INTENT: IT IS THE INTENT OF THE DRAINAGE SYSTEM TO CONVEY ROOF AND DRIVEWAY RUNOFF TO A SAFE LOCATION, TO MINIMIZE EXCESSIVE MOISTURE AROUND FOUNDATIONS, AND TO PREVENT AN INCREASE IN RUNOFF TO NEIGHBORING PROPERTIES.
2. DOWNSPOUTS SHALL LEAD TO DETENTION BASIN, AS SHOWN.
3. CREATE SHALLOW SWALE BETWEEN DETENTION BASIN OVERFLOW AND NEARBY EXISTING SWALE TO FACILITATE DRAINAGE TO STREET.

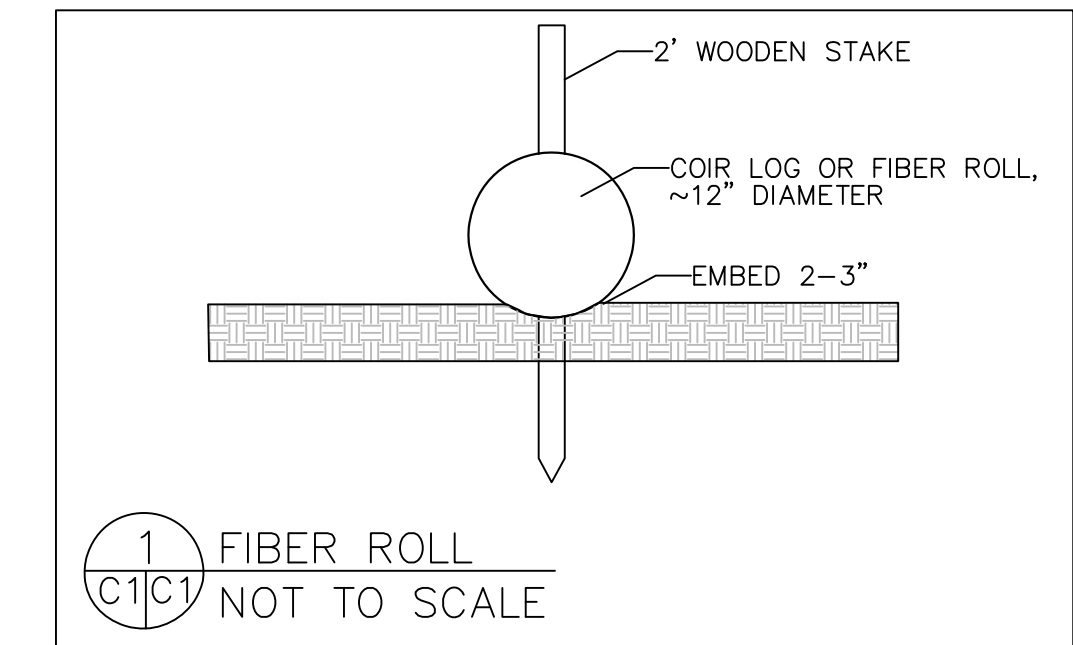
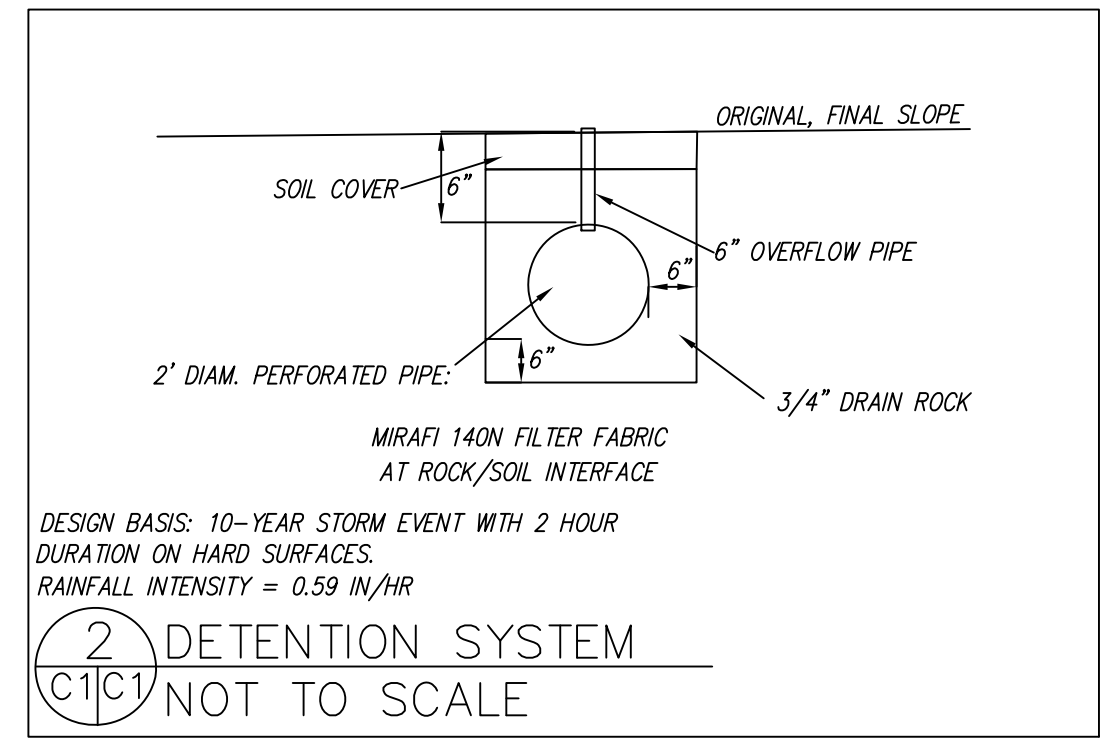


SECTION AND DETAIL CONVENTION



EROSION AND SEDIMENT CONTROL NOTES

- FIBER ROLL: INSTALL AT LOCATIONS SHOWN. AFFIX AS SHOWN IN DETAIL 1.
1. FOR CONSTRUCTION DURING DRY SEASON, ALL EXPOSED SURFACES SHALL BE WETTED PERIODICALLY TO PREVENT SIGNIFICANT DUST.
 2. ALL EXPOSED SOIL SHALL BE PROTECTED FROM EROSION AT ALL TIMES. SUCH PROTECTION SHALL CONSIST OF JUTE MATTING ON SLOPES.
 3. ALL STOCKPILED SOIL SHALL BE COVERED DURING PERIODS OF RAIN.
 4. BEFORE COMPLETION OF PROJECT ALL EXPOSED OR DISTURBED SURFACES SHALL BE PERMANENTLY PROTECTED FROM EROSION.
 5. AREAS TO RECEIVE NATURAL VEGETATION SHALL BE SEEDED PRIOR TO OCT 15 WITH 75# PER ACRE OF ANNUAL RYEGRASS OR APPROVED SUBSTITUTE, AS PER LANDSCAPE PLAN. SEED MAY BE COVERED WITH STRAW MULCH AT RATE OF 2 TONS/ACRE.



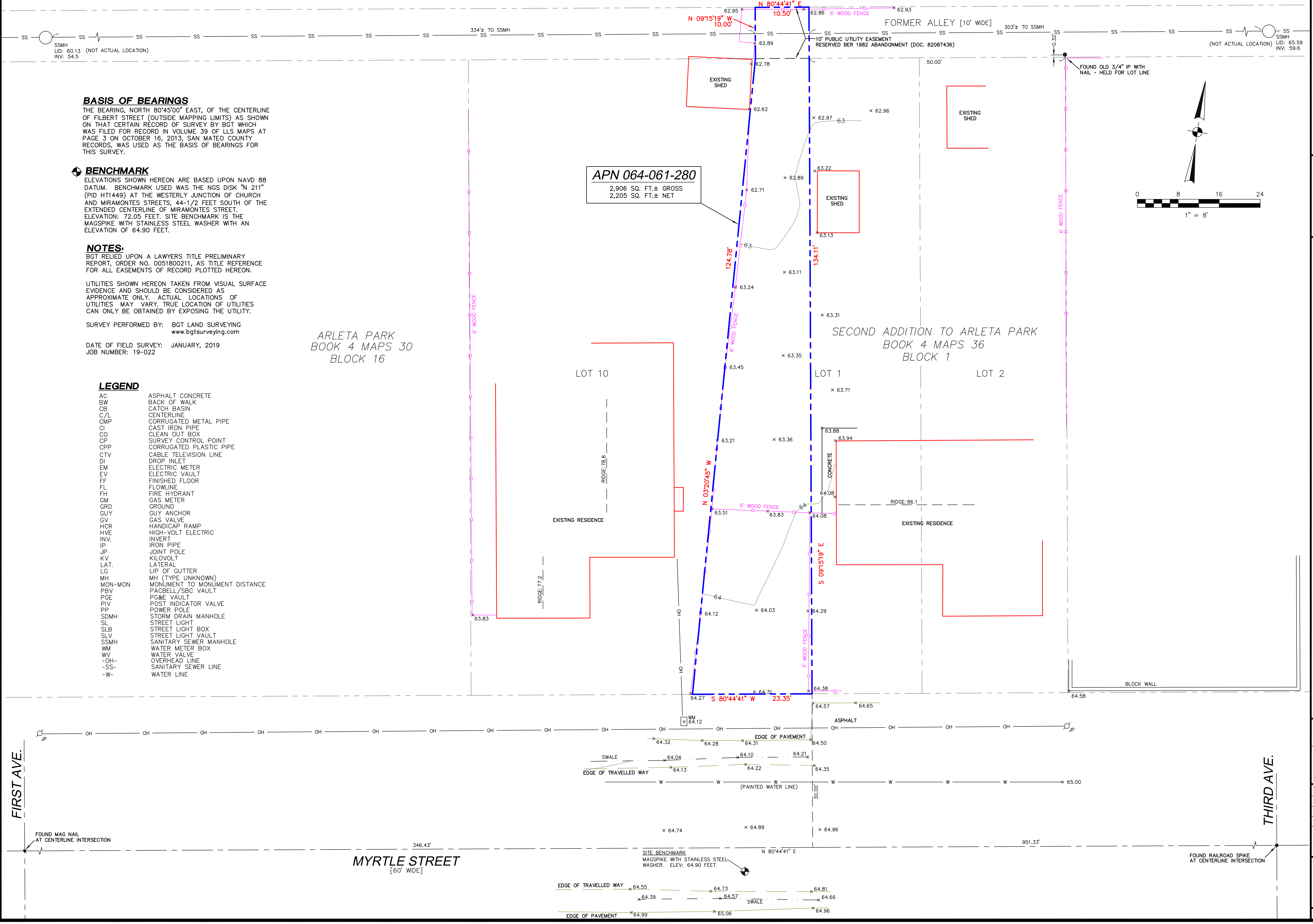
GRADING, DRAINAGE, EROSION CONTROL PLAN

SHEET C-1

DATE: 12-12-19
DRAWN BY: CMK
CHECKED BY: AZG
REV. DATE: 6-29-20
REV. DATE: 7-27-20

Sigma Prime Geosciences, Inc.
SIGMA PRIME GEOSCIENCES, INC.
332 PRINCETON AVENUE
HALF MOON BAY, CA 94019
(650) 726-3880
FAX: 726-3885

CALLAN PROPERTY
341 MYRTLE STREET
HALF MOON BAY, CALIFORNIA
APN 064-061-280



BASIS OF BEARINGS
 THE BEARING, NORTH 80°45'00" EAST, OF THE CENTERLINE OF FILBERT STREET (OUTSIDE MAPPING LIMITS) AS SHOWN ON THAT CERTAIN RECORD OF SURVEY BY BGT WHICH WAS FILED FOR RECORD IN VOLUME 39 OF LLS MAPS AT PAGE 3 ON OCTOBER 16, 2013, SAN MATEO COUNTY RECORDS, WAS USED AS THE BASIS OF BEARINGS FOR THIS SURVEY.

BENCHMARK
 ELEVATIONS SHOWN HEREON ARE BASED UPON NAVD 88 DATUM. BENCHMARK USED WAS THE NGS DISK "N 211" (PID HT1449) AT THE WESTERLY JUNCTION OF CHURCH AND MIRAMONTES STREETS, 44-1/2 FEET SOUTH OF THE EXTENDED CENTERLINE OF MIRAMONTES STREET. ELEVATION: 72.05 FEET. SITE BENCHMARK IS THE MAGSPIKE WITH STAINLESS STEEL WASHER WITH AN ELEVATION OF 64.90 FEET.

NOTES:
 BGT RELIED UPON A LAWYERS TITLE PRELIMINARY REPORT, ORDER NO. 0051800211, AS TITLE REFERENCE FOR ALL EASEMENTS OF RECORD PLOTTED HEREON.

UTILITIES SHOWN HEREON TAKEN FROM VISUAL SURFACE EVIDENCE AND SHOULD BE CONSIDERED AS APPROXIMATE ONLY. ACTUAL LOCATIONS OF UTILITIES MAY VARY. TRUE LOCATION OF UTILITIES CAN ONLY BE OBTAINED BY EXPOSING THE UTILITY.

SURVEY PERFORMED BY: BGT LAND SURVEYING
 www.bgtssurveying.com

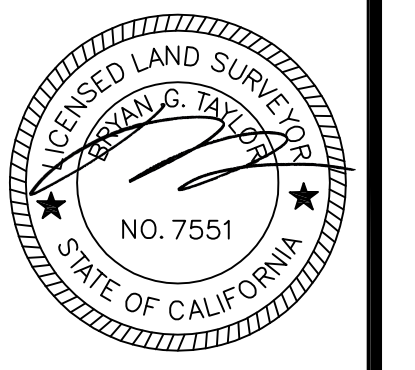
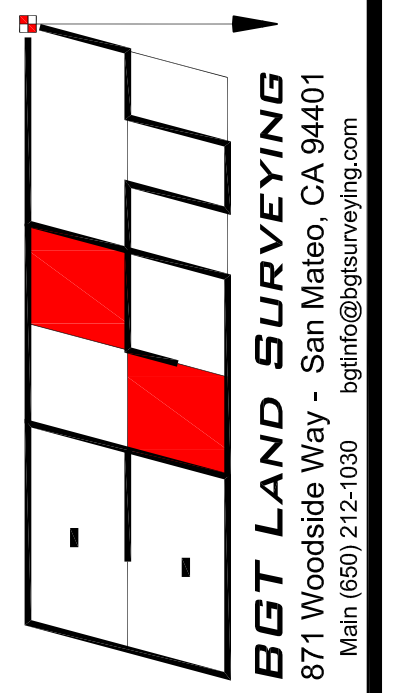
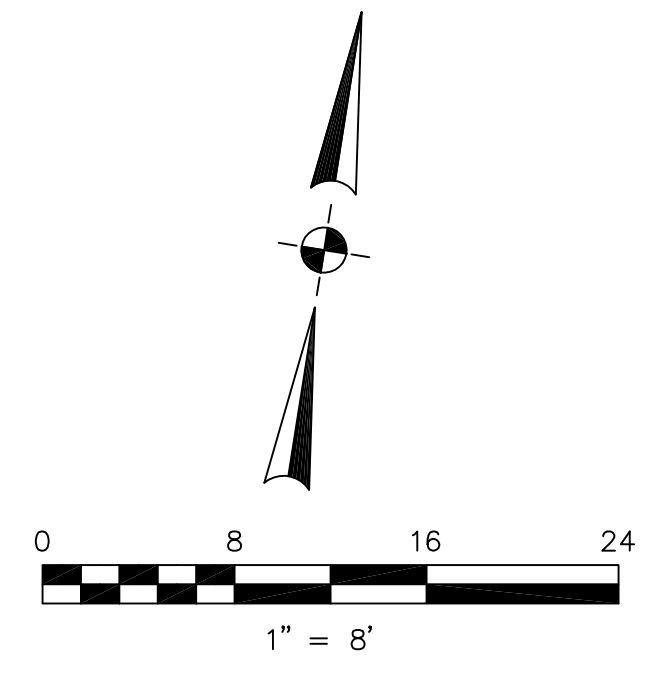
DATE OF FIELD SURVEY: JANUARY, 2019
 JOB NUMBER: 19-022

ARLETA PARK
 BOOK 4 MAPS 30
 BLOCK 16

APN 064-061-280
 2,906 SQ. FT. ± GROSS
 2,205 SQ. FT. ± NET

LEGEND

AC	ASPHALT CONCRETE
BW	BACK OF WALK
CB	CATCH BASIN
C/L	CENTERLINE
CMP	CORRUGATED METAL PIPE
CI	CAST IRON PIPE
CO	CLEAN OUT BOX
CP	SURVEY CONTROL POINT
CPP	CORRUGATED PLASTIC PIPE
CTV	CABLE TELEVISION LINE
DI	DROP INLET
EM	ELECTRIC METER
EV	ELECTRIC VAULT
FF	FINISHED FLOOR
FL	FLOWLINE
FH	FIRE HYDRANT
GM	GAS METER
GRD	GROUND
GUY	GUY ANCHOR
GV	GAS VALVE
HCR	HANDICAP RAMP
HVE	HIGH-VOLT ELECTRIC
INV.	INVERT
IP	IRON PIPE
JP	JOINT POLE
KV	KILOVOLT
LAT.	LATERAL
LG	LIP OF GUTTER
MH	MH (TYPE UNKNOWN)
MON-MON	MONUMENT TO MONUMENT DISTANCE
PBV	PACBELL/SBC VAULT
PGE	PG&E VAULT
PVI	POST INDICATOR VALVE
PP	POWER POLE
SDMH	STORM DRAIN MANHOLE
SL	STREET LIGHT
SLB	STREET LIGHT BOX
SLV	STREET LIGHT VAULT
SSMH	SANITARY SEWER MANHOLE
WM	WATER METER BOX
WV	WATER VALVE
-OH-	OVERHEAD LINE
-SS-	SANITARY SEWER LINE
-W-	WATER LINE



BOUNDARY AND TOPOGRAPHIC SURVEY
 PORTION OF LOT 1, BLOCK 1, PORTION OF 10' ALLEY, "SECOND ADDITION TO ARLETA PARK" (BOOK 4 MAPS 36)
VACANT LOT, 341 MYRTLE STREET
 HALF MOON BAY, COUNTY OF SAN MATEO, CALIFORNIA

Assessor Parcel Number:
 064-061-280

Prepared For:
 JOHN T. CALLAN
 P.O. Box 764
 Kentfield, CA 94914

Date: FEBRUARY 2019
 Scale: 1" = 8'
 Contour Interval: 1'
 Drawn by: LHL
 Revisions:

SU-1

Job No. 19-022

GENERAL NOTES

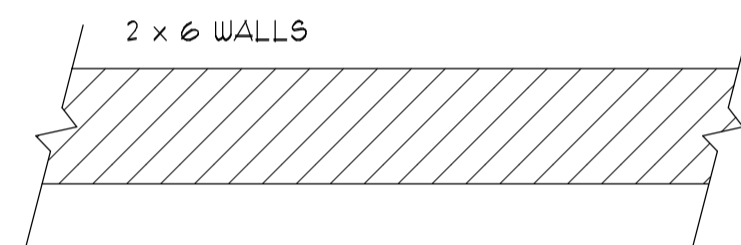
REFERENCE THE ELECTRICAL PLAN FOR LOCATION AND SPECIFICATIONS OF SMOKE DETECTORS AND OTHER ELECTRICAL REQUIREMENTS.

