Mitigated Negative Declaration

494A Carpenteria Road Minor Subdivision

County of San Benito

July 12, 2024

Prepared by

EMC Planning Group

MITIGATED NEGATIVE DECLARATION

494A CARPENTERIA ROAD MINOR SUBDIVISION

PREPARED FOR

County of San Benito

Jonathan Olivas, MUP, Associate Planner

2301 Technology Parkway

Hollister, CA 95203

Tel 831.902.9857

jolivas@cosb.us

PREPARED BY

EMC Planning Group Inc.

601 Abrego Street

Monterey, CA 93940

Tel 831.649.1799

Fax 831.649.8399

Teri Wissler Adam, Senior Principal

wissler@emcplanning.com

www.emcplanning.com

July 2024

MITIGATED NEGATIVE DECLARATION

In Compliance with the California Environmental Quality Act (CEQA)

Project Name	494A Carpenteria Road Minor Subdivision San Benito County File PLN220033
Lead Agency	County of San Benito
Project Proponent	Maria Salazar Segovia 347 Carmel Avenue, Space 56 Marina, CA 93933
Project Location	494A Carpenteria Road, Aromas, CA 95004 Unincorporated San Benito County
Project Description	The proposed project includes a minor subdivision of the five-acre property into two 2.5-acre lots and the construction of a single-family residence. The property contains one existing single-family residence, which will remain on one lot and a new residence will be constructed on the second lot.
Public Review Period	Begins – July 15, 2024 Ends – August 13, 2024
Written Comments To	Jonathan Olivas, MUP, Associate Planner County of San Benito Planning 2301 Technology Pkwy, Hollister, CA 95023
Proposed Findings	The County of San Benito is the custodian of the documents and other material that constitute the record of proceedings upon which this decision is based. The initial study indicates that the proposed project has the potential to result in significant adverse environmental impacts. However, the mitigation measures identified in the initial study would reduce the impacts to a less than significant level. There is no substantial evidence, in light of the whole record before the lead agency, County of San Benito, that the project, with mitigation measures incorporated, may have a significant effect on the environment. See the following project-specific mitigation measures:

Mitigation Measures

Air Quality

AQ-1 If the project would result in soil disturbance of 2.2 acres or more per day, to reduce dust emissions from tree removal, grading, and construction activities on the project site, the following language shall be included in all grading and construction plans for the project prior to issuance of demolition or grading permits:

Dust control measures shall be employed to reduce visible dust leaving the project site. The following measures or equally effective substitute measures shall be used:

a. Use recycled water to add moisture to the areas of disturbed soils twice a day, every day, to prevent visible dust from being blown by the wind;

b. Apply chemical soil stabilizers or dust suppressants on disturbed soils that will not be actively graded for a period of four or more consecutive days;

c. Apply non-toxic binders and/or hydro seed disturbed soils where grading is completed, but on which more than four days will pass prior to paving, foundation construction, or placement of other permanent cover;

d. Cover or otherwise stabilize stockpiles that will not be actively used for a period of four or more consecutive days, or water at least twice daily as necessary to prevent visible dust leaving the site, using raw or recycled water when feasible;

e. Maintain at least two feet of freeboard and cover all trucks hauling dirt, sand, or loose materials;

f. Install wheel washers at all construction site exit points, and sweep streets if visible soil material is carried onto paved surfaces;

g. Stop grading, and earth moving if winds exceed 15 miles per hour;

h. Pave roads, driveways, and parking areas at the earliest point feasible within the construction schedule;

i. Post a publicly visible sign with the telephone number and person to contact regarding dust complaints. This person shall respond and take corrective action within 48 hours of receiving the complaint. The phone number of the Monterey Bay Air Resources District shall also be visible to ensure compliance with Rule 402 (Nuisance); and

j. Limit the area under construction at any one time.

Biological Resources

BIO-1 California tiger salamander and California red-legged frog have been recorded in proximity to the project site, however suitable habitat for either species is considered limited within the site. One of the following options shall be implemented to reduce potential impacts to California tiger salamander and California red-legged frog:

Option 1. Assume Presence of California Red-Legged Frog and Obtain Incidental Take Authorization

If the presence of California red-legged frog and/or California tiger salamander is assumed on the project site, the project applicant shall obtain Incidental Take Permit(s) from the U.S. Fish and Wildlife Service and the California Department of Fish and Wildlife. The project applicant, with oversight by San Benito County Resource Management Agency, shall implement all avoidance, minimization, and compensatory mitigation measures required in the permit(s) to minimize the potential for "take" of California red-legged frog and/or California tiger salamander.

Option 2. Pre-Construction Surveys and Biological Monitoring for Protected Amphibians

Due to the small impact area, marginal habitat, and low probability of occurrence of California red-legged frog and/or California tiger salamander, the project applicant may choose to conduct construction surveys and biological monitoring instead of assuming presence and obtaining Incidental Take Permit(s). However, if California red-legged frog or California tiger salamander is found at any point during surveys or project activities, the project applicant would need to proceed with obtaining the permits in Option 1, prior to any grading or construction activities.

1. A qualified biologist shall conduct preconstruction surveys for California red-legged frog and California tiger salamander no more than two weeks (14 days) prior to the start of construction activities. The project site shall be surveyed for potential migratory and/or upland activity. The qualified biologist shall prepare a report documenting the results of the preconstruction surveys for submittal to the San Benito County Resource Management Agency prior to ground disturbance.

2. A qualified biologist shall conduct biological construction monitoring for California tiger salamander and California red-legged frog during ground-disturbing activities. Before the start of work each day, a biologist or their designee shall check for wildlife under any equipment such as vehicles and stored pipes within active construction zones. A biologist or their designee shall also check all excavated steep-walled holes or trenches greater than one foot deep for trapped animals. If California tiger salamander or California red-legged frog is observed within an active construction zone, a biologist shall be notified immediately and all work shall be halted and all equipment turned off. Work may not proceed until consultation with the U.S. Fish and Wildlife and/or the California Department of Fish and Wildlife has been completed.

3. If California red-legged frog and/or California tiger salamander is observed within the project area, work shall cease and Incidental Take Permit(s) (Option 1) shall be obtained before work can resume. Work shall re-commence only when authorized by the U.S. Fish and Wildlife and California Department of Fish and Wildlife. The project applicant, with oversight by San Benito County Resource Management Agency, shall implement all avoidance, minimization, and compensatory mitigation measures required in the permit(s).

BIO-2 Prior to ground disturbance, the project applicant shall hire a qualified biologist to conduct a training session for all construction personnel. At a minimum, the training shall include a description of special-status species potentially occurring in the project vicinity, including, but not limited to, California tiger salamander, California red-legged frog, special-status bats, and nesting birds and raptors. Their habitats, general measures that are being implemented to conserve species as they relate to the project, and the boundaries within which construction activities shall occur shall be explained. Informational handouts with photographs clearly illustrating the species' appearances shall be used in the training session. All new construction personnel shall undergo this mandatory environmental awareness training.

The qualified biologist shall provide documented evidence of completion of this training to San Benito County Resource Management Agency prior to ground disturbance.

BIO-3 The following measures shall be implemented to avoid loss of or harm to special-status bat species:

1. Approximately 14 days prior to tree removal or any construction activities, a qualified biologist shall conduct a habitat assessment for bats and potential roosting sites in trees or buildings within 50 feet of the construction easement. These surveys shall include a visual inspection of potential roosting features (bats need not be present) and a search for presence of guano within the project site, construction access routes, and 50 feet around these areas. Cavities, crevices, exfoliating bark, and bark fissures that could provide suitable potential nest or roost habitat for bats shall be surveyed. Assumptions can be made on what species is present due to observed visual characteristics along with habitat use, or the bats can be identified to the species level with the use of a bat echolocation detector such as an "Anabat" unit. Potential roosting features found during the survey shall be flagged or marked.