CALGREEN MANDATORY MEASURES

- DUCT SYSTEMS ARE SIZED, DESIGNED, AND EQUIPMENT IS SELECTED PER SECTION 4501.2 HVAC SYSTEM INSTALLERS MUST BE TRAINED AND CERTIFIED AND SPECIAL INSPECTORS EMPLOYED BY THE ENFORCING AGENCY MUST BE QUALIFIED.
- PROTECT ANNULAR SPACES AROUND PIPES, ELECTRIC CABLES, CONDUITS AT EXTERIOR WALLS AGAINST THE PASSAGE OF RODENTS (4.5046.1)
- COVER DUCT OPENINGS AND OTHER RELATED AIR DISTRIBUTION COMPONENT OPENINGS DURING CONSTRUCTION (4.5041)
- ADHESIVES, SEALANTS AND CAULKS SHALL BE COMPLIANT WITH VOC LIMITS AND OTHER TOXIC COMPOUNDS DURING CONSTRUCTION (4.5042.1)
- PAINTS, STAINS AND OTHER COATING SHALL BE COMPLIANT WITH VOC LIMITS (4.5042.2)
- AEROSOL PAINTS AND COATINGS SHALL BE COMPLIANT WITH PRODUCT WEIGHTED MIR LIMITS FOR VOC AND OTHER TOXIC COMPOUNDS (4.5042.3) DOCUMENTATIONS SHALL BE PROVIDED TO VERIFY COMPLIANCE
- CARPET AND CARPET SYSTEMS SHALL BE COMPLIANT WITH VOC LIMITS (4.5043)
- MINIMUM 80% OF FLOOR AREA RECEIVING RESILIENT FLOORING SHALL COMPLY WITH THE VOC-EMISSION LIMITS PER SECTIONS 4.5044
- PARTICLEBOARD, MEDIUM DENSITY FIBERBOARD (MDF) AND HARDWOOD PLYWOOD USED IN INTERIOR FINISH SYSTEM SHALL COMPLY WITH LOW FORMALDEHYDE EMISSION STANDARDS (4.5045)
- INSTALL CAPILLARY BREAK AND VAPOR RETARDER AT SLAB ON GRADE FOUNDATIONS (4.5052)
- CHECK MOISTURE CONTENT OF BUILDING MATERIALS USED IN WALL AND FLOOR FRAMING BEFORE ENCLOSURE (4.5053)

WALL SCHEDULE

EXTERIOR WALLS TO BE 2x6 ALL INTERIOR WALLS TO BE 2x4 UNLESS NOTED AS BELOW.



LANDING

PROVIDE A MIN. 36" DEEP LANDING ON EACH SIDE OF EACH EXTERIOR DOOR. EACH LANDING SHALL HAVE A DIMENSION OF NOT LESS THAN 36 INCHES MEASURED IN THE DIRECTION OF TRAVEL. THE SLOPE AT EXTERIOR LANDINGS SHALL NOT EXCEED 2%. LANDINGS OR FINISHED FLOORS AT THE REQUIRED EGRESS DOOR SHALL NOT BE MORE THAN 1/2" LOWER THAN THE TOP OF THE THRESHOLD, EXCEPT ON THE EXTERIOR SIDE SHALL NOT BE MORE THAN 3/4" BELOW THE TOP OF THE THRESHOLD PROVIDED THE DOOR DOES NOT SWING OVER THE LANDING OR FLOOR. ALL OTHER EXTERIOR DOORS SHALL BE PROVIDED WITH LANDING NOT MORE THAN 3/4" BELOW THE TOP OF THE THRESHOLD.

WINDOW SCHEDULE

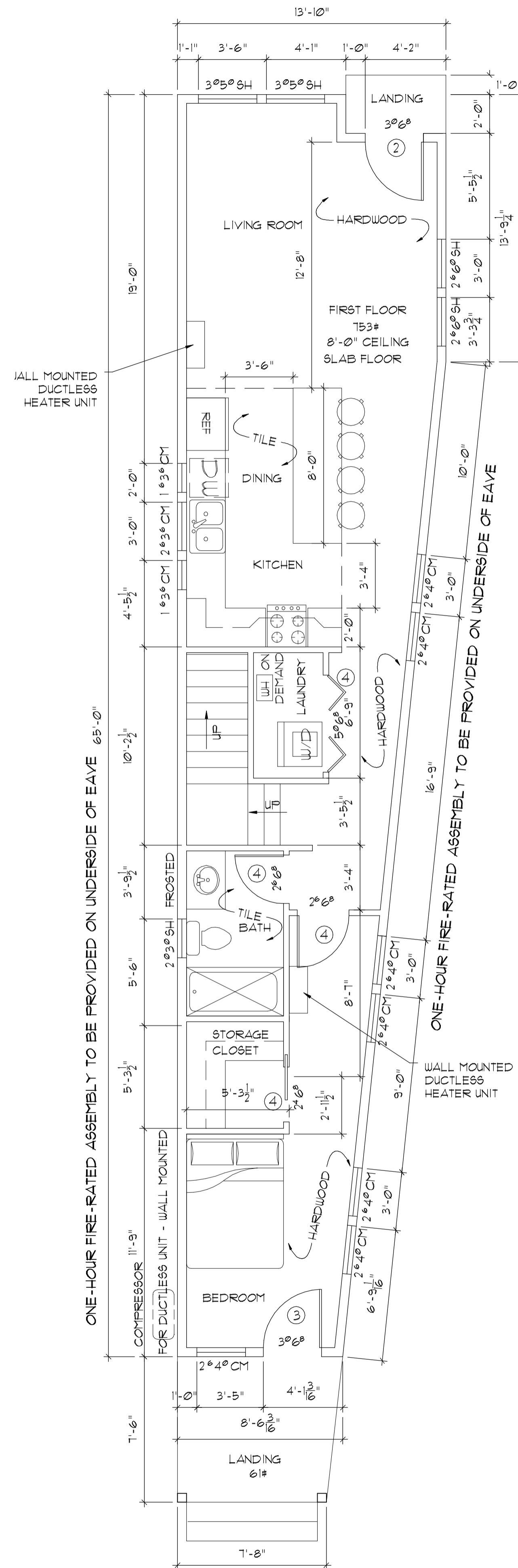
SH	SINGLE HUNG	SG	SAFETY GLAZED
SL	SLIDER	AW	AWNING
CM	CASEMENT	SDLT	SIDELIGHT
DCM	DOUBLE CASEMENT		
TR	TRANSOM		
F	FIXED		

VENTILATION
SEE SHEET A1-2.1

TILE FLOORS REQUIRE THINSET, 1/4" HARDIEBACKER CEMENT BOARD AND A MAXIMUM WEIGHT OF CERAMIC TILE OF 4.1 psf.

STAIR RAILING AND GUARDRAIL NOTES:

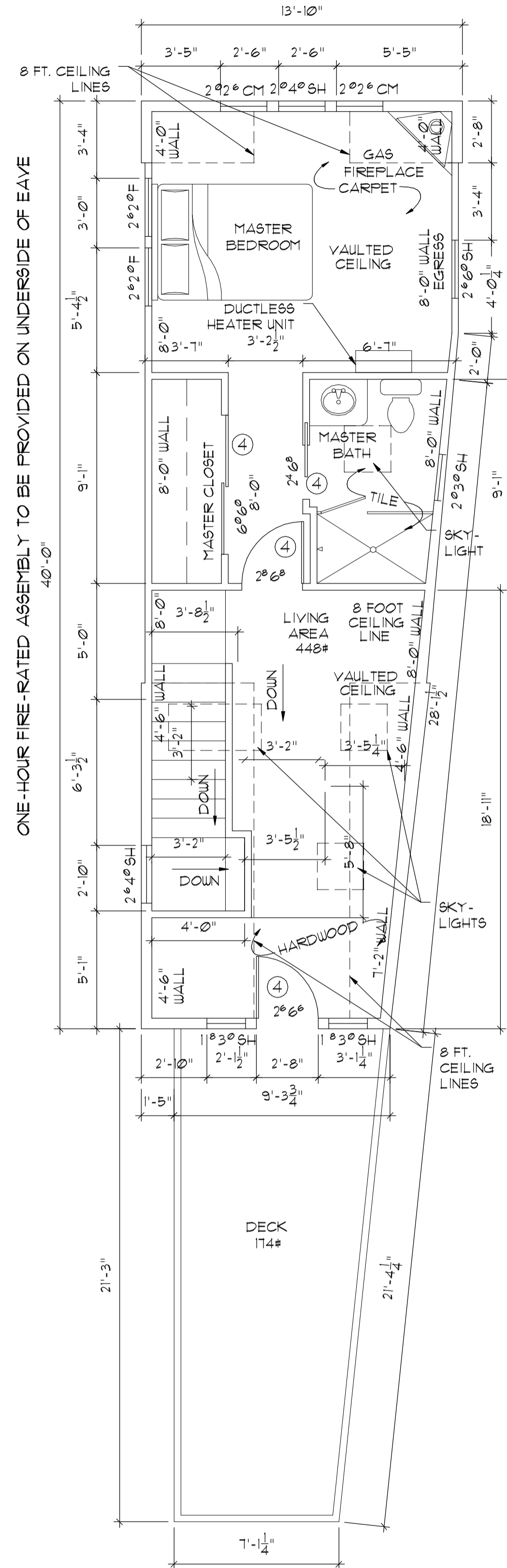
- STAIRWAYS SHALL HAVE A MINIMUM WIDTH OF 36". HAND RAILS MAY ENCROACH A MAXIMUM OF 3 1/2" INTO THE REQUIRED WIDTH.
- ENCLOSED ACCESSIBLE SPACE UNDER STAIRS SHALL HAVE WALLS, UNDER STAIR SURFACE AND ANY SOFFITS PROTECTED ON THE ENCLOSED SIDE WITH 1/2-INCH GYPSUM BOARD, PER R302.1 OF 2016 CRC.
- TREADS SHALL HAVE A MINIMUM LENGTH OF 10".
- RISERS SHALL BE A MAXIMUM OF 7 1/4".
- A NOSING NOT LESS THAN 0.75" BUT NOT MORE THAN 125" SHALL BE PROVIDED ON STAIRWAYS WITH SOLID RISERS WHERE THE TREAD DEPTH IS LESS THAN 11".
- TOLERANCE LARGEST AND SMALLEST RISER HEIGHT OR TREAD DEPTH SHALL BE 0.375"
- STAIRWAYS SHALL HAVE A MINIMUM OF 6'-8" OF HEADROOM AT THE NOSE OF THE STAIR.
- STAIRWAYS HAVING LESS THAN 4 RISERS DO NOT REQUIRE A HAND RAIL.
- GUARDRAILS SHALL BE PROVIDED FOR AT PORCHES, DECKS, BALCONIES, STAIRWAYS AND LANDINGS WHERE THE ADJACENT SURFACE IS GREATER THAN 30" BELOW.
- HANDRAILS SHALL BE CONTINUOUS THE FULL LENGTH OF THE STAIRS.
- THE ENDS OF HANDRAILS SHALL RETURN TO WALL OR TERMINATE INTO A NEWEL POST OR SAFETY TERMINAL.
- GUARDRAILS SHALL BE AT NOT LESS THAN 42" IN HEIGHT, PER CRC R312.12
- GUARDS ON THE OPEN SIDES OF STAIRS OR SERVES AS A HANDRAIL, THE TOP OF THE GUARD SHALL HAVE A HEIGHT NOT LESS THAN 34" AND NO MORE THAN 38"
- REQUIRED GUARDS SHALL NOT HAVE OPENINGS FROM THE WALKING SURFACE TO THE REQUIRED GUARD HEIGHT THAT ALLOW PASSAGE OF A SPHERE 4" IN DIAMETER. (R312.3)
- THE TRIANGULAR OPENINGS AT THE OPEN SIDE OF A STAIR FORMED BY THE RISER, TREAD, AND BOTTOM RAIL OF A GUARD, SHALL NOT ALLOW PASSAGE OF A SPHERE 6" IN DIAMETER. (R312.3 exception #1)
- TYPE 1 HANDRAILS WITH A CIRCULAR CROSS SECTION SHALL HAVE AN OUTSIDE DIAMETER OF NOT LESS THAN 1 1/4" AND NOT GREATER THAN 2". IF THE HANDRAIL IS NOT CIRCULAR, IT SHALL HAVE A PERIMETER DIMENSION OF NOT LESS THAN 4" AND NOT GREATER THAN 6 1/4" WITH A CROSS SECTION OF DIMENSION OF NOT MORE THAN 2 1/4". EDGES SHALL HAVE A RADIUS OF NOT LESS THAN 0.01". TYPE 2 HANDRAILS WITH A PERIMETER GREATER THAN 6 1/4" SHALL HAVE A GRASPABLE FINGER RECESS AREA ON BOTH SIDES OF THE PROFILE. THE FINGER RECESS SHALL BEGIN WITHIN A DISTANCE OF 3/4" MEASURED VERTICALLY FROM THE TALLEST PORTION OF THE PROFILE AND ACHIEVE A DEPTH OF NOT LESS THAN 5/16" WITHIN 3/8" BELOW THE WIDEST PORTION OF THE PROFILE. THIS REQUIRED DEPTH SHALL CONTINUE FOR NOT LESS THAN 3/8" TO A LEVEL THAT IS NOT LESS THAN 1 1/4" BELOW THE TALLEST PORTION OF THE PROFILE. THE WIDTH OF THE HANDRAIL ABOVE THE RECESS SHALL BE NOT LESS THAN 1/4" AND NOT MORE THAN 2 3/4". EDGES SHALL HAVE A RADIUS OF NOT LESS THAN 0.01".



FIRST FLOOR PLAN

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

ONE-HOUR FIRE-RATED ASSEMBLY TO BE PROVIDED ON UNDERSIDE OF EAVE



SECOND FLOOR PLAN

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

DOOR SCHEDULE

- SOLID WOOD DOORS NOT LESS THAN 1-3/8 INCHES (35 MM) IN THICKNESS, SOLID OR HONEYCOMB CORE STEEL DOORS NOT LESS THAN 1-3/8 INCHES (35 MM) THICK, OR 20-MINUTE FIRE-RATED DOORS. DOORS SHALL BE SELF-CLOSING AND SELF-LATCHING DEVICE. SEE GENERAL NOTES FOR EXCEPTION.
- 36" EXTERIOR EXIT DOOR - NET CLEAR DOOR WAY SHALL BE 32". DOOR SHALL BE OPENABLE FROM INSIDE WITHOUT THE USE OF A KEY OR ANY SPECIAL KNOWLEDGE OR EFFORT. DOOR SHALL SWING TO THE FULL OPEN POSITION WHEN AN OPENING FORCE NOT EXCEEDING 30 lbs. IS APPLIED TO THE LATCH SIDE. GLAZING IN DOORS SHALL BE DUAL PANE SAFETY GLASS WITH MIN. U-VALUE OF 0.60. PERIMETER OF DOOR SHALL BE WEATHER STRIPPED. GLAZING IN DOORS SHALL BE DUAL PANE SAFETY GLASS.
- EXTERIOR DOORS SHALL COMPLY WITH ONE OF THE FOLLOWING:
 - THE EXTERIOR SURFACE OR CLADDING SHALL BE OF NONCOMBUSTIBLE OR IGNITION-RESISTANT MATERIAL, OR
 - SHALL BE CONSTRUCTED OF SOLID CORE WOOD THAT COMPLY WITH THE FOLLOWING REQUIREMENTS:
 - STILES AND RAILS SHALL NOT BE LESS THAN 1 3/8" THICK
 - RAISED PANELS SHALL NOT BE LESS THAN 1/4" THICK, EXCEPT FOR THE EXTERIOR PERIMETER OF THE RAISED PANEL THAT MAY TAPE TO A TONGUE NOT LESS THAN 3/8" THICK.
 - SHALL HAVE A FIRE-RESISTANCE RATING OF NOT LESS THAN 20 MINUTES WHEN TESTED ACCORDING TO NFPA 252.
 - SHALL BE TESTED TO MEET THE PERFORMANCE REQUIREMENTS OF 5FM STANDARD 12-14-1.
- INTERIOR DOORS - HOLLOW CORE.

WINDOWS AND GLAZING

WINDOWS SHALL BE DUAL PANE
EMERGENCY AND ESCAPE RESCUE OPENINGS SHALL HAVE A NET CLEAR OPENING OF NOT LESS THAN 5.7 SQ. FT., 5.0 SQ. FT. ALLOWED AT GRADE. THE NET CLEAR OPENING DIMENSIONS REQUIRED BY THIS SECTION SHALL BE OBTAINED BY THE NORMAL OPERATION OF THE EMERGENCY ESCAPE AND RESCUE OPENING FROM THE INSIDE. THE NET CLEAR HEIGHT OPENINGS SHALL BE NOT LESS THAN 24" AND THE NET CLEAR WIDTH SHALL BE NOT LESS THAN 20 INCHES. FINISHED SILL HEIGHT SHALL BE NOT MORE THAN 44 INCHES ABOVE THE FINISHED FLOOR.

RESCUE WINDOWS IN BEDROOMS ARE LABELED AS EGRESS. CONTRACTOR / OWNER TO VERIFY THAT THEY MEET ALL REQUIREMENTS.

ALL GLAZING LESS THAN 60 INCHES ABOVE A SHOWER OR TUB FLOOR. GLAZING ADJACENT TO STAIRWAYS, LANDINGS AND RAMPS WITHIN 36 INCHES HORIZONTALLY OF A WALKING SURFACE WHEN THE EXPOSED SURFACE OF THE GLAZING IS LESS THAN 60 INCHES ABOVE THE PLANE OF THE ADJACENT WALKING SURFACES AND GLAZING IN ALL FIXED AND OPERABLE PANELS OF SWINGING, SLIDING AND BI-FOLD DOORS SHALL BE TEMPERED GLAZING PER 2016 CRC R308.4.

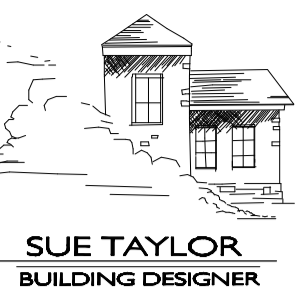
SHOWER COMPARTMENTS AND WALLS ABOVE BATHTUBS WITH INSTALLED SHOWER HEADS SHALL BE FINISHED WITH A NONABSORBENT SURFACE TO A HEIGHT OF NOT LESS THAN 6 FEET ABOVE THE FLOOR PER CRC 307.2.

PER CBC 308.4.3 GLAZING IN AN INDIVIDUAL FIXED OR OPERABLE PANEL THAT MEETS ALL OF THE FOLLOWING CONDITIONS SHALL BE CONSIDERED TO BE A HAZARDOUS LOCATION:

- THE EXPOSED AREA OF AN INDIVIDUAL PANE IS LARGER THAN 9 SQ. FT. AND
- THE BOTTOM EDGE OF THE GLAZING IS LESS THAN 18 INCHES ABOVE THE FLOORS AND
- THE TOP EDGE OF THE GLAZING IS MORE THAN 36 INCHES ABOVE THE FLOOR AND
- ONE OR MORE WALKING SURFACES ARE WITHIN 36 INCHES MEASURED HORIZONTALLY AND IN A STRAIGHT LINE, OF THE GLAZING.