2. If no roosting sites or bats are found, a letter report shall be prepared by the biologist and submitted to San Benito County Resource Management Agency, where it shall be kept on file, and no further measures are required.

3. If bats or roosting sites are found, bats shall not be disturbed without specific notice to and consultation with California Department of Fish and Wildlife.

4. The nursery season is typically from May 1 to October 1. If bats are found roosting outside of the nursery season, California Department of Fish and Wildlife shall be consulted prior to any eviction or other action. If avoidance or postponement is not feasible, a Bat Eviction Plan shall be submitted to California Department of Fish and Wildlife for written approval prior to project implementation. A request to evict bats from a roost includes details for excluding bats from the roost site and monitoring to ensure that all bats have exited the roost prior to the start of activity and are unable to re-enter the roost until activity is completed. Any bat eviction shall be timed to avoid lactation and young-rearing. If bats are found roosting during the nursery season, they shall be monitored to determine if the roost site is a maternal roost. This could occur by either visual inspection of the roost bat pups, if possible, or by monitoring the roost after the adults leave for the night to listen for bat pups. Because bat pups cannot leave the roost until they are mature enough, eviction of a maternal roost cannot occur during the nursery season. Therefore, if a maternal roost is present, a 50-foot buffer zone (or different size if determined in consultation with the California Department of Fish and Wildlife) shall be established around the roosting site within which no construction activities including tree removal or structure disturbance shall occur until after the nursery season.

BIO-4 To avoid impacts to nesting birds during the nesting season (January 15 through September 15), tree removal and all construction activities should be conducted between September 16 and January 14, which is outside of the bird nesting season. If construction or project-related work is scheduled during the nesting season (February 15 to August 30 for small bird species such as passerines; January 15 to September 15 for owls; and February 15 to September 15 for other raptors), a qualified biologist shall conduct nesting bird surveys.

1. Two surveys for active bird nests shall occur within 14 days prior to start of construction, with the final survey conducted within 48 hours prior to construction. Appropriate minimum survey radii surrounding each work area are typically 250 feet for passerines, 500 feet for smaller raptors, and 1,000 feet for larger raptors. Surveys shall be conducted at the appropriate times of day to observe nesting activities. Locations off the site to which access is not available may be surveyed from within the site or from public areas. If no nesting birds are found, a letter report confirming absence shall be prepared and submitted to San Benito County Resource Management Agency and no further mitigation is required.

2. If the qualified biologist documents active nests within the project site or in nearby surrounding areas, an appropriate buffer between each nest and active construction shall be established. The buffer shall be clearly marked and maintained until the young have fledged and are foraging independently. Prior to construction, the qualified biologist shall conduct baseline monitoring of each nest to characterize "normal" bird behavior and establish a buffer distance, which allows the birds to exhibit normal behavior. The qualified biologist shall monitor the nesting birds daily during

construction activities and increase the buffer if birds show signs of unusual or distressed behavior (e.g., defensive flights and vocalizations, standing up from a brooding position, and/or flying away from the nest). If buffer establishment is not possible, the qualified biologist or construction foreman shall have the authority to cease all construction work in the area until the young have fledged and the nest is no longer active. Once the absence of nesting birds has been confirmed, a letter report shall be prepared and submitted to San Benito County Resource Management Agency.

BIO-5 Grading activities within 50-foot buffers (measured horizontally) from the drainage along Carpenteria Road shall be avoided. Prior to issuance of a grading permit, grading plans shall show the 50-foot buffer with a notation that no disturbance, including storing construction equipment, is allowed within this area.

BIO-6 If improvements to the driveway over the drainage channel become necessary, the improvements shall be designed to minimize impacts to the drainage to the extent feasible. Prior to ground disturbance and issuance of a grading permit, the extent of potential wetlands and waterways regulated by the United States Army Corps of Engineers (USACE), Regional Water Quality Control Board (RWQCB), and California Department of Fish and Wildlife (CDFW) should be determined (wetland delineation report), and regulatory agency consultations should occur.

1. If impacts to a federally jurisdictional feature may occur as a result of the project, a Clean Water Act Section 404 Nationwide Permit (NWP) may be appropriate. If the proposed activity would not otherwise qualify for a NWP, the applicant should proceed with obtaining an Individual Permit from the USACE. For either permit, a formal wetland delineation report should first be submitted to the USACE for a jurisdictional determination.

2. If wetlands or waters of the State are present, the applicant should coordinate with the RWQCB to obtain a Clean Water Act Section 401 Water Quality Certification. If impacts to wetlands, riparian areas, or streams are identified, the applicant should coordinate with the CDFW to obtain a Streambed Alteration Agreement.

Cultural Resources

CR-1 The following language shall be added to all project plans associated with tree removal, grading, and construction.

"Per the San Benito County Code of Ordinance Chapter 19.05, if archaeological resources are discovered during construction, then work shall be halted within 200 feet of the find until a qualified professional archaeologist can evaluate it. If the find is determined to be significant, then appropriate mitigation measures shall be formulated and implemented."

CR-2 The following language shall be added to all project plans associate with tree removal, grading, and construction.

"If human remains are encountered during construction, the county coroner shall be notified immediately. The San Benito County Code of Ordinances Chapter 19.05 and Section 7050.5 of the California Health and Safety Code require that construction or excavation be stopped in the vicinity of discovered human remains until the coroner can determine whether the remains are those of a Native American. A qualified archaeologist shall also be contacted immediately. If the county coroner determines that the remains are Native American, the coroner shall then contact the Native American Heritage Commission (NAHC), pursuant to Section 7050.5(c) of the California Health and Safety Code (see Section 1.2 Regulatory Setting).

The county coordinator of Indian Affairs shall also be contacted. There will be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie human remains until the county coroner has determined that no investigation of the cause of death is required; and, if the remains are of Native American origin.

The NAHC shall identify a Native American most likely descendant to make a recommendation with regards to appropriate treatment of human remains within 24 hours after being notified by the commission.

If the NAHC fails to make a recommendation, the descendants of the deceased Native Americans shall make a recommendation to the landowner or the person responsible for the excavation work for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in the Public Resources Code Section 5097.98.

According to the California Health and Safety Code, six or more human burials at one location constitutes a cemetery (Sec. 8100), and disturbance of Native American cemeteries is a felony (Sec. 7052)."

Geology and Soils

GEO-1 The applicant shall include the recommendations presented in the Geotechnical Investigation Design Phase Proposed Residential Construction 494A Carpenteria Road, Aromas, San Benito County, California by Butano Geotechnical Engineering Inc. in the project plans, and the recommendations shall be implemented during construction of the project.

GEO-2 Prior to issuance of a grading permit, the applicant shall prepare an erosion control plan indicating proposed methods for the control of runoff, erosion, and sediment control, subject to review and approval by the County Resources Management Agency. The erosion control plan shall be implemented during construction.

GEO-3 Due to the possibility that buried paleontological resources might be discovered during construction, the following language shall be included on all construction documents and on any permits issued for the project site, including, but not limited to, grading and building permits associated with proposed project:

"If paleontological resources are unexpectedly discovered during construction, work shall be halted immediately within 50 meters (160 feet) of the find, and the Planning Department notified, until it can be evaluated by a qualified professional paleontologist. If the find is determined to be significant, an appropriate resource recovery shall be formulated, with the concurrence of the San Benito County, and implemented."