FIRST FLOOR AREA	753#
SECOND FLOOR AREA	442#
TOTAL FLOOR AREA :	1195#
1ST FLOOR COVERED PORCH	50#
2ND FLOOR OPEN DECK	174#

SUE TAYLOR DESIGN



P.O. BOX 961
CAMINO, CA 95709
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NEW RESIDENCE FLOOR PLANS

JOHN & KELLY CALLAN
341 MYRTLE STREET
HALF MOON BAY, CA 94019

REVISION	DATE	DESCRIPTION

Sue Taylor

DATE: JUNE 7, 2021

DESIGNED BY: SRT
DRAWN BY: SRT
CHECKED BY: SRT

FILE: PROJECTS/2019/001/001A111
PROJECT #: 19001

PAGE 6 OF 8

SHEET NO. A1-1.1

ELEVATION COLORS:

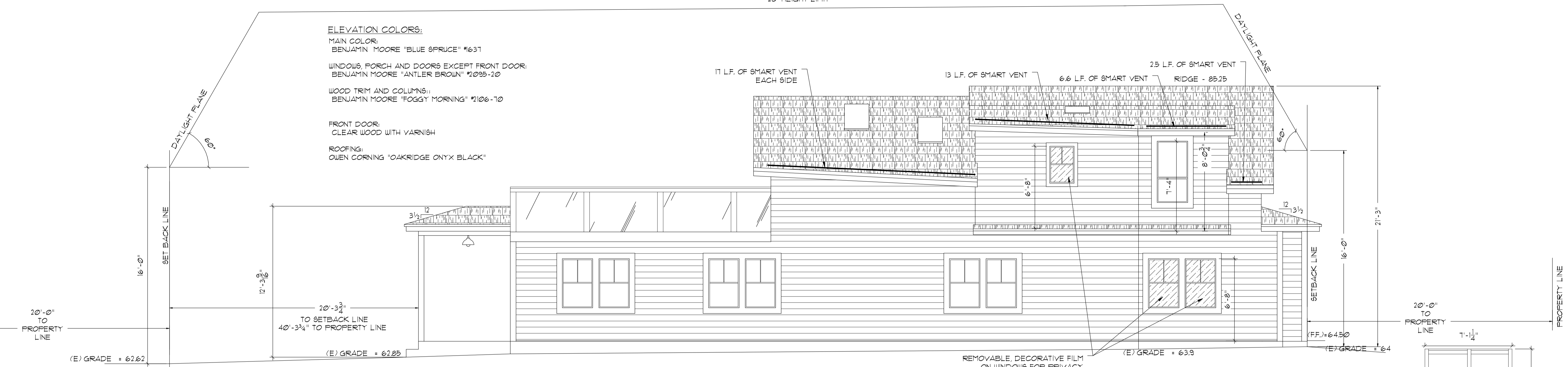
MAIN COLOR:
BENJAMIN MOORE "BLUE SPRUCE" #1631

WINDOWS, PORCH AND DOORS EXCEPT FRONT DOOR:
BENJAMIN MOORE "ANTLER BROWN" #2095-20

WOOD TRIM AND COLUMNS:
BENJAMIN MOORE "FOGGY MORNING" #2106-10

FRONT DOOR:
CLEAR WOOD WITH VARNISH

ROOFING:
OWEN CORNING "OAKRIDGE ONYX BLACK"



WEST ELEVATION

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

ROOF VENTILATION

PER CRC SECTION R806.1: ENCLOSED ATTICS AND ENCLOSED RAFTER SPACES FORMED WHERE CEILINGS ARE APPLIED DIRECTLY TO THE UNDERSIDE OF ROOF RAFTERS SHALL HAVE CROSS VENTILATION FOR EACH SEPARATE SPACE BY VENTILATING OPENINGS PROTECTED AGAINST THE ENTRANCE OF RAIN OR SNOW. VENTILATION OPENINGS SHALL HAVE A LEAST DIMENSION OF 1/16-INCH AND 1/4-INCH MAX. OPENINGS IN ROOF FRAMING MEMBERS SHALL CONFORM TO THE REQUIREMENTS OF SECTION R802.1.

PER CRC SECTION R806.2: THE TOTAL NET FREE VENTILATING AREA SHALL NOT BE LESS THAN 1/150 OF THE AREA OF THE SPACE VENTILATED EXCEPT THAT REDUCTION OF THE TOTAL AREA TO 1/300 IS PERMITTED PROVIDED THAT AT LEAST 40 PERCENT AND NOT MORE THAN 80 PERCENT OF THE REQUIRED VENTILATING AREA IS PROVIDED BY VENTILATORS LOCATED IN THE UPPER PORTION OF THE SPACE TO BE VENTILATED AT LEAST 3 FEET ABOVE THE EAVE OR CORNICE VENTS WITH THE BALANCE OF THE REQUIRED VENTILATION PROVIDED BY EAVE OR CORNICE VENTS. AS AN ALTERNATIVE, THE NET FREE CROSS-VENTILATION AREA MAY BE REDUCED TO 1/300 WHEN A CLASS 1 OR II VAPOR BARRIER IS INSTALLED ON THE WARM-IN-WINTER SIDE OF THE CEILING.

PER CRC SECTION R806.3: WHERE EAVE OR CORNICE VENTS ARE INSTALLED, INSULATION SHALL NOT BLOCK THE FREE FLOW OF AIR. A MINIMUM OF A 1-INCH SPACE SHALL BE PROVIDED BETWEEN THE INSULATION AND THE ROOF SHEATHING AND AT THE LOCATION OF THE VENT.

NECESSARY ROOF VENTILATION:

UPPER ROOF 285# / 150 = 1.9# OF VENTILATION REQUIRED
UPPER ROOF RIDGE (EXHAUST): 21 L.F. OF RIDGE VENT (.125 PER SQ. FT.) = 2.625#
UPPER ROOF EAST (INTAKE): 22 L.F. OF SMART VENT (.0625 PER FT.) = 1.375#
UPPER ROOF WEST (INTAKE): 22 L.F. OF SMART VENT (.0625 PER FT.) = 1.375#

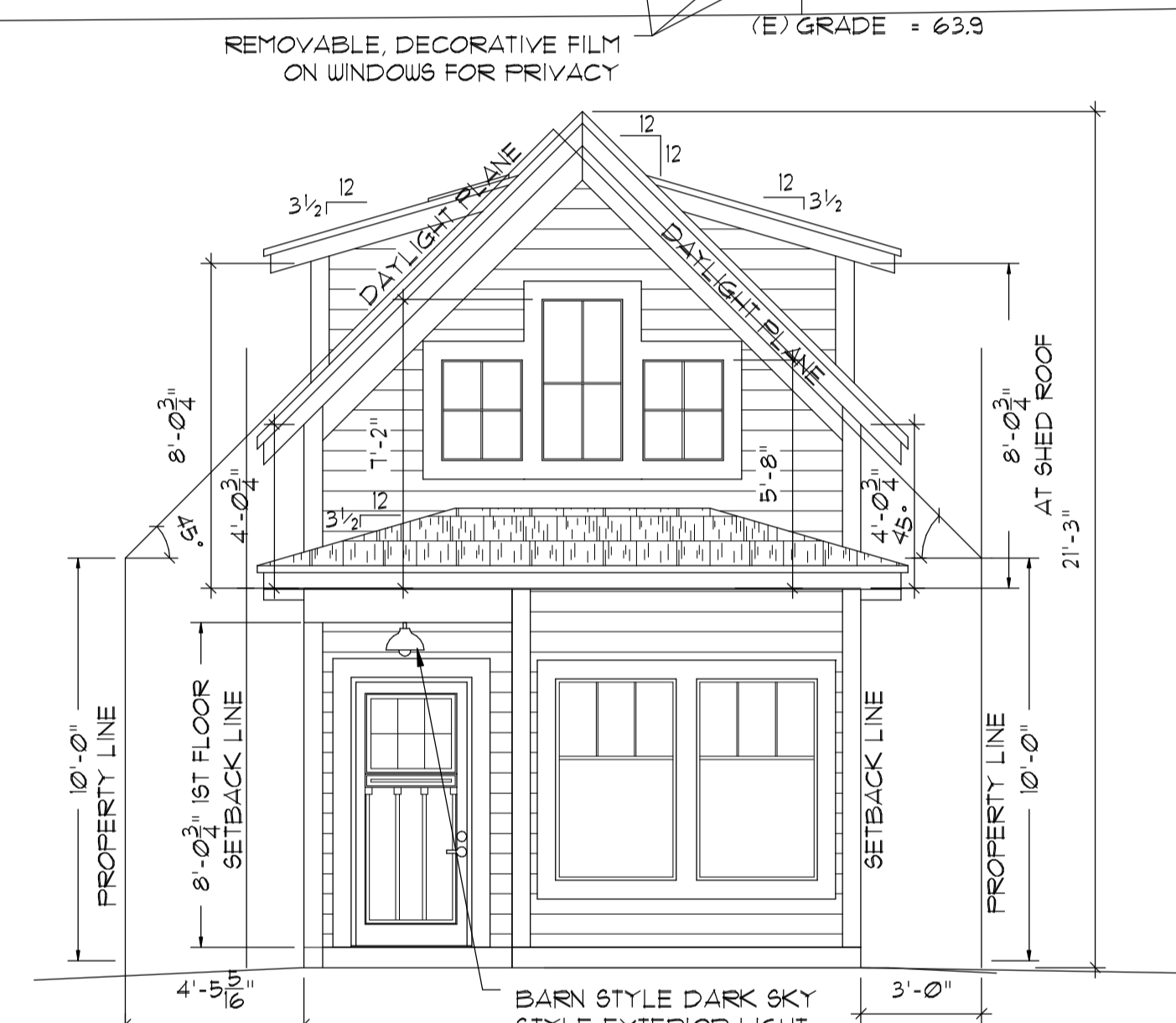
PROPOSED UPPER ROOF VENTILATION: 5.375#

LOWER ROOF 221# / 150 = 1.47# OF VENTILATION REQUIRED
LOWER ROOF RIDGE (EXHAUST): 16 L.F. OF RIDGE VENT (.125 PER SQ. FT.) = 2.0#
LOWER ROOF EAST (INTAKE): 11 L.F. OF SMART VENT (.0625 PER FT.) = 1.0625#
LOWER ROOF WEST (INTAKE): 11 L.F. OF SMART VENT (.0625 PER FT.) = 1.0625#

PROPOSED LOWER ROOF VENTILATION: 4.125#

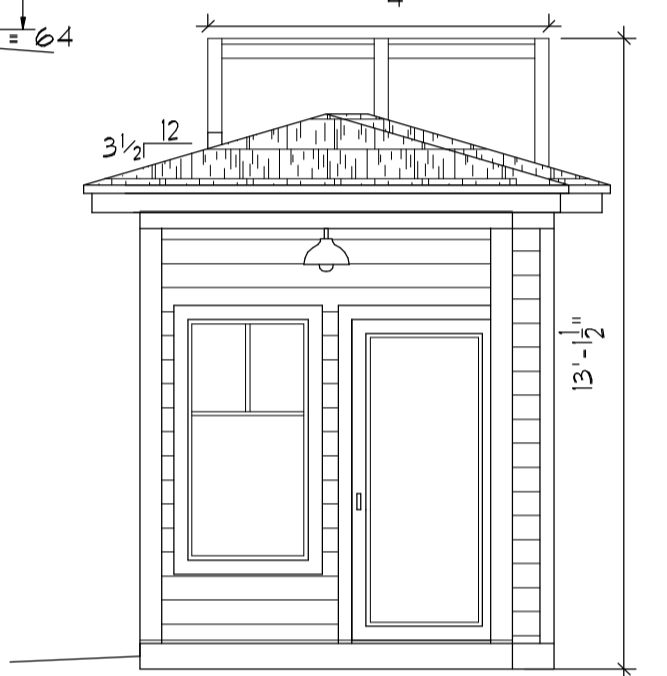
SMALL ROOF 30# / 150 = .2# OF VENTILATION REQUIRED
SMALL ROOF (EXHAUST): 14 L.F. OF SMART VENT (.0625 PER FT.) = .9125#
SMALL ROOF (INTAKE): 15 L.F. OF SMART VENT (.0625 PER FT.) = .9375#

IN NO CASE SHOULD THE AMOUNT OF EXHAUST VENTILATION EXCEED THE AMOUNT OF INTAKE VENTILATION. 1.8125#



SOUTH ELEVATION

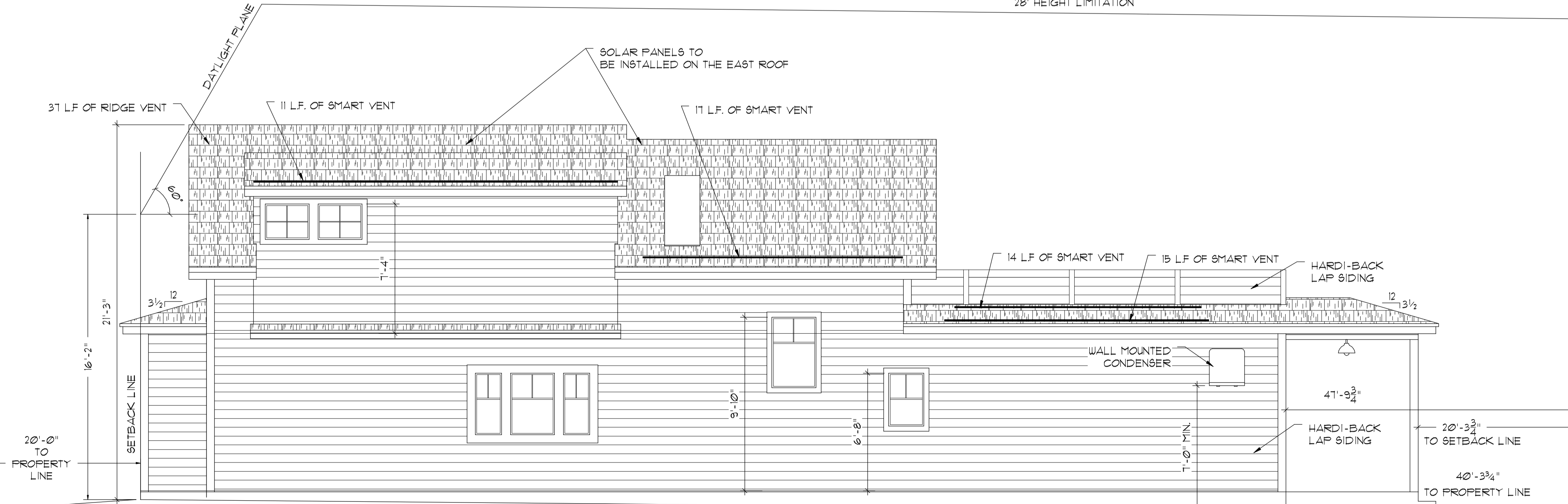
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REAR ELEVATION

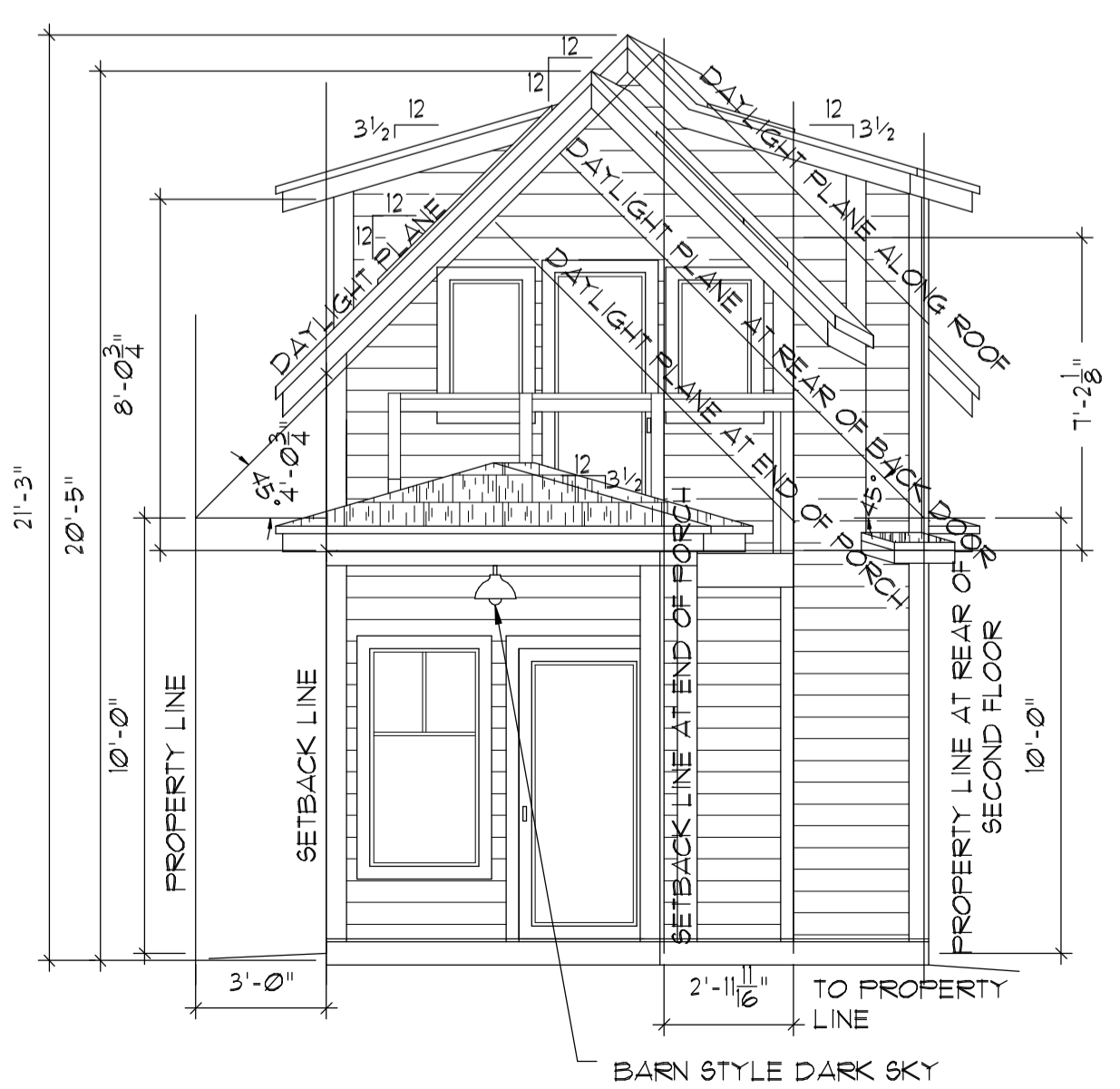
SCALE: 1/4" = 1'-0"

28' HEIGHT LIMITATION



EAST ELEVATION

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



NORTH ELEVATION

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

SUE TAYLOR DESIGN
SUE TAYLOR BUILDING DESIGNER

P.O. BOX 961
CAMINO, CA 95109
(530) 391-2190
suetaylor@comcast.net

NEW RESIDENCE ELEVATIONS

JOHN & KELLY CALLAN
341 MYRTLE STREET
HALF MOON BAY, CA 94019

REVISION	DATE	DESCRIPTION

Sue Taylor

DATE: JUNE 7, 2021
DESIGNED BY: SRT
DRAWN BY: SRT
CHECKED BY: SRT
FILE: PROJECTS\2019\001\001\AD1
PROJECT #: 19001

PAGE 7 OF 8

SHEET NO. A1-21

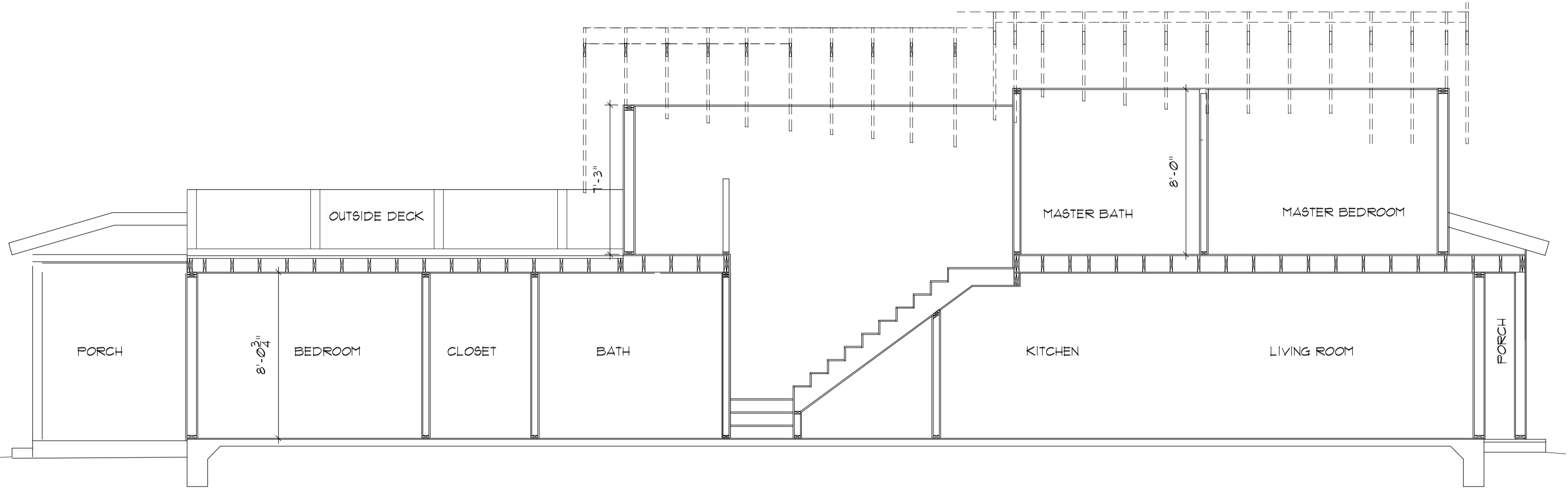
REVISION	DATE	DESCRIPTION

Sue Taylor

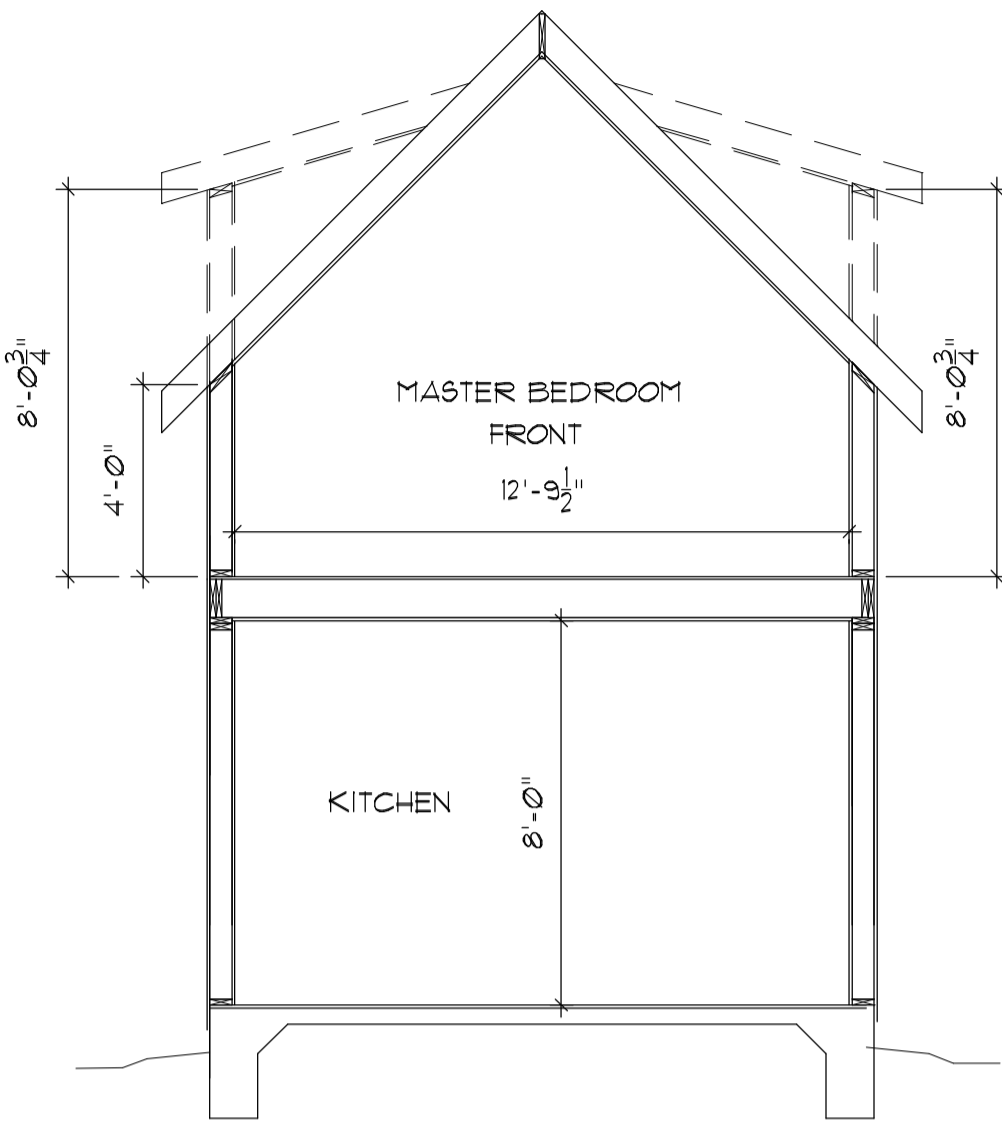
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DESIGNED BY:	SRT
DRAWN BY:	SRT
CHECKED BY:	SRT
FILE:	PROJECTS/2019/001/001A1
PROJECT:	19001

PAGE 8 OF 8

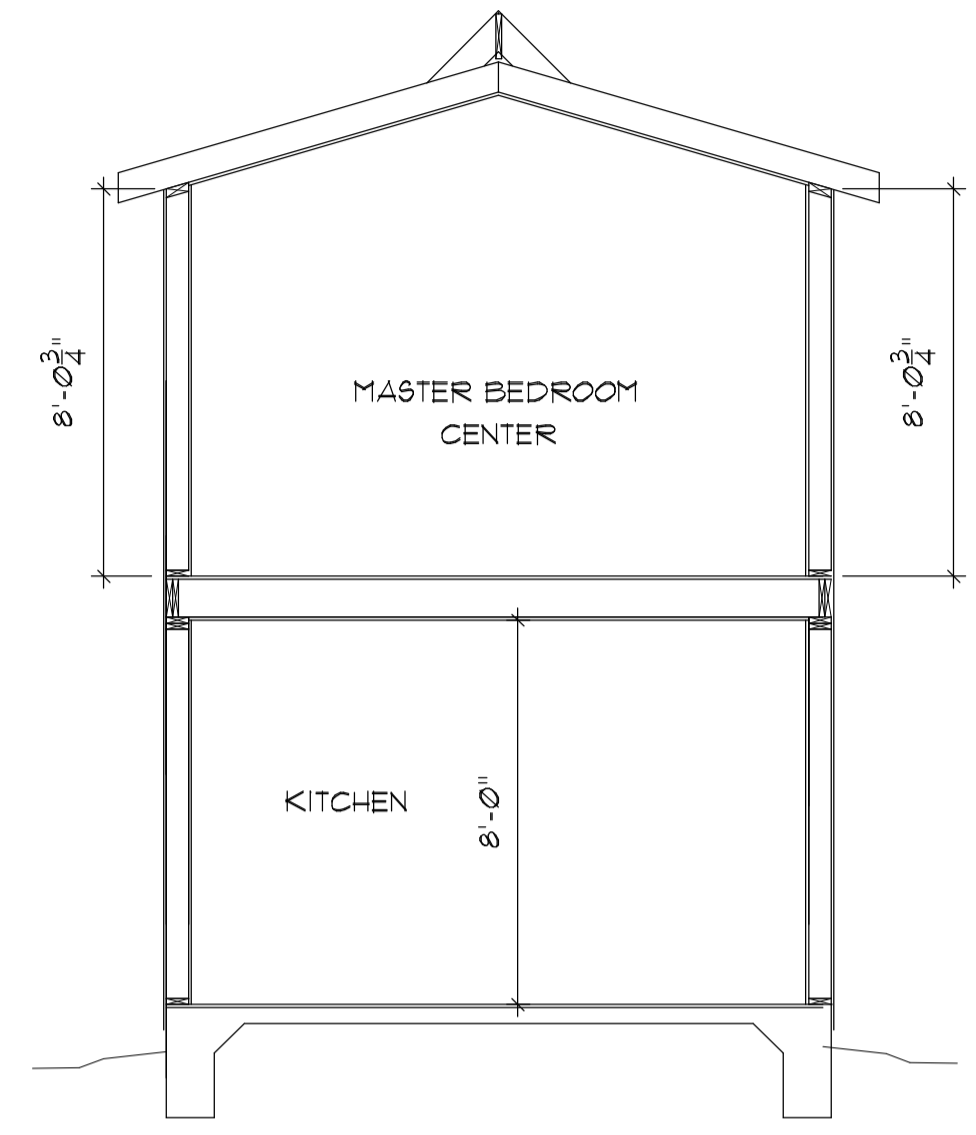
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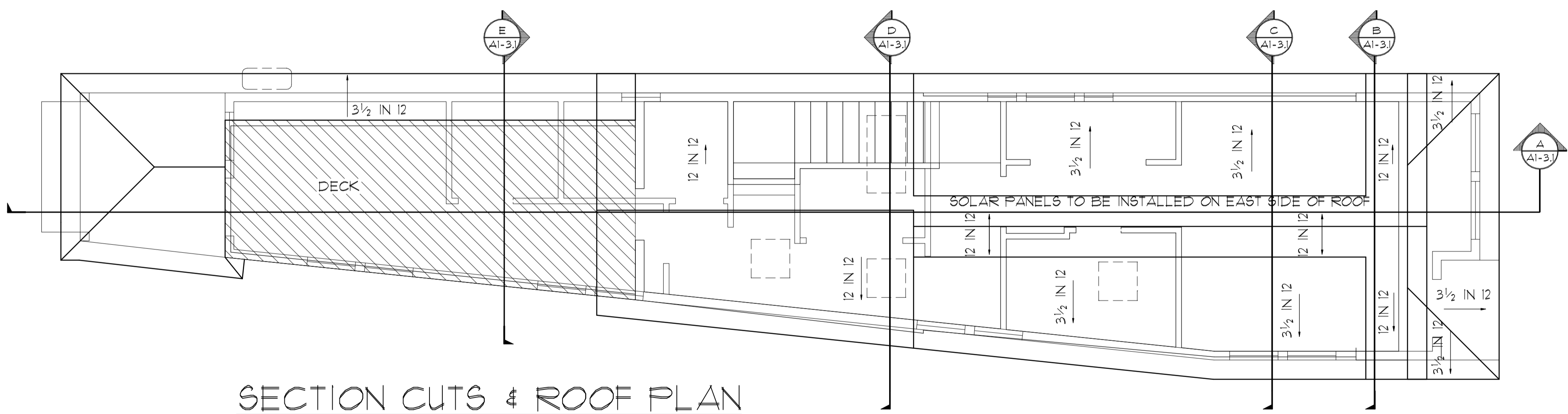
SECTION A
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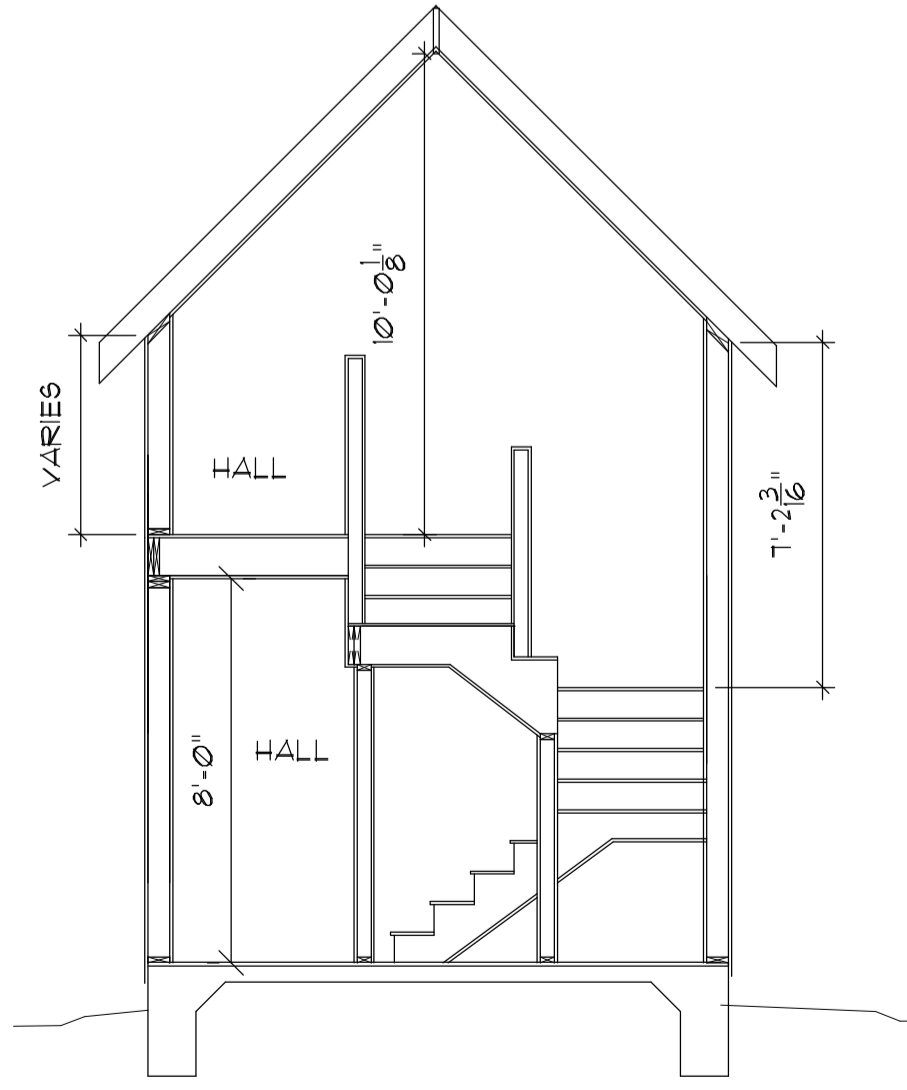
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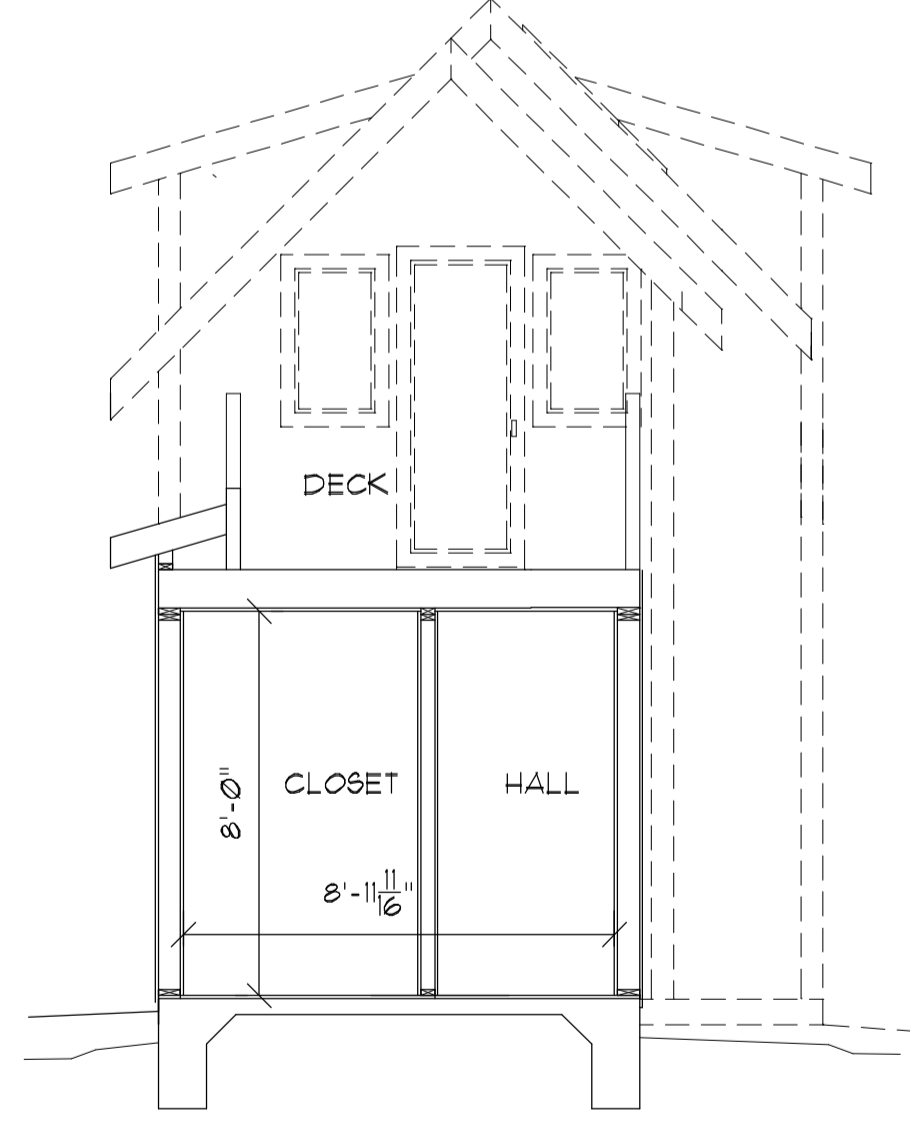
SECTION C
SCALE: 1/4" = 1'-0"



SECTION CUTS & ROOF PLAN
SCALE: 1/4" = 1'-0"



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



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

**BUSINESS OF THE PLANNING COMMISSION
OF THE CITY OF HALF MOON BAY**

AGENDA REPORT

For meeting of: **January 12, 2021**

TO: Honorable Chair and Planning Commissioners

FROM: Jill Ekas, Community Development Director
Scott Phillips, Associate Planner

TITLE: 341 Myrtle Street - Coastal Development Permit, Architectural Review, Combined Side Yard Setback Variance, Maximum Building Envelope Variance and Parking Exception, File No. PDP-19-096

RECOMMENDATION

Adopt Resolution P-21-__ to approve PDP-19-096 an application for a Coastal Development Permit, Architectural Review, Combined Side Yard Setback variance, Maximum Building Envelope variance and Parking Exception to allow the construction of a new two-story 1,195 square-foot, single-family residence on a 2,806 square-foot site at 341 Myrtle Street, based upon the Findings and Evidence contained in Exhibit A of the Draft Resolution, and subject to the Conditions of Approval in Exhibit B.

PROJECT BACKGROUND

Summary of Project	
File Number	PDP-19-096
Requested Permits/Approvals	Coastal Development Permit, Architectural Review, Combined Side Yard Setback Variance, Maximum Building Envelope Variance and Parking Exception
Site Location	341 Myrtle Street/ APN: 064-061-280
Applicant/Property Owner	John T. Callan
Project Planner	Scott Phillips, Associate Planner; (650)726-8299; sphillips@hmbcity.com
Zoning District	R-1 Single Family Residential Zoning District
LCP Land Use Plan Designation	Residential Medium Density
Water Service	One 5/8-inch, non-priority water connection currently assigned to the property
Sewer Service (Sewer Authority Mid-Coast)	Two benefit sewer units required

Street Improvements	In-lieu payment for construction of curb, gutter and sidewalk along the frontage		
Environmental Determination	Categorically Exempt pursuant to California Administrative Code Section 15303, New Construction or Conversion of Small Structures		
Heritage Trees	None		
Story Poles	Required	No	Yes if in Visual Resource Area, or those cited in code
		Yes	Variance or Exception required?
		No	Located in a largely undeveloped area?
Right of Appeal	Any aggrieved person may appeal the Planning Commission’s decision to the City Council within ten (10) working days of the decision.		
	The project not located within the Coastal Commission Appeals Jurisdiction; therefore, City action is final.		

Site and Surrounding Properties

The project site is located mid-block along Myrtle Street, just west of Second Avenue within the Arleta Park subdivision. The site is currently vacant, with some dilapidated fencing along the property lines. The site is zoned R-1 Single-Family Residential, a zoning designation that allows single-family residences. Along with a colors and materials sample, Attachment 4 includes an elevation of Design B with the adjacent residences. Land use and zoning for properties surrounding the subject site are as follows:

Table 1. Surrounding Land Uses

North	Single-story Single-Family Residence	R-1 Single Family Residential District
South	Single-story Single-Family Residence	R-1-B-1 Single Family Residential District
East	Single-story Single-Family Residence	R-1 Single Family Residential District
West	Single-story Single-Family Residence	R-1 Single Family Residential District

A key feature of the project site is the narrowness and acute shape of the lot. The frontage length is 23 feet but narrows towards the back of the lot. The average site width is 17 feet. The Chain of Title associated with the subject property was reviewed in detail and demonstrated that the subject property is a legal lot. A Certificate of Compliance was issued in September 2018. The site frontage does not contain curb gutter and sidewalk.



Figure 1. Site Location in Green

Project Description

The project consists of a new two-story residence with a floor area of 1,195 square feet. The proposed home contains two bedrooms, two bathrooms and a 224 square foot second story deck. The proposed house is characterized by a series of front and rear facing gable roof elements. Several bay windows and shed dormers are sited along the sides of the new residence. The proposed exterior materials include horizontal siding, and composition shingles. The color palette includes blue siding, off-white trim and a yellow front door (Attachment 4).



Figure 2. Site Photo with Story Poles, dated January 5, 2021

Story Poles

Project review includes story pole installation in conformance with the City Council Story Pole Policy. Story pole installation is required because two Variances and a parking exception are being considered as part of this project. Story poles were installed on January 5th and a photograph is included in Figure 2.