Hydrology and Water Quality

HYD-1 Prior to issuance of a grading permit, the applicant shall prepare a drainage plan that complies with the San Benito County Best Management Practices and standards established for compliance with non-point discharge emissions for storm water. The drainage plan shall incorporate Low Impact Development strategies and Best Management Practices to reduce storm water runoff, encourage infiltration, and reduce pollutant transmission. The drainage plan shall be subject to review and approval by County Resource Management Agency, and be implemented with development of the project.

Noise

N-1 To reduce construction-related noise, the applicant shall include the following measures in the project plans:

a. Operation of construction equipment shall be limited to the hours of 7:00 a.m. and 6:00 p.m. on weekdays and 8:00 a.m. and 5:00 p.m. on Saturdays. No construction shall be allowed on Sundays or federal holidays;

b. All internal combustion engine-driven equipment shall be equipped with mufflers;

c. All stationary noise-generating equipment, such as air compressors and portable power generators, shall be located as far away as possible from adjacent land uses;

d. Staging areas and construction material areas shall be located as far away as possible from adjacent land uses;

e. Unnecessary idling of internal combusting engines shall be prohibited; and

f. The days and hours of construction, as well as, the name and phone number of a designated representative to be contacted for noise-related concerns, should be posted at the perimeter of the project site.

INITIAL STUDY

494A CARPENTERIA ROAD MINOR SUBDIVISION

PREPARED FOR

County of San Benito

Jonathan Olivas, MUP, Associate Planner

2301 Technology Parkway

Hollister, CA 95203

Tel 831.902.9857

jolivas@cosb.us

PREPARED BY

EMC Planning Group Inc.

601 Abrego Street

Monterey, CA 93940

Tel 831.649.1799

Fax 831.649.8399

Teri Wissler Adam, Senior Principal

wissler@emcplanning.com

www.emcplanning.com

July 12, 2024

TABLE OF CONTENTS

Appendices

Figures

A. BACKGROUND

Project Title	494A Carpenteria Road Minor Subdivision San Benito County File PLN220033
Lead Agency Contact Person and Phone Number	County of San Benito Jonathan Olivas, MUP, Associate Planner (831) 902-9857
Date Prepared	July 2024
Study Prepared by	EMC Planning Group Inc. 601 Abrego Street Monterey, CA 93940
Project Location	494A Carpenteria Road, Aromas, CA 95004 Unincorporated San Benito County
Project Sponsor Name and Address	Maria Salazar Segovia 347 Carmel Avenue, Space 56 Marina, CA 93933
General Plan Designation	Rural Transitional (RT)
Zoning	Rural Transitional (RT)

Setting

The five-acre project site is located at 494A Carpenteria Road, in unincorporated San Benito County approximately seven miles southeast of the City of Watsonville and approximately six miles northwest of the City of San Juan Bautista. The project site has a *San Benito County 2035 General Plan* land use designation of Rural Transitional (RT). The Rural Transitional (RT) designation allows rural development as a transition between rural and urban areas at a maximum density of one dwelling unit per two-and-half acres. The project site is zoned Rural Transitional (RT), which permits residential uses.

The project site is comprised of one parcel: Assessor's parcel number 011-210-095. Existing use on the project site includes a single-family residence. The project site slopes to the west (less than 30 percent grade). Woodlands cover most of the site and a channelized drainage runs north-south near Carpenteria Road. The site is surrounded by residences to the east, south, and west, with the Aromas Tri-County Fire Protection District fire station to the north. The project site and its surrounding uses are all within the California Department of Forestry and Fire very high and high fire hazard severity zones for state responsibility areas. Access to the project site, including the existing residence, is provided by an existing driveway connecting the project site to Carpenteria Road.

Figure 1, Location Map, presents the regional and vicinity location of the project site. Figure 2, Aerial Photograph, presents an aerial view of the project site and immediate surroundings. Figure 3, Site Photographs, presents photographs taken at the project site in January 2024, and Figure 4, Surrounding Uses, presents photographs taken of existing uses in the immediate vicinity of the project site.

Description of Project

Minor Subdivision

The proposed project includes a minor subdivision of the five-acre property into two 2.5-acre lots and the construction of a single-family residence. The property contains one existing single-family residence, which will remain on one lot and a new residence will be constructed on the second lot. Figure 5, Parcel Map, presents the property boundaries. Figure 6, Tentative Parcel Map, presents the proposed subdivision of parcels and indicates the location of the existing house located on parcel 1 and the proposed house located on parcel 2. See Appendix A for the vesting tentative map and site and grading plans.

As required by Chapter 23.15, Dedications, Reservations and Development Fees, of the San Benito County Code, the project may be required to design and implement public road improvements along the property frontage along Carpenteria Road, which is in Monterey County. The Aromas Water District currently serves the existing residence and will also serve the proposed new residence. The existing residence uses a septic system for sewage disposal and the proposed new residence will use a proposed new septic system.

Access and Circulation

Vehicular access to the project site from Carpenteria Road will be provided by the existing driveway. The proposed project includes removal and replacement of 150 linear feet of the existing driveway upon entering the property and adding a vertical extension to the proposed single-family residence. The proposed driveway extension will be 16-feet wide and provide a 12-foot-wide turnaround. A retaining wall up to 365 linear feet and varying in height from 1 to 10 feet will be constructed around the proposed single-family residence and driveway extension. The proposed driveway will be designed to adhere to the San Benito County design guidelines and standards and would be subject to approval by the San Benito County Public Works and San Benito County Fire Department.

Grading Permit

The civil plans include a preliminary grading plan (Sheet 2 in Appendix A). The preliminary grading plan indicates the earthwork quantities required for development of the proposed project as follows: total cut is 500 cubic yards, total fill is 580 cubic yards, and shrinkage is 80 cubic yards, resulting in a net export of zero cubic yards.

Tree Removal

The proposed project includes removal of 16 trees on the project site, including 14 oak trees and two pine trees. The proposed project does not include a landscaping plan or tree replacement plan.