Project History

The residential project was presented to the Architectural Advisory Committee (AAC) on December 13, 2019 and September 17, 2020. Meeting summary notes are provided in Attachment 6. For the first review, the project would have required multiple variances and included a three-story element. The AAC identified the scope of the required variances to be excessive and also provided guidance to help the applicant work through significant design changes. The applicant responsively redesigned the proposed residence. At the second meeting, the AAC reviewed a revised two-story design

(Attachment 2 and Figure 3) which would require a combined side yard setback variance and as well as a variance for a minor inconsistency with the Maximum Building Envelope requirements.

The AAC was supportive of the revised home design but suggested that the applicant could explore options for increasing the floor-to-ceiling height within the second story provided the design elements could be essentially retained as reviewed by the AAC. At the same time, the AAC was also clear that the home size needs to be proportional to the lot size. The applicant studied options and shortly after the September 17th AAC meeting, the applicant submitted a revised house design with an increased overall height, attributed to raising the second floor ceiling height by 2 ½ feet. The revised design is shown in Figure 4 and Attachment 3. This increase in building height provides more space in the second story, but also pushes up the entire roof so that it is outside of the Maximum Building Envelope, which would require a substantive variance from zoning standards, as further described below.

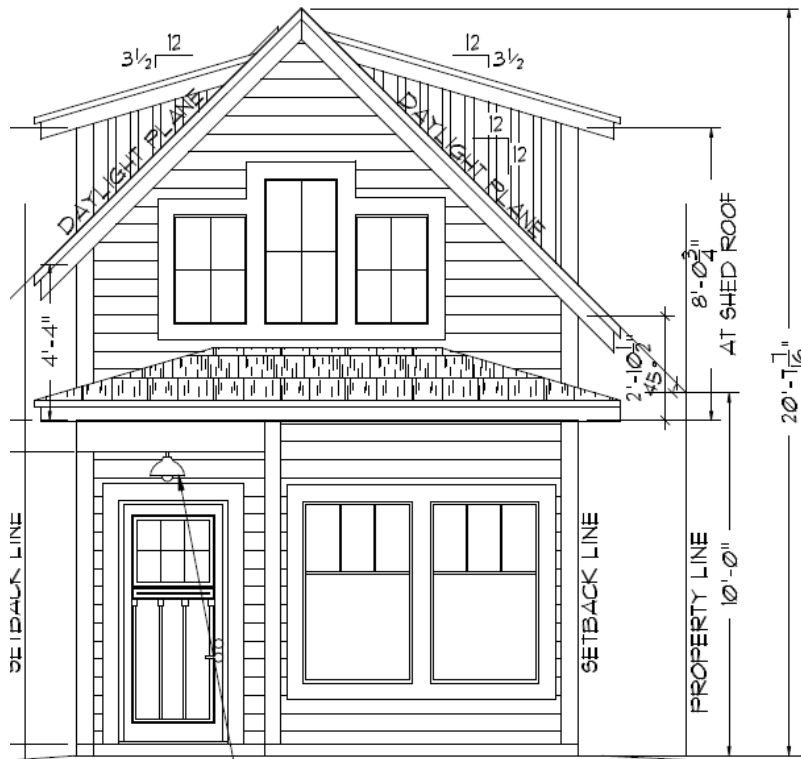


Figure 3. Front of Proposed Residence, Design A¹

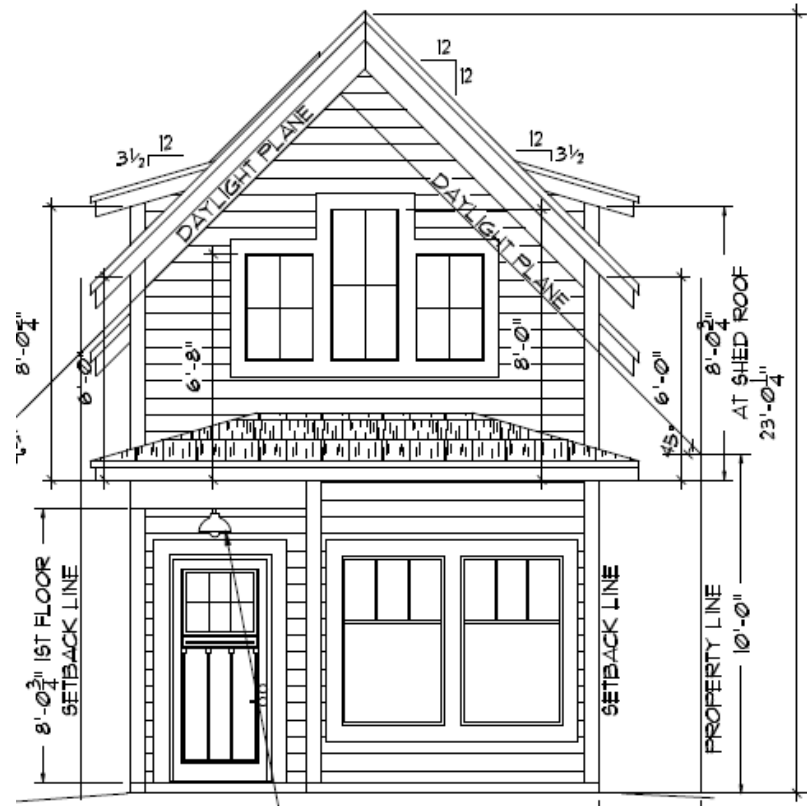


Figure 4. Front of Proposed Residence, Design B²

¹ Design A: The shed dormers shown in Figure 3 would be allowed encroachments if the sheer walls of the shed dormers were inset and separated from the first story sheer wall below. As shown in Figure 3, the sheer walls are vertically aligned, which is therefore the subject of the building envelope variance for Design A. If the sheer walls were inset at least 6-inches from the first floor walls, no building envelope variance would be required for Design A.

² Design B: In addition to the shed dormers, the entire roof area is outside of the building envelope and is therefore the subject of the variance request.

ANALYSIS

The key issues for this project are conformance with the General Plan/Local Coastal Land Use Plan, conformance with the Zoning Code/LCP Implementation Plan, and design compatibility with surrounding development.

Conformance with the General Plan/Local Coastal Program Land Use Plan And Zoning Code

With the exception of the requested variances and parking exception, the proposed residence meets the requirements of the Local Coastal Program. Single-family residential use is a principally permitted use in the R-1 Single-Family Residential Zoning District. The Housing Element of the City’s General Plan does not identify the site in the site inventory; however, the proposed home would meet Goal 2 of the Housing Element by providing high quality housing to range of income levels. Table 2 below summarizes the zoning regulations as they relate to the proposed development.

Table 2. Project Conformance with R-1 Zoning District Requirements for Severely Substandard Lots

Development Standards	Zoning Requirements	Proposed
Min. Site Area	5,000 sq. ft.	2,906 sq. ft. (existing)
Min. Average Site Width	50 ft.	17 ft. (existing)
Min. Front Setback	20 ft.	20 ft.
Min. Interior Side Setback	3 ft.	3 ft.
Min. Combined Side Yard Setback	8 ft.	6 ft. (Variance Required)
Min. Rear Setback	20 ft.	40 ft. 4 inches
Max. Two-Story Height	28 ft.	Design A: 20 ft. 8 Design B: 23 ft.
Max. Two-Story Lot Coverage	35% (1,017sq. ft.)	26.3% (763 sq. ft.)
Max. Floor Area Ratio	0.5:1 +200 sq. ft. (1,653 sq. ft.)	0.37:1 (1,195 sq. ft.)
Min. Parking Spaces	1 garage and 1 uncovered space not in front yard setback	1 uncovered space (Parking Exception Required)
Maximum Building Envelope	Per Section 18.06.040G	Design A: Shed Dormer (Variance Required) Design B: Roof and Dormers (Variance Required)

Table 3 identifies key Zoning Code/LCP Implementation Plan issues and their applicability to the subject site. As indicated in the table, no policy conflict is anticipated from this project.

Table 3. Key Zoning Code/LCP Implementation Plan Issues

Issue	Applicability/Explanation	
Environmentally Sensitive Habitat Area	No	None within 100 feet of the site.
Visual Resource Area	No	Not located in a Visual Resource Area.
Obstruct Public Access	No	House will have no effect on coastal access.
Archaeologically Resource Area	No	Not in area of mapped or known resources.
Historic Resources	No	No historic resources exist on the site or surrounding area.

Variations

Two variations have been requested, one related to the combined side yard setback requirement and the other with the Maximum Building Envelope.

Combined Side Yard Setbacks: The minimum required side yard setback on a severely substandard lot is 3 feet. Both Design A and Design B have 3-foot side yard setbacks on both sides and thereby comply with the minimum setback standard, individually. It is important to note that 3 feet allows for full compliance with building and fire codes. However, the zoning code also specifies a standard for a minimum **combined** side yard setback (adding the setbacks together) of 8 feet for severely substandard lots. The combined side yard setback for both Design A and B is 6 feet, and this is where the variance need comes in. The required findings for the requested setback variance can be supported because both the narrowness and irregularity (which tapers down to only 10 ½ feet in the rear) are special circumstances applicable to the subject property. It is of particular note that this site was determined to be a legally subdivided lot following a thorough review of the submitted Chain of Title. The applicant has also submitted their interpretation of the findings and copy of their letter is included as Attachment #5.

Maximum Building Envelope: Design A (Attachment 2) includes a minor inconsistency with the Maximum Building Envelope requirements due to the lack of off-set between the first story sheer wall and the dormer walls. For Design B, the top 2 ½ feet of the building including the roof in its entirety, extend beyond what is normally permissible. It is unclear if the required findings can be made for a variance to the Maximum Building Envelope standards for Design B because it involves the entire structure. The narrowness, irregular shape, and small size of the parcel are supportive for variance findings. However, the Planning Commission has reviewed several proposals for development on severely substandard lots and has found that it is important to maintain the relative scale of building area to lot size, lot width, and streetscape presence to ensure conformance with the Residential Design Guidelines. Staff recommends Design A because it most closely conforms to the zoning code while allowing the applicant use of their property pursuant to their own design. Staff encourages the Planning Commission to review the story pole installation carefully. The roof ridgeline for both Design A and Design B are depicted in the installation of the orange fencing between the story poles.

Parking Exception

A parking exception was also requested to remove the requirement for a garage parking space and allow for one uncovered parking space within the front yard setback. Similar to the variance findings, the parking exception can be justified due to the narrowness and small size of the legal lot. One uncovered parking area at the front of the lot is provided.

Design Compatibility

The Single Family Residential Design Guidelines encourage flexibility in architectural design to reflect the community's eclectic character and seek to achieve compatible design within existing neighborhoods. The current project proposes a neo-traditional design that is compatible with the existing pattern of development in the surrounding area in terms of building placement/orientation, massing, and materials and colors. The project proposes a two-story house that is located at the 20-foot front yard setback line and oriented to the street, consistent with the neighborhood pattern. The front of the residence contains an attractive appearance facing Myrtle Street, consistent with recommendations of the Single Family Residential Design Guidelines and the AAC. The proposed building is well-articulated on all sides and building materials and colors are consistent with the proposed architectural style, compatible with the surrounding area, and suitable to the coastal setting. The AAC has reviewed the massing, materials, colors, and neighborhood context and recommends the design to the Planning Commission for its consideration.

Conclusion

Based on the above analysis, staff concludes that the proposed residence is consistent with the General Plan/Local Coastal Land Use Plan, the Zoning Code/LCP Implementation Plan, and the Residential Design Guidelines; is compatible with surrounding development; and conforms to the requirements of the California Environmental Quality Act. Staff recommends approval of Design A based on the findings and draft conditions of approval (Exhibits A and B of the attached Draft Resolution). As of the drafting of this report, staff had not received any written comments directed to the Planning Commission for this project; however, several neighbors have called and emailed to request more information. Any written communications directed to the Planning Commission received after packet distribution will be forwarded via memo and posted with the agenda listing for this item.

ATTACHMENTS

1. Draft Resolution with Findings and Evidence, Exhibit A and Conditions of Approval, Exhibit B.
2. Project Plans Design A
3. Project Plans Design B (Post AAC Meetings)
4. Color and Material Sample / Neighboring House Relationship
5. Variance Findings from the Applicant
6. Architectural Advisory Committee Meeting Summary Notes: Excerpts from December 13, 2019 and September 17, 2020



MINUTES

CITY OF HALF MOON BAY PLANNING COMMISSION

TUESDAY, JANUARY 12, 2021

ALL REMOTE/VIRTUAL WEBINAR VIA ZOOM

Chair Benjamin called the hearing to order at 7:08 PM

PRESENT: Chair Benjamin, Commissioners Ruddock, Hernandez (commissioner Polgar joined meeting at 10:15 PM)

ABSENT: None

PLEDGE OF ALLEGIANCE AND ROLL CALL

Chair Benjamin led the Pledge of Allegiance.

APPROVAL OF MINUTES

December 8, 2020

Motion to approve as written

M/S: Ruddock/Hernandez

Roll Call Vote: 4-0 (yes: Benjamin, Ruddock, Hernandez and Holt)

PUBLIC COMMENT

None

ITEM 1.A. PROJECT DESCRIPTION: An application for a Coastal Development Permit, architectural review, combined side yard setback variance, maximum building envelope variance and parking exception to allow the construction of a new two-story 1,195 square foot, single family residence.

FILE NO.: PDP-19-096

LOCATION: 341 Myrtle Street / APN: 064-061-280

APPLICANT/OWNER: John T. Callan

PROJECT PLANNERS: Scott Phillips, Project Planner

Staff Presentation: Scott Phillips gave presented to Planning Commission Sue Taylor, project designer for the applicant. Explains that the headroom is really difficult. Requested if could raise the walls two feet to get some head room and AAC supported this. The AAC also supported not in setting the dormer walls. Would be happy to put siding on the back of the deck instead of glass. Parking is not realistic. Added two feet for head room very important.

Planning Commission Clarifying Questions

Q. Didn't see comprehensive designs in the packet. Would like to see the applicant's presentation; had questions about design details.

A. Staff reviewed all of the elevations as well as neighborhood context.

Q. Where is the concern about this home being used as a STR or party house?

A. Staff explained that this is from the community comments.

Q. Parking in the area, is it saturated?

A. Not sure.

Q. What about lots across the street

A. Three lots, one has been approved for development. All of the three lots are substandard, however, they are larger than the subject property. The approved development did not need any variances or exceptions.

Q. If built the house the maximum height possible, would this house fit into the maximum building envelope?

A. No. It would not comply

Q. Could this have been done as a one story structure?

A. Not a good answer from applicant...

Q. Was two parking spaces in front ever discussed?

A. Yes in the AAC process.

Chair Benjamin communicated about an ex parte communication with neighbor named Nick De La Torre and the input he received is covered by written communication.

PUBLIC COMMENT

- 1) **Chad Hooker** - Attending as a member of the public. The AAC recommended that they apply for this variance because the building will not be very useful.
- 2) **Heather Prince** - Lives at 339 Myrtle, west of the project site. This property has been empty for 40 or more years. And why would we want to put a house here now, including with variance on the sides. The deck will overlook backyards. With respect to the "party house" have an AirBnB on the street now and it is very difficult. The other house has already had two owners. The western windows will look right into her windows and what are the size of the lots across the street.
- 3) **Joe Falcone** - Objects to the project proposed. The structure is too large for the lot, does not provide sufficient parking for a building of that size, and does not provide sufficient storage, obviously intended for use other than single-family. Objects to variances for daylight plane and setbacks. Sees no need to make new arguments about this. There is no right to a variance. Concerned about fire access. Particularly object to the parking exception. This is a false equivalent to 390 Myrtle.
- 4) **Nancy Arnold** - Lives two properties down at 345 Myrtle. Has 30 years' experience in hospital construction. Has concern about loss of green space. Questions about increased burden on utilities. Regarding the setback reductions.
- 5) **Eric Hartness** - First meeting like this – behind the property on Granelli. Appreciates all of the feedback that the other neighbors have given. Reinforce concern on the balcony.

The small lot conversation – making concessions for the house to develop on a small lot. Does not support concessions.

- 6) **Thomas Perez** - Has lived on this street for 25 years. 390 Myrtle is not the same as this site. Most of the things he was going to say have already been covered. “Minimal living space” and “garage or house” and wants to abide by every rule that he can. He does not think this will provide benefit to this community. No storage. No benefit to putting a tiny house there that is out of regulation.
- 7) **Donald Blanchard** - Neighbor at 27X Myrtle. Most of his comments have been addressed. Anyone buying this property should have known. Should address issues through design and not through codes. If codes are this malleable need to know that. With no garage this is of particular significance.
- 8) **Nick De La Torre** - Neighbor on the east side on the two story structure. The 390 Myrtle house is not a good comparison. Parking is an issue. If all of the lots are developed across the street, they not sure what will happen across the street. There could be three smaller homes. Has a problem with the proposed setback.
- 9) **Beverly Laurenzano** - Neighbor to the east. Has two concerns – oversize and location of the deck is uncomfortable. Parking is concerns, especially with the children in the neighborhood. Will push parking into the neighborhood. Agrees with other neighbor concerns.
- 10) **Bev Harker** - A neighbor, and it sounds like hammering a square peg in a round hole. Big house on a very challenging lot. Substandard lots already have allowances and this is asking for more. Design A versus B is a red herring. Would like to see a one story option.
- 11) **Laura** - Used to live on Myrtle. Her sister lists at 343 Myrtle. With the extra two feet for the raised roof is blocking window on the west side of the house. The house is a bit invasive. Also agrees about parking.
- 12) **Danielle De La Torre** - Grandfather lives at 343 Myrtle. They have enjoyed this lot. The lot is not the size that can build a home on. A nice neighborhood and would like the neighborhood to stay the same with families, children riding bikes, etc. This proposed home does not seem to fit within the rest of the neighborhood. Does not want to see this for an AirBnB, does not fit with the neighborhood.
- 13) **John Callan** - Thanks everyone for all of the hard work. Have owned the lot for about 85 years. The neighborhood is very important to him. Neighbors are very important and reached out to the neighbors during the design process. Started with Heather Prince. Tried to purchase land to widen the footprint. Was looking for a lot line adjustment. Then discussed Nick De La Torre and how had enjoyed the subject property subject to an understanding. The lot had been listed. Then cancelled the sale because Nick wanted to buy the lot.

Staff Responses:

- Fire Codes – there are different codes involved, building and fire code are 3 feet and require specific types of construction for safe separation.
- Parking Impacts
- Design:

- Storage
- Deck
- Easy to provide EV
- Lot sizes across the street
- AAC Process
- What is new with respect to allowing houses on small sites?

Planning Commission Discussion:

- Use: If want to enjoy the lot, need to buy it.
- Variances: Noted that the standard for a variance is a high bar and requires necessity in order to enjoy the property. A small home with no variances would be even more affordable. This project does not need to have variances to be fully enjoyable. That said, the less exceptions and variances required the better. It is a negative for the design to pull the upper floor in a little bit. Thinks is provides an articulation of upper floor. That would eliminate need for a daylight plan variance entirely. Worth considering Design A with sheer wall all pulled in. Then the 6 versus 8 feet combined side setbacks would be more of a concession to allow for property enjoyment.
- Design: Discussed merits of design A and B. Design A has look of a one-story house.
- Safety: Fire and safety concerns have been considered. Question about fire place close to the house.
- Privacy: Would like to see a way to address some of the privacies concerns.
 - Deck: Treat the deck with siding and "right-size" it. Reduce the deck size. Add landscape screening. Terrific experience to have the deck, as long as conforms to zoning code; but with reduced side yard setbacks, would like the deck to provide side views off the deck.
 - Second Story Windows: Consider high sill windows to improve privacy.
- STR: Concerned about parking and STRs. What about deed restriction for no STRs?
- Parking: Entertain the idea of two parking spaces in front; then add landscaping in back to improve privacy. OK with no garage, but consider using the space for parking in the front yard with careful design because it may be used that way anyway.

If there is an opportunity for neighbors and the applicant to discuss concerns, that could benefit the project.