Other Public Agencies Whose Approval is Required

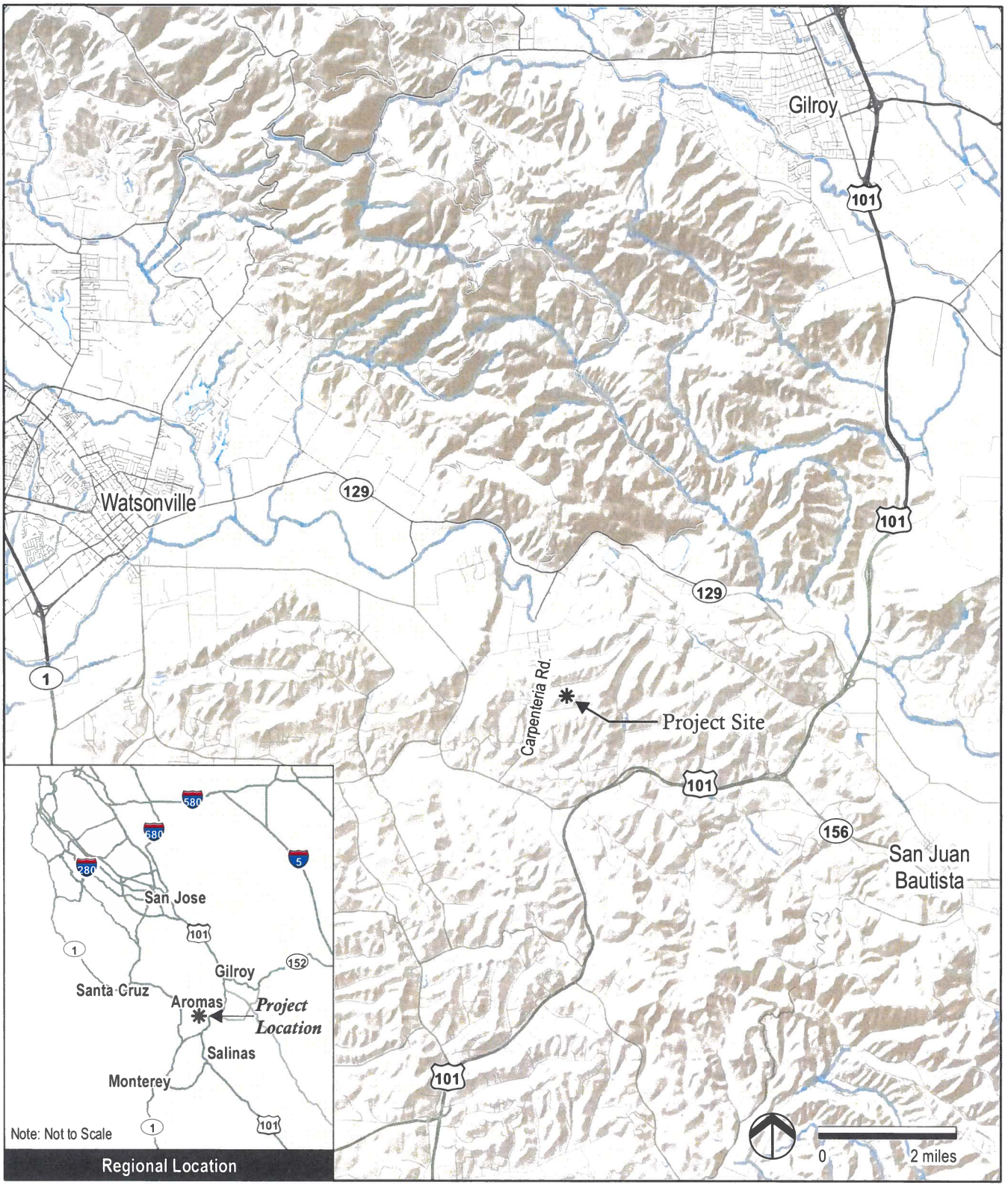
California Department of Fish and Wildlife
California Department of Forestry and Fire Protection
County of San Benito Resource Management Agency

Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?

No California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1.

Note: Conducting consultation early in the CEQA process allows tribal governments, lead agencies, and project proponents to discuss the level of environmental review, identify and address potential adverse impacts to tribal cultural resources, and reduce the potential for delay and conflict in the environmental review process. (See Public Resources Code section 21080.3.2.) Information may also be available from the California Native American Heritage Commission's Sacred Lands File per Public Resources Code section 5097.96 and the California Historical Resources Information System administered by the California Office of Historic Preservation. Please also note that Public Resources Code section 21082.3(c) contains provisions specific to confidentiality.

This side intentionally left blank.



Source: ESRI 2024

Figure 1

Location Map

Carpenteria Road Minor Subdivision Initial Study

This side intentionally left blank.

0 950 feet

Project Boundary

Source: San Benito County GIS 2024, Google Earth 2024

Figure 2

Aerial Map

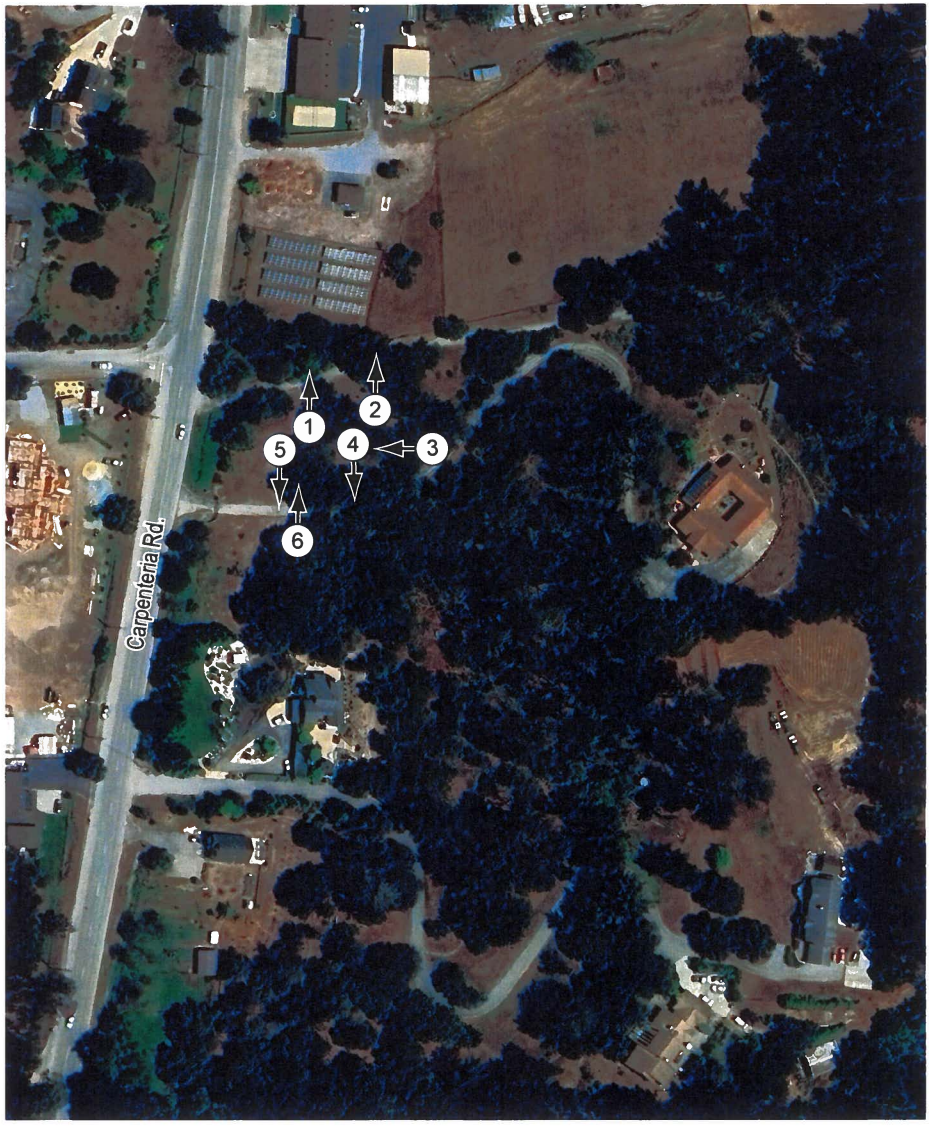
Carpenteria Road Minor Subdivision Initial Study

This side intentionally left blank.

(1) View looking north from within project site.

(2) View looking north from within project build site.

(3) View looking west into project build site.



Source: Google Earth 2024
Photographs: EMC Planning Group 2024

(4) View looking south in project build area.

(5) View looking south in project build area.

(6) View looking north of proposed driveway extension.