Applicant – comfortable with continuance. Noted that upper floor has limited windows and that the deck has screening; not sure about the parking. Why did they do A? Did it to show us how the house would be conforming with the daylight plane requirements. Would like to consider a plan C which would be symmetrical like B, but with front portion of the upper ridge lowered and overall consider how to

Motion to continue the project to a date uncertain.

M/S: Hernandez/ Holt

Vote: 4-0 (yes: Benjamin, Ruddock, Hernandez and Holt)

Planning Commission took a 6 minute break.

10:15PM Planning Commissioner Polgar joined the meeting.

Motion to extend meeting to 11:30 PM

M/S: Hernandez/Holt

Vote: unanimous

ITEM 2.A. STUDY SESSION: City's Climate Action and Adaption Plan

Conducted a Study Session regarding the City's Climate Action and Adaption Plan (CAAP); received a presentation, provided public comment, discussed and provided input to staff.

Staff Presentation By: Veronika Vostinak, Public Works Sustainability Analyst.

Public Comment

None

Planning Commission Discussion

- Surprised that EV ownership was so low
- Pleased with presentation; proactive.
- Commend City with great community outreach early on.
- Consider waste emission like methane – look into early on
- In the adaption portion. Are we going to be able to use County vulnerability assessment?
 - Staff: Yes
- Adaption Strategy. Would like to see thinking in a near term to longer term. More of the same will be coming.
- Let's see if we can be more resilience now, to adapt for future bigger change.
- Great incorporation of Carbon planning
- Staff and Commission commend climate work within the LUP and to support housing.
- Grant opportunities out there right now to build and provide active and sustainable transportation of trails.
- Education. Teach our community and visitors alike.
- Inventory of greenhouse gasses is very interesting.
- Visitor Serving. How do we get visitors to participate in carbon reduction?
- LCLUP. Policies in the draft document that show climate action plan information.
- Would like to understand how the model works?
- Carbon Sequestration. Wetland and wetland opportunities. Glad to see staff is working with Carbon Cycle Institute (current leaders in exploring carbon sequestration potential for natural and working lands)
- Lots of opportunities to explore.
- Scoring details helps define and help Staff more.
- Ag. Growing food, what does that look like in the future with climate change?

- Planning Commission would like a copy of the presentation.
- Ag: SMC RCD and County office of sustainability have been doing a lot of outreach and study.

DIRECTOR REPORT

PC Updates:
January 21st – AAC Meeting
January 27th – Director Hearing

PLANNING COMMISSION COMMUNICATIONS

ADJOURNMENT


Motion to adjourn.
M/S: Hernandez/Holt
Unanimous
Meeting adjourned at 11:27PM

Respectfully Submitted:



Bridget Jett, Planning Analyst

Approved:



James Benjamin, Chair

***Meeting Attendance List**

Planning Commission

Hearing 01/12/2021

Bridget Jett

PCT Monitor

Jason Francisco

Vice Chair Ruddock

Chair Benjamin

Commissioner Hernandez

Commissioner Holt

Scott Phillips

Winter King

Veronika Vostinak

Doug Garrison

Sue Taylor

Commissioner Polgar

John Doughty

Brian Colby

Jennifer C

Nancy Arnold

John Callan

Dave Olson

Thomas Perez

Chad Hooker

Joe Falcone & Karri Kaiser

Beverly Laurenzano

Laura

Hostus Mostus

Danielle De La Torre

Sue Taylor

Chris Callan

Heather Prince

Jill Ekas

Maziar Bozorginia

Sandi Winter

Vanessa Lamascus

Eric Hartness

Michelle Dragony

Nick De La Torre

Kerry Burke

Donald Blanchard

hmbguy

Bev H.

16507269793

14155185543

14155185543

16508393041

16504650561

THE CALLAN FAMILY

**PO Box 764
Kentfield, California 94914
(415) 847 - 6282**

June 11, 2021

VIA EMAIL

The Planning Commission
CITY OF HALF MOON BAY
501 Main Street
Half Moon Bay, California 94019

Re: PDP-19-096 Coastal Development Permit
341 Myrtle Street (APN: 064-061-280)
Continued Hearing from January 12, 2021

Dear Chairman Benjamin and Honorable Members of the Planning Commission:

This will address multiple points raised by you, the Planning Staff, and the members of the public who attended the Planning Commission Hearing of January 12, 2021.

In summary, the Planning Commission should accept the recommendation of the Architectural Advisory Committee and grant this Variance, since the strict application of the Maximum Building Envelope will: (1) make the property difficult to live in; and (2) result in an asymmetric front elevation. It is important to note that we are not seeking to increase the square footage of the property, but to simply make the home more functional and aesthetically pleasing. Significantly, this application neatly satisfies the HMB Zoning Code, as discussed below.

1. The Planning Commission should accept the recommendation of its Architectural Advisory Committee and grant this Variance for Applicant's Severely Substandard Lot, since the strict application of the Maximum Building Envelope will result in: (1) Practical Difficulties that will make the property difficult to live in; and (2) a Front Elevation that will be asymmetric.

Half Moon Bay Municipal Code § 18.23.010 provides that a Variance may be granted where due to ". . . **exceptional characteristics** of the property. . . a literal enforcement of this title would result in **practical difficulties or unnecessary hardship**" (Emphasis added). Simply put, the Statutory Scheme recognizes the case in which there are "exceptional

characteristics” applicable to a particular parcel of property (viz. its location, shape, size, surroundings, or topography), such that the strict application of the Maximum Building Envelope will deny the property owner of privileges enjoyed by other owners in the neighborhood and under identical zoning districts. Accordingly, the variance is granted in order to bring a disadvantaged property up to the level of use of nearby properties in the same zoning district.

In this instance, the subject property is a Severely Substandard Lot that is 23.35' wide at its Southern end, but narrows down to 10.5' wide at its Northern end. The unique size and configuration of the lot constitutes an “exceptional characteristic” of the property that does not generally apply to the land, building and/or uses in the district (see: HMBMC §18.23.040 B 1). Specifically, the Daylight Plane Lines cross themselves at 6' 6” below the maximum height limit.

It is important to note that this parcel is a “Legal Lot,” and was issued a Certificate of Compliance in September 2018. Since 2001, the average size of a new home constructed along Myrtle Street is 2,502 square feet. The home we are proposing is only 1,195 square feet, including the bedroom on the second floor. Again, this Variance will not increase the square footage of the home, but will simply make the home far more functional and improve the symmetry of its front elevation.

In their report for the January 12, 2021 Planning Commission Hearing, the Planning Staff agreed that “The narrowness, irregular shape, and small size of the parcel are supportive for variance findings,” (Agenda Report dated January 12, 2021 at page 8 [sic 2]) in ¶ 3), but stated that “. . . it is important to maintain the relative scale of building area to lot size, lot width, and streetscape presence to ensure conformance with the Residential Design Guidelines.” (Id. at 8 [sic 2]). Significantly, the Planning Staff pointed out that “For Design B, the top 2 ½ feet of the building including the roof in its entirety, extend beyond what is normally permissible. . . .” (Id. at 8 [sic 2]).

Significantly, in our new Plan C we have lowered the roof from 23'-1/4” to 21'-3”, or about two (2) feet. Therefore, we hope that this Commission will agree that the value of having a functional, symmetrical single-family home far outweighs the harm of having an extension of 7-1/4” on only one side of the daylight plane, into the severely substandard daylight plane, especially when considering that the height of Plan C is lower than the two story house on the east side. Again, the granting of this Variance would not increase the square footage of this modest infill single-family home. It would simply make the second story functional, for the reasons discussed below.

Specifically, Plan C provides for the following: (1) lowering the roof by approximately two feet, (2) running the shed roof through the Master bathroom and closet to provide for ceiling height; and (3) seeking a Variance to extend into the front Daylight Plane by 7.25 inches for the purpose of symmetry.

For all of these reasons, we believe that the Variance is essential to preserve our substantial property rights. What follows is a detailed summary of our timetable for the processing of this application.

2. December 13, 2019 - the First AAC Hearing.

On December 13, 2019, our First Plan for this modest residential infill project was heard by the Half Moon Bay Architectural Advisory Committee (the "AAC"). In pertinent part, the AAC advised us to do the following: (1) reach out to our neighbors, to determine whether they would entertain a lot-line adjustment to create a more functional property; (2) eliminate the proposed roof deck; (3) consider adding a Bay Window or other features to the Master Bedroom on the second story; and (4) provide more building articulation to the Eastern and Western elevations of the building. They emphasized that a variance from the Maximum Building Envelope (i.e., the Daylight Plane) would be very difficult to obtain.

Per the suggestions of the AAC, we contacted the neighbors, who had no interest in a lot-line adjustment to their side yard. We also eliminated the roof deck, added a "more modest second story deck" (per staff report dated Sept. 17, 2019 in ¶ 2 at 1), and provided more articulation to the Eastern & Western Elevations.

3. September 17, 2020, the Second AAC Hearing.

On September 17, 2020, we submitted our 2nd Plan to the HMB AAC, namely "Plan A," which does not require a Variance from the Daylight Plane. However, the interior of that Plan was dysfunctional due to the constraints of the Daylight Plane requirements resulting from the unique configuration of the property. Unsurprisingly, the Architectural Advisory Committee recognized flaws with Plan A, and recommended that we seek a Variance to increase the home's height to make the second story "livable," and to create "vertical symmetry" along the facade, as discussed below.

A. The strict application of the Daylight Planes creates multiple Practical Difficulties by eliminating the headroom necessary to properly enjoy the property (inter alia, a very low ceiling height in the Primary Bedroom and Bath, a strangely oriented stairwell, and limited storage throughout).

The Architectural Advisory Committee correctly noted that strict compliance with the Daylight Planes created multiple Practical Difficulties by eliminating the headroom necessary to enjoy the property. For example, Plan A has Interior Walls that are 8'0" in the vaulted ceiling of the Primary Bedroom, but (because of the 45° angle of the Daylight Plane) sharply descend to a 4' 4" wall on the Western side, and a 2' 10.5" wall on the Eastern side. Accordingly, with Plan A: **(1) large portions of the ceilings in the Bedroom & Bath would have heights of less than**

six (6) feet; (2) the stairwell would be required to enter into the center of the home, since one would be banging their head against the ceiling if the stairwell was designed to follow one side of the wall; (3) storage is very limited (e.g., areas in the Primary Closet would have an average height of approximately 4' 6"); and (4) a 6' individual would probably feel claustrophobic taking a shower in a stall that has a ceiling height that averages only 5.5' or less for about a quarter of its length (or using the toilet for that matter).

Again, for all of these Practical Difficulties, your Architectural Advisory Committee recommended that we seek this Variance to make the second story properly usable, and otherwise avoid having "a second story that is difficult to live in" (see: Meeting Summary Notes of the HMB AAC dated September 17, 2020 at page 2).

B. The strict application of the Daylight Planes results in a lack of Vertical Symmetry of the Front Elevation (i.e., First and Second Floor windows and door do not align or follow a consistent pattern).

Half Moon Bay generally encourages designers to align First- Second-Floor windows to "achieve Vertical Symmetry" along the facades of new homes (see: City of HMB Single-Family Residential Design Guidelines at page 26). However, in this instance, the strict application of the Daylight Planes results in an asymmetrical front elevation, since the windows and doorways cannot be aligned.

4. January 12, 2021 Hearing, introducing Plan B to the Planning Commission.

Accordingly, we submitted our third plan, Plan B, in which we raised the roof by two feet to increase the ceiling height, and otherwise make the second story "liveable." Again, that Variance was recommended by your Architectural Advisory Committee. The Planning Staff submitted both Plan A and Plan B to the Commission and both were discussed at the January 12, 2021 Hearing. This commission did not seem satisfied with Plan B. The neighborhood and commission were concerned about the following issues: (1) the height of the home; (2) the possibility of it becoming a Short-Term Rental; (3) the size of the deck; and (4) the available storage space. The Commission also seemed confused as to why two (2) plans were presented. We advised the Commission that we would work on the design to incorporate the raised concerns, and submit a new "Plan C."

5. We are now submitting Plan C.

Plan C incorporates the concerns of the Planning Commission and Neighborhood, retains the best bits of Plans A & Plan B, and permits us to have a Second Story that is both "liveable" and symmetrical, as discussed below.

A. The Home could not be designed to be One-Story, since the narrow configuration of the lot would result in a Junior One-Bedroom plan with a tiny bedroom, which would be way out of character for the neighborhood.

At the January 12, 2021 Hearing, one Commissioner asked whether the property could be developed as a one-story home with one bedroom, but given the lot's unique configuration and size it would not be functional. At its Hearing on September 17, 2020, the Architectural Advisory Committee pointed out that it "...did not advocate for one-story house because the site is too small" (see: Meeting Summary Notes of the HMB AAC dated September 17, 2020 at page 2). After all, the First Floor Living Area is about 753 square feet; but most of the useable square footage is located at the front (or Southern portion) of the lot, which is 23.35' wide (the lot narrows down to 10.5' wide at its Northern end). As Sue Taylor points out, given the side yard set-backs, walls and sheetrock, the interior wall is only 7' 6" wide at its Southern end, and the wall slants inwards towards the back. As a consequence of its unique size and configuration, the size of the tiny bedroom on the first floor is about 95 square feet, or not large enough for a queen-sized bed with end tables. Simply put, the size of the Secondary Bedroom would only be suitable in a "Junior One Bedroom Apartment," would have virtually no storage space, and would not fit in with the neighborhood. A Two-Bedroom home would allow for many more lifestyles - for example a small family, empty nesters / young professional couple, etc. which would fit-into and complement the neighborhood, and provide needed housing.

B. The Roof Line has been lowered about two (2) feet, in response to the concerns from The De La Torre Family and this Commission.

Many of the neighborhood objections came from our eastern neighbor, Nick De La Torre, his sister, his fiancée, his fiancée's sister, his grandfather and three of their adjoining neighbors. At the hearing, one member of the De La Torre Family ultimately advised the Planning Commission that the proposed home was blocking their views because of the "...extra two feet for the raised roof" (see: Public Comment #11, Laura Laurenzano, at page 3). Consequently, we lowered the roof line two feet to remove the De La Torre Family's main objection.

The Commissioners enjoyed the fact that Plan A looked like a One-Story Home, but enjoyed the symmetry shown in Plan B. The new "Plan C" is not only symmetrical but also retains the look of a One-Story Home. In particular, our new Plan C is more symmetrical than Plan A and has a lower roof than Plan B. It is only 21' 3" tall (or 1.25 feet taller than a One-Story Home), and intrudes into only one side of the Front Daylight Plane by only 7.25 inches.

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C. We sent Flyers to the Neighbors inviting them to discuss these revisions, but we did not get a single response.

Finally, this Commission asked whether we could enter into discussion with the neighbors to discuss their concerns to benefit the project. Consequently, on March 8, 2021, we mailed Flyers depicting Plan C that showed how we addressed the neighborhood's concerns, to everyone who had appeared at the prior meeting, or delivered comments to the Commission, and/or signed off on the De La Torre Family's Petition. We did not receive a single response.

D. We Reduced the size of the Deck by Twenty-Five (25%) Percent in Plan C in response to the concerns of this Commission and the Neighborhood.

The size of the deck has been difficult to grapple with, given the various comments we have received throughout the past 2.25 years. A nice deck is important, since the inside living area of the home is minimalized due to the unique size and configuration of the property. The First Plan included a grand roof deck, which was not supported by the AAC, because they said it constituted a "Third Story Element," which they deemed inappropriate. We replaced it with what we and the Planning Staff considered a "more modest second story deck." However, the neighbors believed this deck was too large (we believe that it merely appeared larger than it actually was, because the home is so small). Nevertheless, we down-sized the deck again, and it is now 75% of the size shown in Plan B, and is co-terminus with the structure.

E. We have added (and subtracted), a Storage Shed to Plan C at the rear of the property, and then made multiple re-revisions to Plan A with updated elevations, per the instructions of your Planning Department.

On May 11, 2021, we first submitted Plan C to the HMB Planning Department. We were advised that our plans were incomplete, in that they failed to take into account multiple concerns of the Planning Commission and the Arleta Park neighborhood. For example, we were directed to design a "Tuff Storage Shed" in the backyard, and to label all "storage areas" that were available in Plan C (e.g., closets had to be labeled a "storage area," in order to show the neighborhood that we had taken their concerns to heart). After designing the Tuff Storage Shed into Plan C, the Planning Department recognized that it could not work, since the Tuff Storage Shed was ten (10) feet wide, which would encroach into the side yard setback and require a variance (again, the Northern boundary of the lot is 10.5 feet wide). Accordingly, we were instructed to remove the Tuff Storage Shed, which we did.

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Although we wish to present Plan C, the Planning Department has required us to "update" Plan A to reflect various revisions that have been made, following the hearing of January 12, 2021. Consequently, we shortened the deck in Plan A, revised the windows, storage and shed dormers, marked closets as "Storage Areas" and created an entirely new set of elevations for Plan A. At this juncture, we believe the plans are impossible to improve upon.

For all of the above reasons, we hope you grant this application and approve Plan C. We appreciate your consideration.

Thank you,

A handwritten signature in cursive script that reads "John T. Callan".

John T. Callan



5-10-21

VIA Email
Half Moon Bay Planning Commission
City of Half Moon Bay
501 Main Street
Half Moon Bay, CA 94019

RE: PDP-19-096 Coastal Development Permit
341 Myrtle Street, Half Moon Bay, CA (APN: 064-061-280)
Resubmittal after 1-12-21 Planning Commission Meeting

Dear Chairman Benjamin and Honorable Members of the Planning Commission,

As promised, due to the **Height** concerns, I revised the elevations to offer a Plan "C" to lower the roof from 23'-1/4" to 21'-3", and in lieu of the higher ridge, continued the shed roof through the master bathroom and closet in order to provide the headroom necessary to better enjoy the property. If we strictly followed the daylight plan, as was shown in our version "A", the front would not be symmetrical. This leaves the need for an 7'-1/2" daylight variance on one side only. So, for "C" we lowered the roof almost 2' while keeping the house symmetrical. Doing this it looks more like a one-story house while also being symmetrical. With this the house is still at least 6'-9" below the maximum height limit.

A question was asked if the house could have been done as a one-story structure. This would be very difficult to provide the space needed for a Bedroom. The maximum living space is at the front of the property in which the **exterior** dimensions for the structure is 13'10" wide and then the structure angles to the back. The best and only place for a bedroom/bath and kitchen/living area is at the front of the property. As you move to the rear, past this area the house quickly becomes narrow and down to 8'-6" measured at the rear **exterior**. For the actual dimensions of the **interior**, one needs to take out another 12" for walls and sheetrock.

Avoiding the Maximum Building Envelope variance is almost impossible on this severely substandard lot given the daylight plane lines cross themselves at 6'-6" below the maximum height limit. If the plane lines were brought together at the 28-foot level this structure would be well within the daylight plane. In spite of this, I designed the house to fit within the lines after the first Architectural Design Review, but that did not create the most desirable result for the front view of the house. Thus, why we are asking for this daylight plane variance. The allowance will result in a more desirable architectural treatment of the building, will not result in more square footage or more coverage and will only create a stronger and more appealing visual character of the area than if the maximum building height standard were complied with.

The majority of the second story is at the front within the space mentioned above which holds a master bedroom, small closet and bathroom. Beyond that the walls are shorter, and follow the daylight planes, which works over the stairs and where the height is not as critical (see section D on page 8 of the plan set). This upstairs lower roof is over the stairs and hall that lead to a deck which becomes one story under the deck. For the first story, beyond the kitchen the space is just big enough for a laundry room, a bathroom and substandard bedroom which

will more likely be used for a den or office. To make this into only a one-story house will minimize the use of the largest space on the property, the front.

As desired, we broke the plane of the wall for the shed dormers.

We feel that allowing the daylight plane variance will result in a more desirable architectural, proportional, and symmetrical treatment of the building, specially creating a more appealing visual front of the building while also contributing to the necessity to enjoy the property.

After the Planning Commission Hearing, we also addressed concerns we heard from the Staff and Residents as following:

The Deck: Many people were concerned with the size of the deck. Actually, this is where the house transitions to be one story. We could have continued to follow the roof line as the daylight plane goes back, but we chose to put in a deck instead in order to lower the height of the house and to also be able to enjoy the space given the limited yard. Beyond that we did hear the concerns of the residents and staff so we reduced the size of the deck from 224 to 174 by adding a roof over the 1st floor porch. To show the neighbors that were concerned with having a view of the back of the deck, I added an elevation view of what the back of the porch would look like, which is 40' away from the rear property line and now has a roof at the rear. On another note, the beginning of the second floor is 69' from the rear property line. We felt this was less invasive than 2 stories over the entire first floor. The east side of the deck has been sided.

Air B&B: There is no intention to use residence as an Air B&B. It is a tiny house intended to be used as a single-family home. Air B&B's are an issue for the City to address by ordinance for all residents and not something that only targets a single resident. A government agency may not require a person to surrender constitutional rights in exchange for discretionary benefits. I would encourage the City to implement a B&B ordinance that covers this issue for the entire city.

Windows looking into the house to the West: We found a removable, decorative, privacy film that will be added to the two windows facing the neighbor to the west. (Picture below). The upstairs bathroom window on the west side will also be frosted. Most of the windows for the bedrooms are at the rear and front of the house. There are 2 small high windows upstairs for the Master Bedroom on the east and one regular window on the west side in order to have one window that looks out to the Ocean. Skylights in the roof and windows downstairs are used for the rest of the house in order to bring in natural light.

Parking: We have put in a parking space in front where it is common for the neighbors to be parked. There will also be a space along the street to park in front of the landscaped area of the front yard. If we put in two spaces on the front yard there will be no space for landscaping. We will go with what the Commission decides for this since I heard both options discussed by different Commissioners.

Storage: We added a storage shed in the backyard. Storage can be placed in the new roof created over the first-floor porch and, if allowed to keep the headroom over the Master Closet, that will also give us more storage space. There is also storage space in the laundry, kitchen, downstairs bedroom/den and in the second story area along the hallway to the outside deck. Update: After submitting this to the Planning Department we removed the shed due to setbacks.

Design: I have worked very hard to create a structure that is compatible with the neighborhood while considering the constraints. The peak is now below the peak of the 2-story house to the East.

Input: John Callan sent out a flier to the neighbors to show them the changes made and to ask for any comments which was done immediately following the updates to the structure.

No more floor area is being created than could have been achieved without this exception. In fact, in this request to encroach into the daylight plane on just one side of the front in order to create a balanced and more appealing front view we have chosen to not take advantage of the allowable square footage, allowable balcony extending into the front or rear setbacks, allowable lot coverage, allowable height, allowable larger deck or allowable below the house space.

We are asking for this variance which will not be contrary to the intent of this title, nor to the public interest, safety, health and welfare, where due to special considerations or exceptional characteristics of the property (being a severely sub-standard lot), a literal enforcement of this title would result in practical difficulties or unnecessary hardship.

I've also included a comparison of the 3 designs to assist the Commission to visualize what was changed from A & B and submitted an update of all the previous submittals.

Respectfully,

Sue Taylor

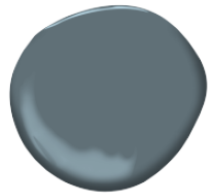
“Old English” window privacy film by Artscape 36”x72”



Roofing: Owen Corning;
Oakridge Onyx Black



Siding
Blue Spruce



Trim
Foggy Morning



Antler Brown



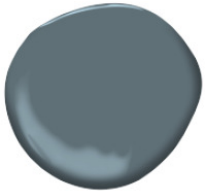
Callan Rendering - C



Roofing: Owen Corning:
Oakridge Onyx Black



Siding
Blue Spruce



Trim
Foggy Morning



Antler Brown





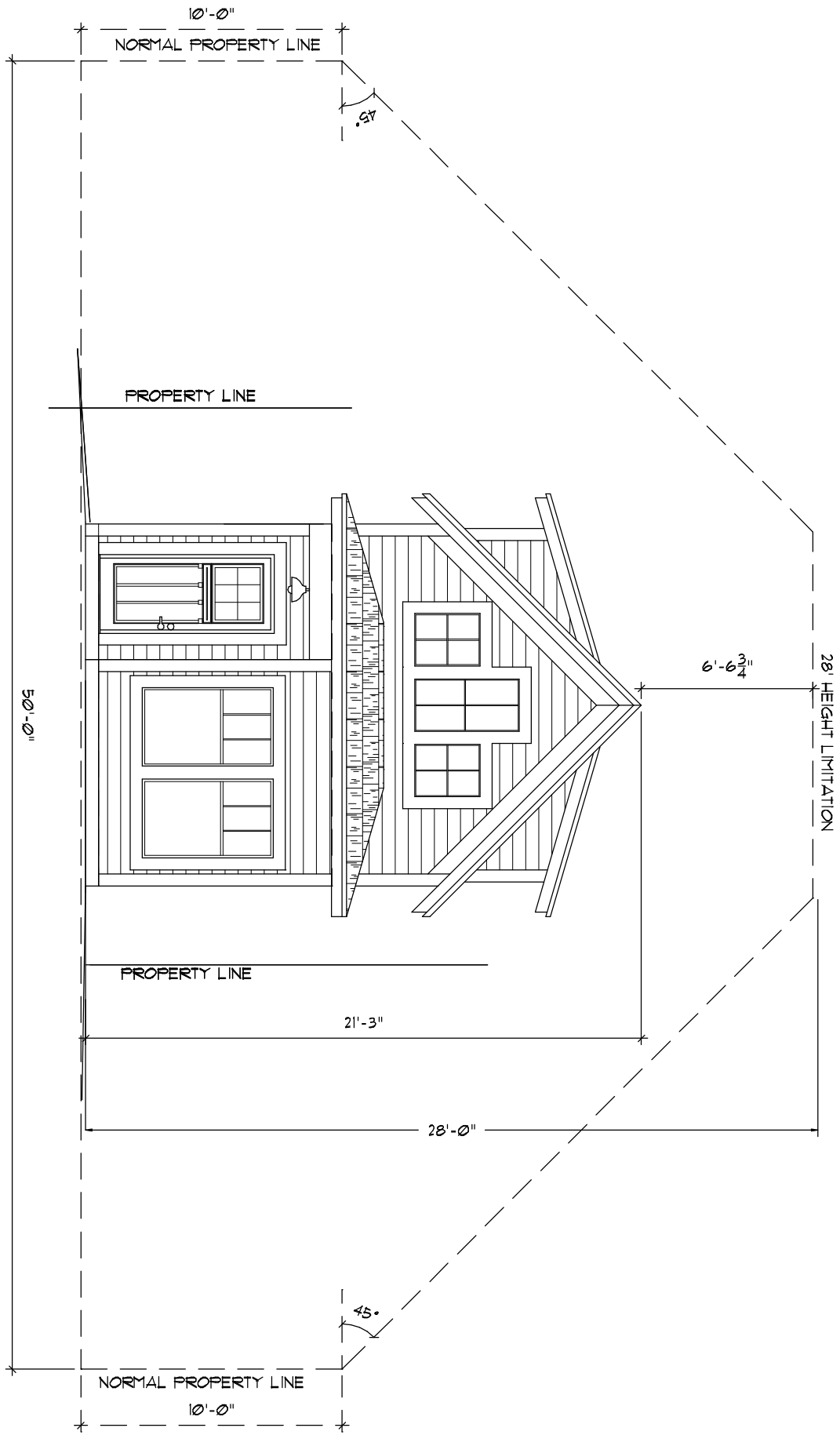
A



B



C











Date: August 24, 2021
To: Honorable Chair and Planning Commissioners
From: Jill Ekas, Community Development Director
Subject: Courtesy Notification of Director's approval of Coastal Development Permit Exemptions

The Local Coastal Program requires that the Community Development Director provide notification regarding coastal development permit exemptions to the Coastal Commission within thirty days of granting.

Zoning Ordinance 18.20.030.D. Record of Exemptions. The community development director shall maintain a record of all permits issued for development within the coastal zone that were exempted from the requirements of the coastal development permit process. This record shall be available for review by members of the public. The record of exemption shall include the name of the applicant, the location of the project, and a brief description of the project. The community development director shall also provide notification to the Coastal Commission of the record of exemption within thirty days.

In addition to notifying the Coastal Commission, the Director is notifying the Planning Commission as a courtesy regarding two recently granted exemptions due to their high visibility and public interest. The exemptions are attached and include the following:

- Caltrans Highway Pedestrian Crossing Improvements
- City Beach Volleyball Pilot



NOTICE OF EXEMPTION COASTAL DEVELOPMENT PERMIT

TO: Lindsay Vivian
CalTrans District 4
111 Grand Ave. MS:8B
Oakland, CA 94612

FROM: City of Half Moon Bay
Planning Division
501 Main Street
Half Moon Bay, CA 94019

PROJECT TITLE: (PDP-21-055) Caltrans Highway 1 and 92 Pedestrian Crossing Improvements

PROJECT LOCATION – SPECIFIC: Seven (7) signalized intersection locations along Highway 1 and Highway 92 throughout city limits. From north to south: Highway 1 & Ruisseau Francais Ave; Highway 1 & Main Street; Highway 1 & Highway 92; Highway 92 & Main Street; Highway 1 & Kelly Avenue; Highway 1 & Fairway Drive; and Highway 1 & Miramontes Point Road.


DESCRIPTION OF NATURE, PURPOSE, AND BENEFICIARIES OF PROJECT: The proposed project includes installation of Accessible Pedestrian Signal (APS) systems and countdown pedestrian signals (CPS) systems and refreshing crosswalks with high-visibility striping for the purpose of improving pedestrian safety. Existing crosswalk markings will be removed and replaced with thermoplastic crosswalk markings with enhanced wet-night visibility consisting of a uniform layer of thermoplastic and 2 layers of glass beads. No pavement rehabilitation work is anticipated for this project. Work requiring lane closures will be done during low peak hours; work done at the Highway 1 & Kelly Avenue intersection will avoid school hours and weekends; and work done at the Highway 92 & Main Street intersection will avoid daytime hours. Work is anticipated to occur between July 2022 and September 2023 and will provide sufficient traffic control and safety measures. This roadway maintenance project will neither temporarily nor permanently affect any environmentally sensitive habitat areas or scenic resources.

CEQA STATUS: Categorically Exempt from CEQA pursuant to California Code of Regulations section 15301, which exempts the repair, maintenance, and minor alteration of existing public or private facilities involving negligible or no expansion of the facility.

REASONS WHY PROJECT IS EXEMPT FROM A COASTAL DEVELOPMENT PERMIT: Section 18.20.030 (C)(2)(a) of the Half Moon Bay Zoning Code/Implementation Plan of the Local Coastal Program specifically exempts repair and maintenance projects necessary for ongoing operations of an existing facility which does not expand the footprint, floor area, height, or bulk of an existing facility.

CONTACT PERSON: Brittney Cozzolino, Associate Planner
CONTACT NUMBER: (650) 750-2014


Jill Ekas, Community Development Director


Date

Attachments: Approved Plans

PROJECT DESCRIPTION

The purpose is to enhance pedestrian safety. The project is needed because existing crosswalks on State routes lack either pedestrian safety devices or current devices are outdated, thereby increasing the potential for pedestrian-related accidents particularly for people with disabilities.

This project is located on various State Routes (SR) and various post miles in San Mateo County (See Attachment A). Office of Traffic Safety has identified 206 locations in the county where existing signalized intersections and ramps need crosswalk safety enhancements.

This project proposes to install Accessible Pedestrian Signal (APS) systems and countdown pedestrian signals (CPS) systems and refresh crosswalks with high-visibility striping at 206 signalized intersections with pedestrian crossings on ten state routes in San Mateo County. Proposed locations are in the cities of Belmont, Colma, Daly City, Burlingame, Half Moon Bay, Menlo Park, Millbrae, Pacifica, Redwood City, San Bruno, San Carlos, San Mateo, South San Francisco, Woodside, and various San Mateo County areas. A project location map is included in Attachment A.

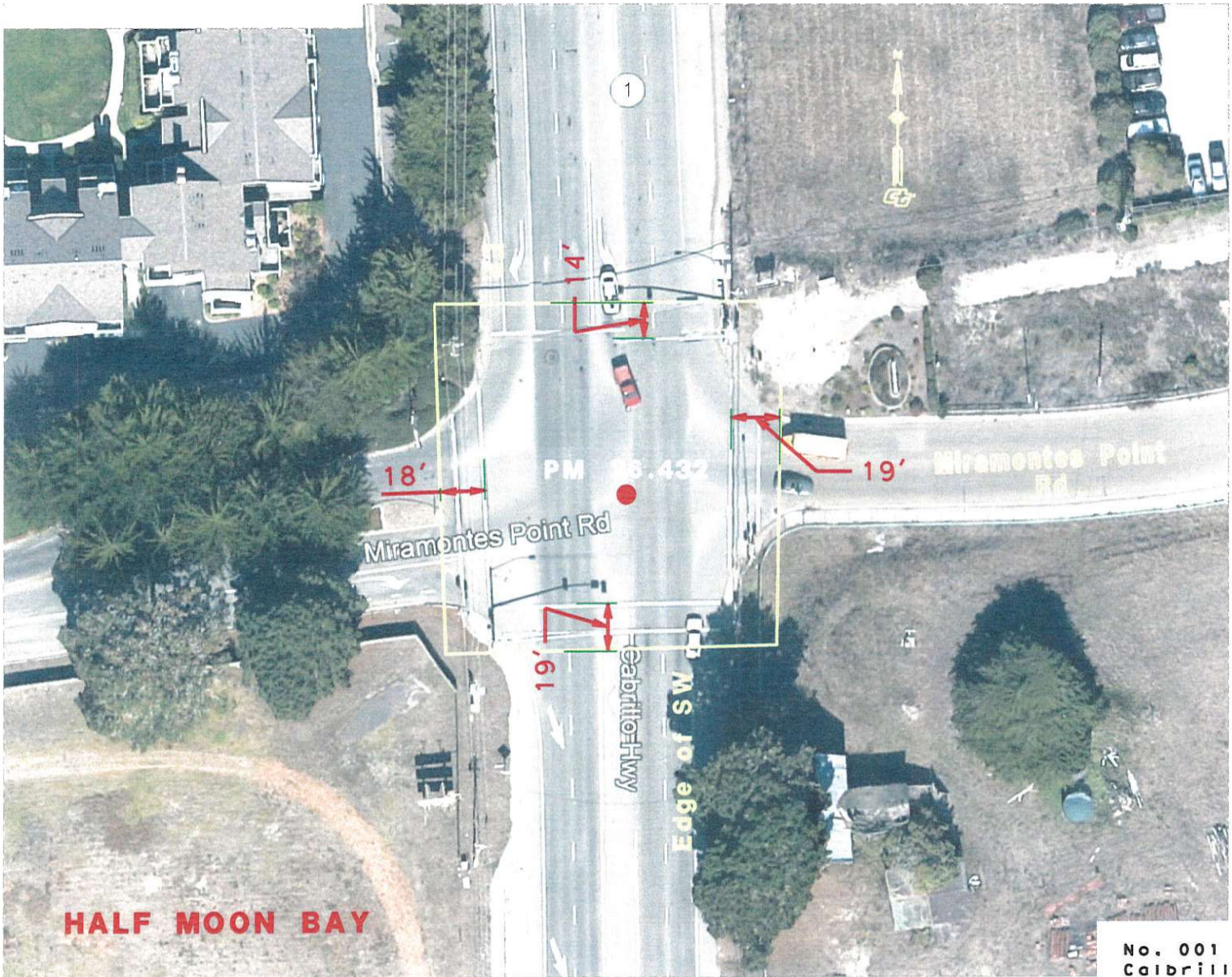
Accessible pedestrian signals (APS) - APS will be installed on Push Button Assembly Posts. This is typically integrated into the pedestrian detector (pushbutton) so the audible tones and/or messages come from the pushbutton housing and have a pushbutton locator tone and tactile arrow. The Posts will be placed in the holes and backfilled to the completed ground surface with Cast-in-Drilled-Pile foundation. For Push Button Assembly Post, backfill material must be minor concrete. Surplus excavated material will be disposed of uniformly.

Countdown pedestrian signals (CPS) - In order to enhance the effectiveness of pedestrian signals at clearing the crosswalk before a signal changes direction, CPS with change interval countdown display are proposed. These signals inform pedestrians of the number of seconds remaining in the pedestrian change interval and reduce the number of pedestrians caught in the crosswalk at end of cycle. For wide streets, countdown displays will assist all users, especially older pedestrians and/or persons with mobility disabilities. CPS will be installed on existing street light poles

Crosswalk marking - Remove existing markings and replace with thermoplastic crosswalk markings with enhanced wet-night visibility consisting of a uniform layer of thermoplastic and 2 layers of glass beads. No pavement rehabilitation work is anticipated for this project.

All this work will be done using shoulders, existing sidewalk, or standard lane closures.

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
 FUNCTIONAL SUPERVISOR
 CALCULATED-DESIGNED BY
 CHECKED BY
 REVISED BY
 DATE REVISED



Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SM	Var	VAR		

REGISTERED CIVIL ENGINEER DATE _____
 PLANS APPROVAL DATE _____

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Environmental Foot Print

EP - Edge of Pavement
 SW - Side Walk

Scope of Work

- * X-Walks Restripe
- * Update push buttons and countdowns

Note

- * No ADA Curb Ramp
- * No Railroad involved
- * Scope of work is under Caltrans Right of Way
- * Trenching and Digging work will be done 5'-10' behind sidewalks

No Scale

No. 001 PM. 26.432
 Calbrillo Hwy (Rte 1)
 & Miramontes Point

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Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
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 EXP. _____
 CIVIL
 STATE OF CALIFORNIA

Environmental Foot Print

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 SW - Side Walk

Scope of Work

- * X-Walks Restripe
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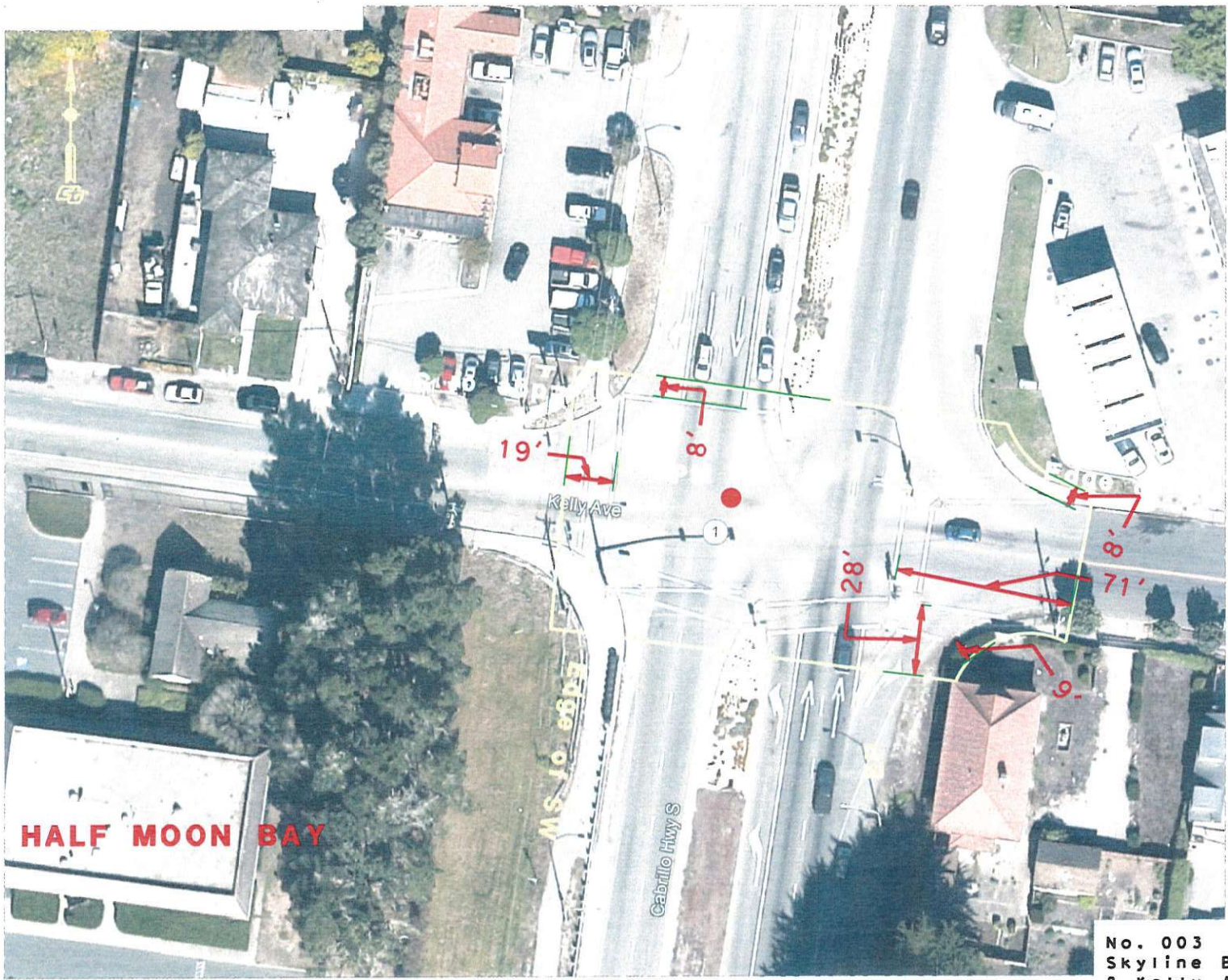
Note