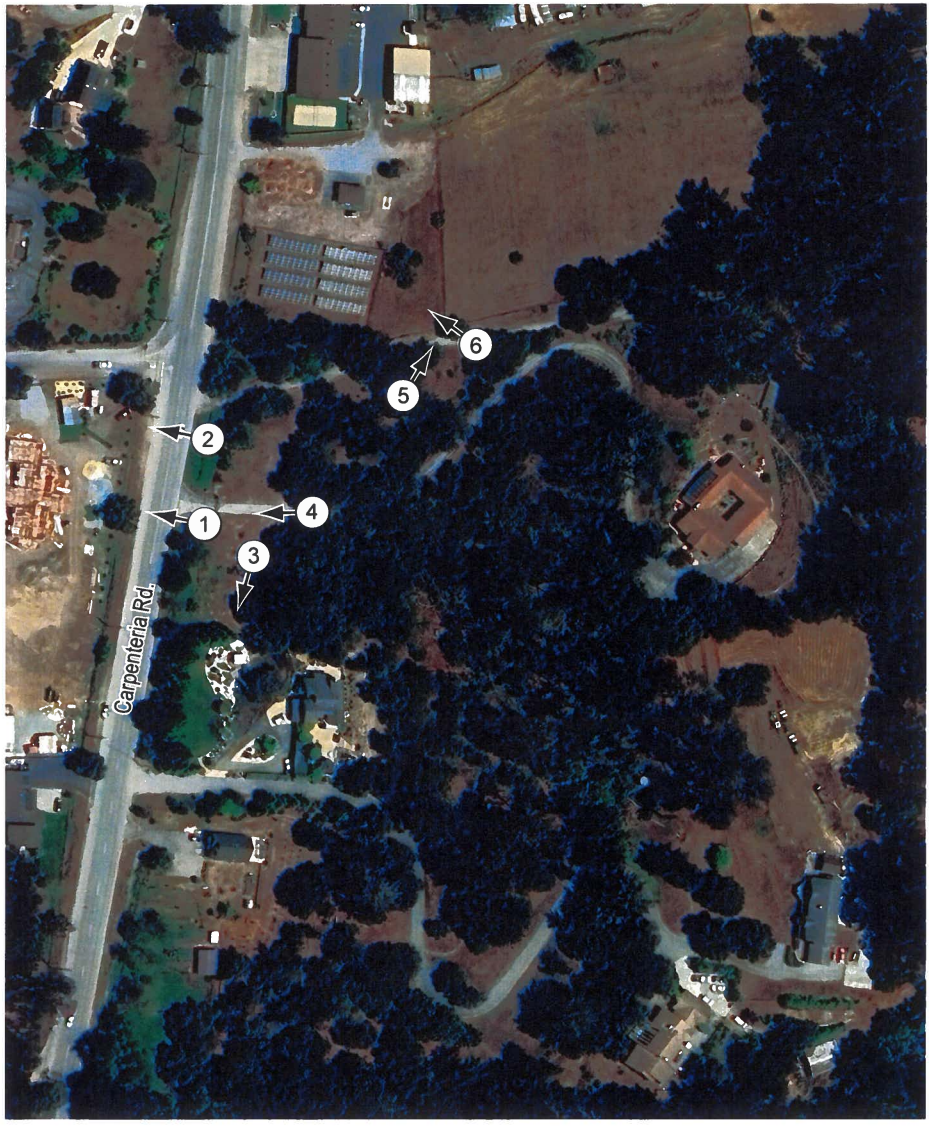
Figure 3
Site Photographs

This side intentionally left blank.

① View of Carpenteria Road to the west of the project site.

② View of adjacent uses northwest of project site.

③ View of single-family residence to the southwest of project site.



Source: Google Earth 2024
Photographs: EMC Planning Group 2024

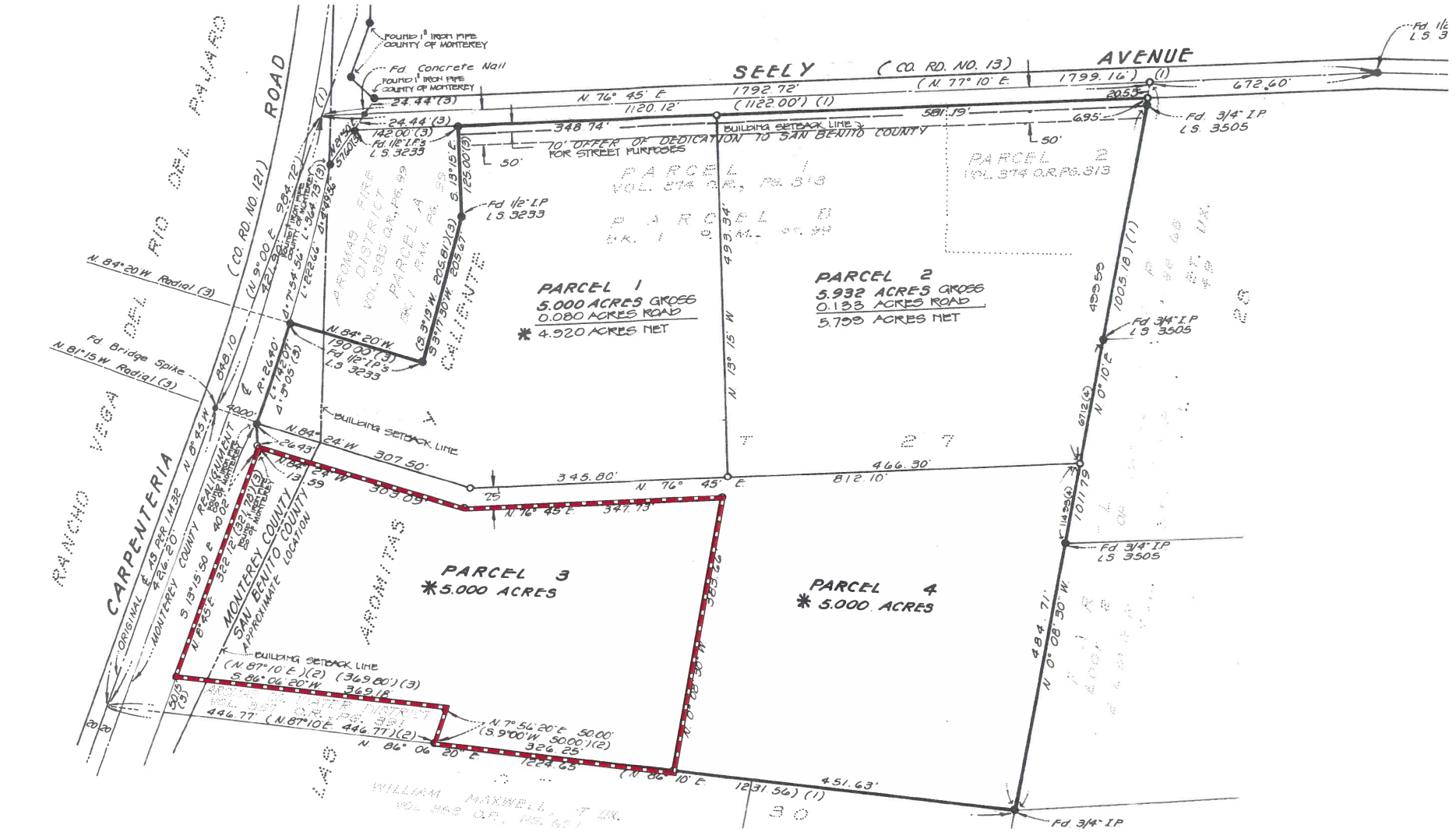
④ View of existing driveway on north boundary of project site looking west.

⑤ View of grassland parcel to the northeast of project site.

⑥ View of solar array to the northwest.

Figure 4
Surrounding Uses

This side intentionally left blank.

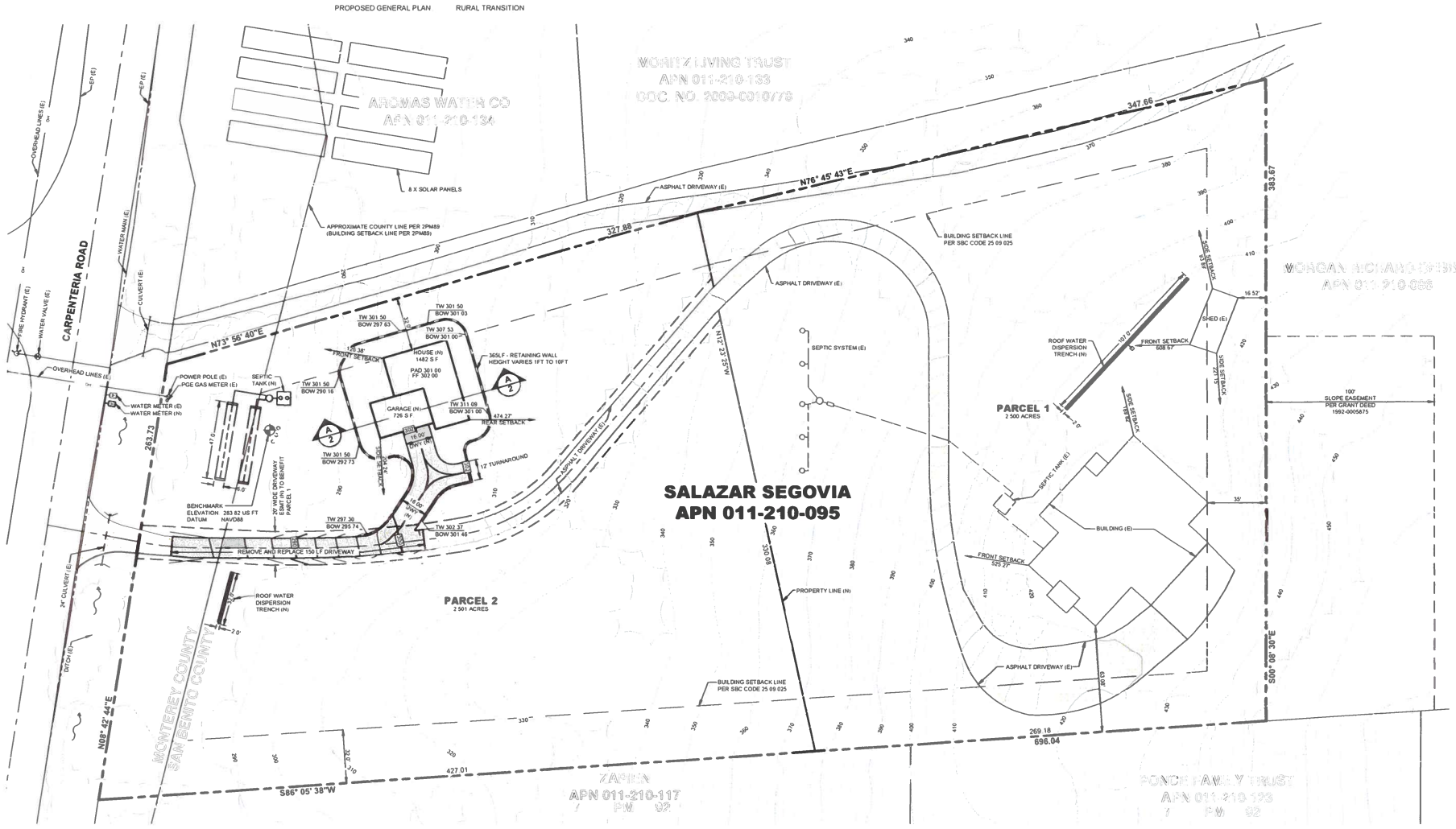


Source: San Benito County Assessors Office 1975

Figure 5

Parcel Map

This side intentionally left blank.



0 80 feet

Source: Kelley Engineering & Surveying 2022

Figure 6

Tentative Parcel Map

Carpenteria Road Minor Subdivision Initial Study

E M C

This side intentionally left blank.

B. Environmental Factors Potentially Affected

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

- ☐ Aesthetics
- ☐ Agriculture and Forestry Resources
- ☐ Air Quality
- ☐ Biological Resources
- ☐ Cultural Resources
- ☐ Energy
- ☐ Geology/Soils
- ☐ Greenhouse Gas Emissions
- ☐ Hazards & Hazardous Materials
- ☐ Hydrology/Water Quality
- ☐ Land Use/Planning
- ☐ Mineral Resources
- ☐ Noise
- ☐ Population/Housing
- ☐ Public Services
- ☐ Recreation
- ☐ Transportation
- ☐ Tribal Cultural Resources
- ☐ Utilities/Service Systems
- ☐ Wildfire
- ☐ Mandatory Findings of Significance

C. DETERMINATION

On the basis of this initial evaluation:

☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☒ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (1) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (2) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Jonathan Olivas, MUP, Associate Planner — Date 7/12/24

D. Evaluation of Environmental Impacts

Notes

1. All answers take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
2. Once it has been determined that a particular physical impact may occur, then the checklist answers indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.
3. "Negative Declaration: Less-Than-Significant Impact with Mitigation Measures Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less-Than-Significant Impact." The lead agency must describe the mitigation measures and briefly explain how they reduce the effect to a less-than-significant level (mitigation measures from section XVII, "Earlier Analyses," may be cross-referenced).
4. Earlier analyses are used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. [Section 15063(c)(3)(D)] In this case, a brief discussion would identify the following:
    a. "Earlier Analysis Used" identifies and states where such document is available for review.
    b. "Impact Adequately Addressed" identifies which effects from the checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and states whether such effects were addressed by mitigation measures based on the earlier analysis.
    c. "Mitigation Measures"—For effects that are "Less-Than-Significant Impact with Mitigation Measures Incorporated," mitigation measures are described which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
5. Checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances, etc.) are incorporated. Each reference to a previously prepared or outside document, where appropriate, includes a reference to the page or pages where the statement is substantiated.
6. "Supporting Information Sources"—A source list is attached, and other sources used or individuals contacted are cited in the discussion.
7. The explanation of each issue identifies:
    a. The significance criteria or threshold, if any, used to evaluate each question; and
    b. The mitigation measure identified, if any to reduce the impact to less than significant.

1. AESTHETICS

Except as provided in Public Resources Code Section 21099 (Modernization of Transportation Analysis for Transit-Oriented Infill Projects), would the project:

		Potentially Significant Impact	Less-than-Significant Impact with Mitigation Measures Incorporated	Less-Than-Significant Impact	No Impact
a.	Have a substantial adverse effect on a scenic vista?	☐	☐	☒	☐
b.	Substantially damage scenic resources, including but not limited to trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒
c.	In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage points.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	☐	☒	☐
d.	Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?	☐	☐	☒	☐

Comments:

a. A scenic vista is typically considered a location from which the public can experience unique and exemplary high-quality views of an area. The project area and surrounding land do not contain any County of San Benito General Plan designated scenic vistas. The visual character of the county is defined by views of mountains, undeveloped rangelands, large agricultural fields and croplands, natural ridgelines along the Diablo and Gabilan Ranges, and annual grasslands (general plan, page 8-13). These features are considered local scenic resources. Views of the project site from Carpenteria Road include woodland and hillside, utility poles, fencing, shrubs, and trees in the foreground; homes and solar panels in the middle ground; and the Santa Cruz Mountain range in the background. Views from and of the project site from Carpenteria Road can, therefore, be considered scenic.

On December 5, 1975, the project site was granted a Conservation and Scenic Easement Deed, which imposes restrictions on the use of the property to preserve the natural scenic beauty. The easement allows a maximum of four dwelling units and associated out building and fences. The proposed project would result in two dwelling units on the project site and therefore, is consistent with the restrictions of the deed.