- * No ADA Curb Ramp
- * No Railroad involved
- * Scope of work is under Caltrans Right of Way
- * Trenching and Digging work will be done 5'-10' behind sidewalks

No Scale

No. 002 PM. 26.667
 Cabrillo Hwy (Rte 1)
 & Fairway Dr

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
 FUNCTIONAL SUPERVISOR
 CALCULATED-DESIGNED BY
 CHECKED BY
 REVISED BY
 DATE REVISED



Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
04	SM	Var	VAR		

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REGISTERED PROFESSIONAL ENGINEER
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 Exp. _____
 CIVIL
 STATE OF CALIFORNIA

Environmental Foot Print

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Scope of Work

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- * Update push buttons and countdowns

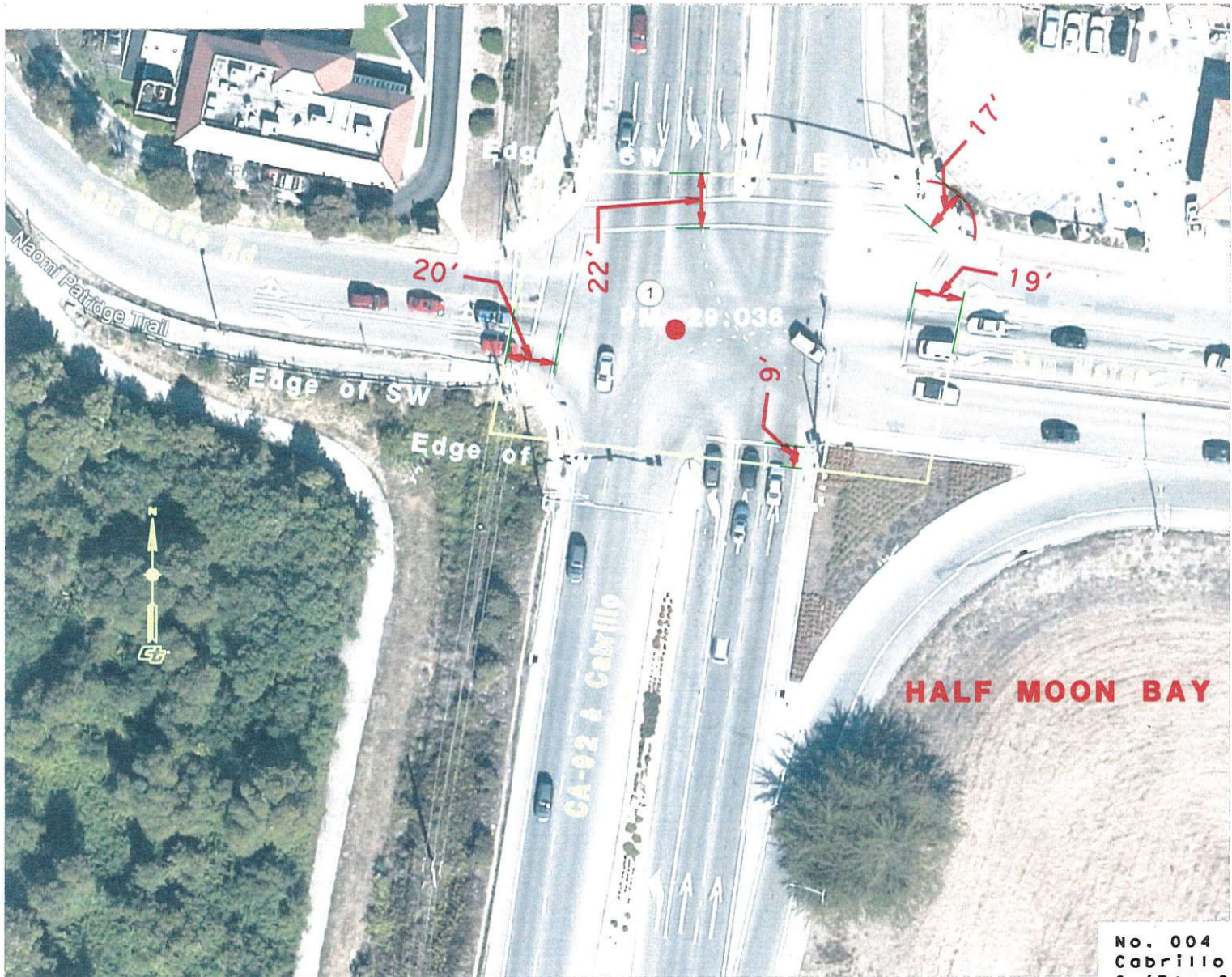
Note

- * No ADA Curb Ramp
- * No Railroad involved
- * Scope of work is under Caltrans Right of Way
- * Trenching and Digging work will be done 5'-10' behind sidewalks

No Scale

**No. 003 PM. 28.750
 Skyline Blvd (Rte 1)
 & Kelly Ave**

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Caltrans
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 REVISED BY
 DATE REVISED



No. 004 PM. 29.036
 Cabrillo Hwy (Rte 1)
 & (Rte 92)

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
04	SM	Var	VAR		

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Environmental Foot Print

EP - Edge of Pavement
 SW - Side Walk

Scope of Work

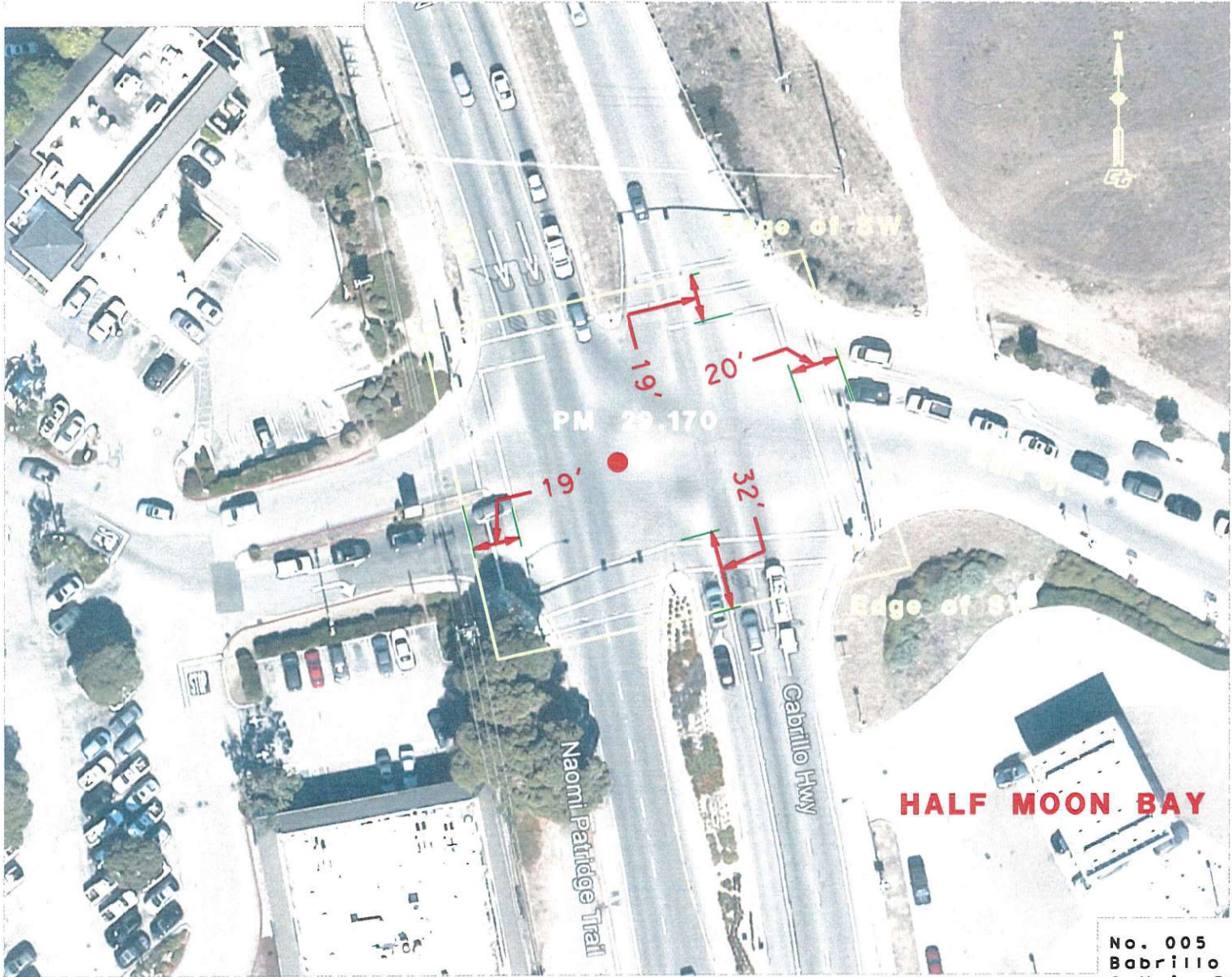
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No Scale

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
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 REVISOR BY
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Environmental Foot Print

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 SW - Side Walk

Scope of Work

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- * Update push buttons and countdowns

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No Scale

**No. 005 PM. 29.170
 Babrillo Hwy (Rte 1)
 & Main St.**

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 DATE REVISOR



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 CIVIL
 STATE OF CALIFORNIA

Environmental Foot Print

- EP - Edge of Pavement
- SW - Side Walk

Scope of Work

- * X-Walks Restripe
- * Update push buttons and countdowns

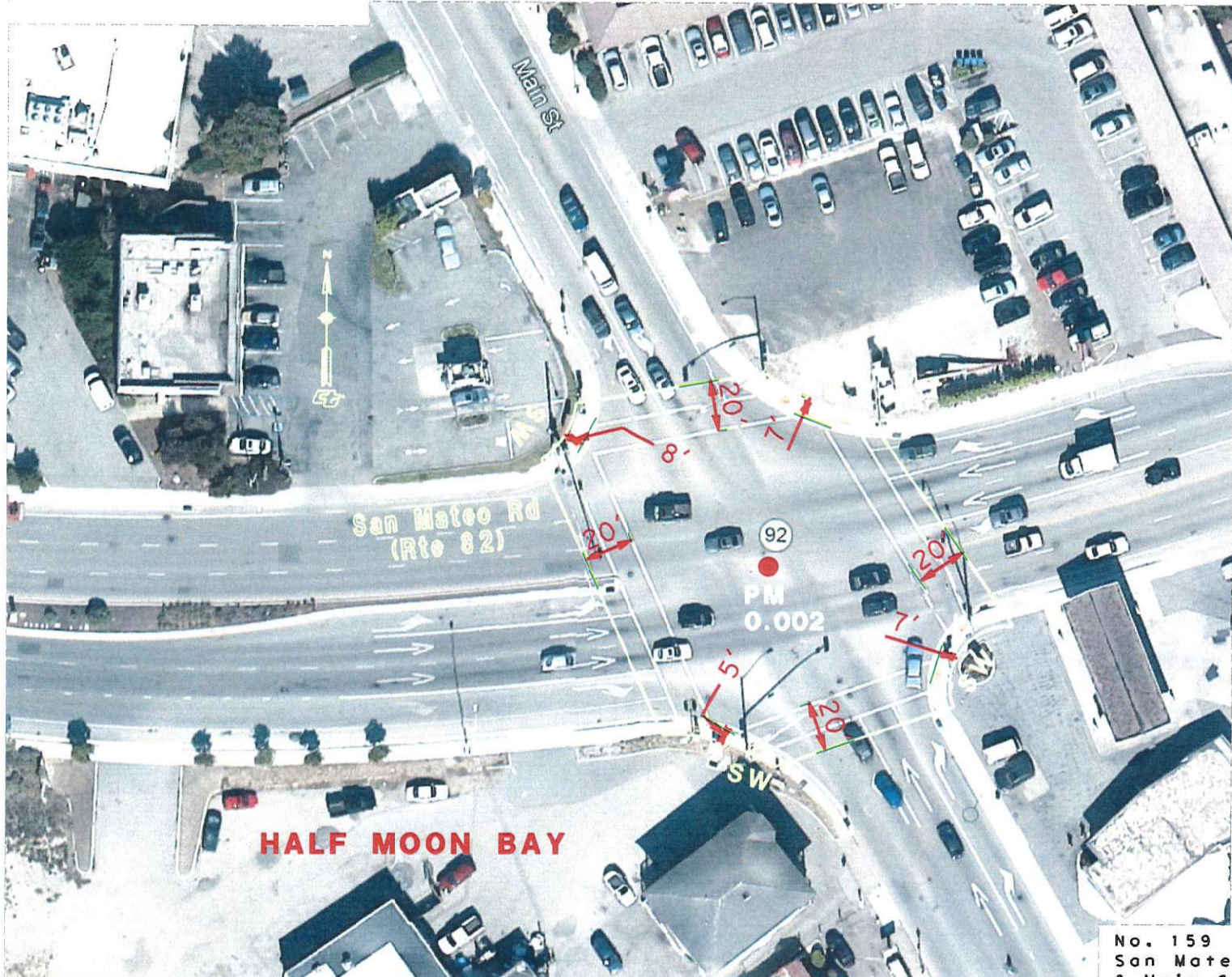
Note

- * No ADA Curb Ramp
- * No Railroad involved
- * Scope of work is under Caltrans Right of Way
- * Trenching and Digging work will be done 5'-10' behind sidewalks

No Scale

No. 006 PM. 30.337
 Cabrillo Hwy (Rte 1)
 & Russeau Francais Ave

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
 FUNCTIONAL SUPERVISOR
 CALCULATED-DESIGNED BY
 CHECKED BY
 REVISED BY
 DATE REVISED



No. 159 PM. 0.002
 San Mateo Rd (Rte 92)
 & Main St

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SM	Var	VAR		

REGISTERED CIVIL ENGINEER DATE _____

PLANS APPROVAL DATE _____

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

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NOTICE OF EXEMPTION COASTAL DEVELOPMENT PERMIT

TO: Matthew Chidester, Deputy City Manager
City of Half Moon Bay
501 Main Street
Half Moon Bay, CA 94019

FROM: City of Half Moon Bay
Planning Division
501 Main Street
Half Moon Bay, CA 94019

PROJECT TITLE: (PDP-21-060) City of Half Moon Bay Beach Volleyball Pilot

PROJECT LOCATION – SPECIFIC: City-owned Poplar Beach area below APN 056-093-210, just south of Kelly Avenue, Half Moon Bay CA 94019

DESCRIPTION OF NATURE, PURPOSE, AND BENEFICIARIES OF PROJECT: The proposed project is a 90-day pilot for beach volleyball, led by the City of Half Moon Bay Recreation Department in partnership with the Half Moon Bay Beach Volleyball Club and Redrock Volleyball Club. The pilot entails installation of three (3) beach volleyball courts adjacent to the bluffs at the north end of Poplar Beach, with each court consisting of two 14' tall redwood posts to hold removable nets and a staked boundary encompassing a 52.5' by 16.25' court area. The courts are intended for use by the partner volleyball clubs on weekday afternoons and weekend mornings, and will be available to the public on a first-come first-served basis when not in use by the clubs. Signage will be installed at the site and information will be posted on the City's website about court usage, parking and access options, and pack-it-in/pack-it-out trash and recycling practices. The courts are sited and designed to maintain public access to and along the beach and avoid visual and biological resource impacts. No coastal resource or public coastal access impacts are anticipated. The pilot will end by November 18, 2021 and any continuation of the pilot will require separate permit review.

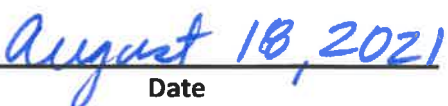
CEQA STATUS: Categorically Exempt from CEQA pursuant to California Code of Regulations section 15304, which exempts the minor temporary use of land having negligible or no permanent effects on the environment.

REASONS WHY PROJECT IS EXEMPT FROM A COASTAL DEVELOPMENT PERMIT: Section 18.20.030 (C)(5) of the Half Moon Bay Zoning Code/Implementation Plan of the Local Coastal Program and Section 30610 of the California Coastal Act specifically exempt temporary events, except for those that meet all of three defined criteria. The proposed use and duration qualify as a temporary event, and the pilot does not meet all three criteria.

CONTACT PERSON: Brittney Cozzolino, Associate Planner

CONTACT NUMBER: (650) 750-2014


Jill Ekas, Community Development Director


Date

Attachments: Approved Plans

City of Half Moon Bay
Poplar Beach Volleyball Courts
Summer/Fall 2021 Pilot

The City of Half Moon Bay, in collaboration with the HMB Beach Volleyball club and Redrock Volleyball Club, proposes a ninety-day pilot program, to erect three beach volleyball courts at Poplar Beach, which is owned and operated by the City.

Each court would be approximately 52.5' x 26.25', with two 14' x 6" x 6" untreated redwood posts approximately 3' outside of the court along the centerline (see diagram below). The redwood posts will be buried in the sand approximately 4' below the surface. Each post will have a powder coated steel mounting bracket attached to the top inside edge with three stainless steel bolts screwed directly into the post. The mounting brackets will allow for easy installation and removal of nets at varying heights for different ages and abilities. The outline of the court will be created using 2" webbing and 5" stakes.

During this pilot, the courts will be installed at the north end of Poplar Beach, near the west end of Kelly Avenue, adjacent to the bluffs. This will keep the courts clear of the commercial horse rides along Poplar, which access the beach south of this location, shelter the courts from some winds, and leave the access to the water clear of volleyball activities.

The courts will be installed on or after August 21, 2021, and will be removed on or before November 18, 2021.

Parking and access to the Courts will be through three locations:

- State Beach vertical access points to the north (club members and coaches purchase annual passes from State Parks to use the parking, restrooms and vertical access; other users will be encouraged to do the same)
- The "Slot" vertical access from the Coastal Trail just south of the courts, for those who utilize public street parking or the Coastal Trail near Kelly Avenue and the Alsace Lorraine neighborhood
- The main vertical access at the end of Poplar Street, for those who utilize the Poplar Beach Park lot or public street parking near the Arleta Park neighborhood.

Information about the courts, including parking and access options, will be posted on the City's website and shared via social media and other distribution channels.

During this pilot, the Courts will be used on an intermittent basis, with priority to the partner clubs on weekday afternoons and weekend mornings, with public access on a first come first served basis on weekend afternoons. Signage will be posted at the courts indicating the public availability of the courts on a first-come, first-served basis, other beach and court rules, directions to vertical access points, and pack-it-in, pack-it-out language for trash and recycling.

During the pilot, club and City staff will observe the impacts of court usage, including parking, access, blufftop and vegetation impacts due to observation and access, trash and other impacts on the beach, cooperation between the clubs, public, and other users, and parking. Within 30 days of completion of the pilot, the City will host a meeting with staff, club representatives, the Parks and Recreation Commission volleyball subcommittee, and State Parks to discuss the impacts of the pilot, positives and negatives of the use, and changes or other mitigating measures that should be implemented if the use continues in the future, under a new permit.