The project site is visible from Carpenteria Road, which is not a County-designated scenic corridor (general plan, page 8-13). The proposed single-family residence would be located approximately 200 feet from the centerline of Carpenteria Road, and although the project would result in the removal of 16 trees, sufficient vegetation will remain to partially shield the house from view.

County Code Section 25.03.004 states that the main building and roof form for all structures within the Rural Transitional (RT) district shall be limited to a maximum of 35 feet in height. The proposed project is required to comply with the abovementioned County Municipal Code section associated with height to ensure that the proposed structure does not have a substantial adverse effect on views of adjacent wooded hillsides. Therefore, because the proposed new home is consistent with the restriction of the deed, will be partially obscured from views on Carpenteria Road, and the home design is required to conform to County standards, development of the proposed project would have a less-than-significant impact on scenic vistas.

b. The project site is not located in the vicinity of a state scenic highway. The project site is located adjacent to Carpenteria Road, which is not officially designated a state scenic highway (general plan, page 8-13). Therefore, the proposed project would not damage scenic resources within a state scenic highway, or when viewed from a state scenic highway.

c. The project site is in a non-urbanized area; however, it is surrounded by rural, residential development. Existing use on the project site includes a single-family residence. Land uses adjacent to the project site include rural residences to the east, south, and west, and the Aromas Tri-County Fire Protection District fire station immediately to the north.

With a general plan designation of Rural Transitional (RT) and a zoning district of Rural Transitional (RT), the project site was anticipated for low density rural residential development to provide a buffer between high density residential development and agricultural areas. Although the development of the proposed project would change the existing visual character of the site, the proposed project would not be inconsistent with existing and proposed adjacent residential uses. Therefore, the visual impact would be less than significant.

d. Development of the project site with a single-family residence would introduce new sources of nighttime lighting at the project site. New light sources would include, but are not limited to, interior building lighting and outdoor property lighting. These new light sources could result in adverse effects to adjacent land uses due to light trespass and glare. Section 25.07.012 of the San Benito County Code regulates outdoor lighting facilities within the county and outlines types of lighting that are acceptable and/or unacceptable. The proposed project is subject to conformance with the development review processes, as outlined in the county's general plan policies. Therefore, light and glare impacts associated with the proposed project would be less than significant.

2. AGRICULTURE AND FOREST RESOURCES

In determining whether impacts on agricultural resources are significant environmental effects and in assessing impacts on agriculture and farmland, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:

		Potentially Significant Impact	Less-than-Significant Impact with Mitigation Measures Incorporated	Less-Than-Significant Impact	No Impact
a.	Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to nonagricultural use?	☐	☐	☐	☒
b.	Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c.	Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☒
d.	Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e.	Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to nonagricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

Comments:

a. The project site is predominantly identified as "Other Land" on the California Department of Conservation's Important Farmland Finder. A small portion of the project site is designated "Urban and Build-Up Land." Therefore, the proposed project would have no impact on prime farmland, unique farmland, or farmland of statewide importance.

b-d. The project site is not under a Williamson Act contract. The project site is zoned Rural Transitional (RT). The project site is not zoned for forestland or timberland uses. There are no forest resources on or adjacent to the project site. Therefore, the proposed project would not conflict with existing zoning for agricultural use, or a Williamson Act contract, conflict with existing zoning for, or cause rezoning of, forest land or timberland, or result in the loss or conversion of forest land to non-forest use.

e. The project site consists of a single-family residence. Land uses adjacent to the project site include rural residences to the east, south, and west, and the Aromas Tri-County Fire Protection District fire station immediately to the north. Since surrounding lands are already developed with non-agricultural uses, the proposed project would not result in any impacts due to conversion of farmland or forest land to nonagricultural use.

3. AIR QUALITY

Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:

		Potentially Significant Impact	Less-than-Significant Impact with Mitigation Measures Incorporated	Less-Than-Significant Impact	No Impact
a.	Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☐	☒
b.	Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard?	☐	☒	☐	☐
c.	Expose sensitive receptors to substantial pollutant concentrations?	☐	☒	☐	☐
d.	Result in other emissions, such as those leading to odors adversely affecting a substantial number of people?	☐	☐	☒	☐

Comments:

a. San Benito County, including the project site, is located in the North Central Coast Air Basin, which is under the jurisdiction of the Monterey Bay Air Resources District (hereinafter "air district"). Regional air districts must prepare air quality plans specifying how state air quality standards will be met. The air district's most recent adopted plan is *2012-2015 Air Quality Management Plan for the Monterey Bay Region* (hereinafter "air quality management plan"). The air district specifies air quality management plan consistency for population-related projects only. The proposed project includes the construction of one single-family residence, which would not result in a significant increase in the population, and thereby would not exceed the population projections of the air quality management plan. Therefore, the proposed project would not conflict with or obstruct implementation of the air quality management plan.

b. The proposed project includes the construction of one single-family residence and therefore, would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard.

Emissions produced during demolition, grading, and construction activities are considered short-term as they occur only during the construction phase of the project. Construction emissions include mobile source exhaust emissions, emissions generated during the application of asphalt paving material and architectural coatings, as well as

emissions of fugitive dust associated with earthmoving equipment. Worst case construction phase emissions typically occur during initial site preparation, including grading and excavation, due to the increased amount of surface disturbance that can generate dust and due to construction equipment emissions with the use of heavier equipment used at this phase.

Air district CEQA Guidelines Table 5-2, Construction Activity with Potentially Significant Impacts, identifies the level of construction activity that could result in significant temporary fugitive dust impacts if not mitigated. Construction activities with grading and excavation that disturb more than 2.2 acres per day and construction activities with minimal earthmoving that disturb more than 8.1 acres per day are assumed to be above the 82 pounds of particulate matter per day threshold of significance. The proposed project includes grading and excavation on the five-acre project site, and may result in soil disturbance that exceeds the air district's threshold of 2.2 acres per day for construction activities with grading and excavation, resulting in a significant impact on air quality. Implementation of the following mitigation measure would reduce this impact to less-than-significant.

Mitigation Measure

AQ-1 If the project would result in soil disturbance of 2.2 acres or more per day, to reduce dust emissions from tree removal, grading, and construction activities on the project site, the following language shall be included in all grading and construction plans for the project prior to issuance of demolition or grading permits:

Dust control measures shall be employed to reduce visible dust leaving the project site. The following measures or equally effective substitute measures shall be used:

a. Use recycled water to add moisture to the areas of disturbed soils twice a day, every day, to prevent visible dust from being blown by the wind;

b. Apply chemical soil stabilizers or dust suppressants on disturbed soils that will not be actively graded for a period of four or more consecutive days;

c. Apply non-toxic binders and/or hydro seed disturbed soils where grading is completed, but on which more than four days will pass prior to paving, foundation construction, or placement of other permanent cover;

d. Cover or otherwise stabilize stockpiles that will not be actively used for a period of four or more consecutive days, or water at least twice daily as necessary to prevent visible dust leaving the site, using raw or recycled water when feasible;

e. Maintain at least two feet of freeboard and cover all trucks hauling dirt, sand, or loose materials;

f. Install wheel washers at all construction site exit points, and sweep streets if visible soil material is carried onto paved surfaces;

g. Stop grading, and earth moving if winds exceed 15 miles per hour;

h. Pave roads, driveways, and parking areas at the earliest point feasible within the construction schedule;

i. Post a publicly visible sign with the telephone number and person to contact regarding dust complaints. This person shall respond and take corrective action within 48 hours of receiving the complaint. The phone number of the Monterey Bay Air Resources District shall also be visible to ensure compliance with Rule 402 (Nuisance); and

j. Limit the area under construction at any one time.

Therefore, the cumulatively considerable construction impact of the proposed project would be less than significant with mitigation.

c. According to the air district CEQA Guidelines, a sensitive receptor is generally defined as any residence including private homes, condominiums, apartments, and living quarters; education resources such as preschools and kindergarten through grade twelve (k-12) schools; daycare centers; and health care facilities such as hospitals or retirement and nursing homes. The nearest sensitive receptor is a rural residence, located approximately 250 feet south of the project site. Residences to the east and west of the project site are located within a distance of 400 feet from the project site.

Operation of the proposed project is not expected to cause any localized emissions that could expose sensitive receptors to unhealthy air pollutant levels, because no significant operational sources of pollutants are proposed onsite. Construction activities would result in localized emissions of dust and diesel exhaust that could result in temporary impacts to adjacent land uses that include sensitive receptors. The short-term air quality effects related to dust emissions during project construction would be avoided with implementation of the Mitigation Measure AQ-1 under checklist item "b" above, if 2.2 acres or more are graded per day. The diesel construction equipment required for the proposed project could expose these sensitive receptors to toxic air contaminants from heavy equipment diesel exhaust; however, the potential diesel emissions from construction of one house is not considered significant.

d. The proposed project is not anticipated to produce any objectionable odors during its operation. Construction activities associated with the proposed project, such as paving and painting, may temporarily generate objectionable odors. Since odor-generating construction activities would be localized, sporadic, and short-term in nature, this impact would be less-than-significant.

4. BIOLOGICAL RESOURCES

Would the project:

		Potentially Significant Impact	Less-than-Significant Impact with Mitigation Measures Incorporated	Less-Than-Significant Impact	No Impact
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, regulations, or by the California Department of Fish and Wildlife or US Fish and Wildlife Service?	☐	☒	☐	☐
b.	Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or US 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, filing, 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?	☐	☐	☐	☒

Comments:

A reconnaissance-level biological field survey of the project site was conducted by EMC Planning Group biologist Rose Ashbach on January 26, 2023, to document existing plant communities/wildlife habitats and assess the suitability of the site to support special-status species. Biological resources were documented in field notes, including plant and wildlife species observed, dominant plant communities, wildlife habitat quality, disturbance levels, and aquatic resources.

Prior to conducting the survey, Ms. Ashbach reviewed site plans, aerial photographs, natural resource database accounts, and other relevant scientific literature. This included searching the U.S. Fish and Wildlife Service (USFWS) *Endangered Species Database* (USFWS 2024a), California Department of Fish and Wildlife (CDFW) *California Natural Diversity Database* (CDFW 2024a, CDFW 2024b), and California Native Plant Society (CNPS) *Inventory of Rare and Endangered Plants* (CNPS 2024) to identify special-status plants, wildlife, and habitats known to occur in the vicinity of the project. A review of the USFWS *National Wetlands Inventory* (NWI) database was also conducted to identify jurisdictional aquatic features (wetlands, drainages, and/or riparian areas) on or adjacent to the project site (USFWS 2024b).

Existing Conditions

The approximately five-acre parcel is located at 494A Carpenteria Road, within unincorporated San Benito County and about 0.5 miles from the center of the town of Aromas. Aromas is divided between two counties: San Benito and Monterey. While the majority of the project parcel is located in San Benito County, a small portion of the parcel adjacent to Carpenteria Road is located in Monterey County.

The proposed project would subdivide the approximately five-acre parcel into two 2.5-acre parcels through the center of the lot in a north south division. An existing residence is located on the eastern side of the parcel, accessible through the existing driveway. The purpose of the subdivision is to maintain the current residence in the eastern parcel and to add an additional residence in the western parcel adjacent to Carpenteria Road.

The proposed residence would be located in an oak woodland and would require the removal of coast live oak (*Quercus agrifolia*) and Monterey pine (*Pinus radiata*) trees. The proposed residence is located on a slope and would require grading work and construction of retaining walls to stabilize the slopes around the proposed residence. A new driveway and turnaround would link the existing driveway to the proposed residence. The upper parcel would have easement rights to the existing driveway for access through the lower parcel.

Plant and Wildlife Habitats

Vegetation throughout the parcel includes coast live oak and Monterey pine forest, annual grassland/ruderal vegetation, and ornamental landscaped areas.

Coast live oak and Monterey pine forest comprise the majority of the slopes of the property. The steep northwest slopes are dominated by naturalized Monterey pine (*Pinus radiata*) and non-native eucalyptus (*Eucalyptus* sp.) trees with occasional coast live oak (*Quercus agrifolia*) trees. The understory is dominated by California blackberry (*Rubus ursinus*), poison oak (*Toxicodendron diversilobum*), annual grasses, and non-native iceplant (*Carpobrotus edulis*). Other understory species include *Sanicula* sp., bedstraw (*Gallium* sp.), and non-native pampas grass (*Cortaderia selloana*).

The slopes below the existing residence in the center of the parcel are dominated by Monterey pines with associated species coast live oak, coyote brush (*Baccharis pilularis*), and sometimes very dense patches of non-native French broom (*Genista monspessulana*). Areas west towards Carpenteria Road are dominated by coast live oak. The understory of these slopes includes native

poison oak, bedstraw, gold back fern (*Pentagramma triangularis*), wood fern (*Dryopteris* sp.); and non-native species: French broom, rattle snake grass (*Briza maxima*), Bermuda buttercup (*Oxalis pes-caprae*), sheep sorrel (*Rumex acetosella*), and Italian thistle (*Carduus pycnocephalus*).

Lower slopes are dominated by coast live oak with approximately 90 percent coast live oak canopy and 10 percent Monterey pine canopy. The understory of the oak forest has been raked and includes piles of oak leaves and branches. Other understory features in these raked areas include bare ground, Bermuda buttercup, annual grasses, and other unidentifiable annual herbs in their seed leaf stage.

The proposed residence is located within the coast live oak forest. The slopes are moderately steep. Other species within the building envelope include native species: California blackberry and coyote brush; and non-native species: annual grasses, English plantain (*Plantago lanceolata),* sheep sorrel, chickweed (*Stellaria media*), rough cat's ear (*Hypochaeris radicata*), and crane's bill (*Erodium* sp.).

Throughout all woodland/forested areas there is a great diversity of fungi, including witches' butter (*Tremella mesenterica*), black elfin saddle (*Helvella lacunose*), orange oysters (*Phyllotopsis* sp.), *Amanita* sp., and many others.

Non-native annual grasslands/ruderal vegetation comprise the flat lower parcel and an opening on the upper slope. The flat area adjacent to Carpenteria Road (west parcel boundary) includes annual grassland/ruderal vegetation dominated by non-native annual grasses (*Bromus diandrus, Avena fatua, Polypogon monspeliensis*, *Poa annua*, etc.), and other non-native annual herbs including sheep sorrel, chickweed, doves foot crane's bill (*Geranium molle*), English plantain, Bermuda buttercup, crane's bill, rough cat's ear, narrow leaf clover (*Trifolium angustifolium*), and *Spergula* sp. An opening below the existing residence between the existing Monterey pine/eucalyptus forest and the driveway includes annual grasses, French broom, miner's lettuce (*Claytonia perfoliate*), horseweed, bristly ox-tongue (*Helminthotheca echioides)*, California blackberry, narrow leaf clover, rough cat's ear, and sheep sorrel.

Areas of ornamental landscaping are located around the existing residence and include *Agapanthus* sp., succulents (*Aeonium* sp.), jade (*Crassula ovata*), manuka (*Leptospermum* sp.), and fruit trees. Various large ornamental trees lined the bottom of the parcel along Carpenteria Road, with four coast redwood trees (*Sequoia sempervirens*) marking the southwest parcel boundary.

A small drainage channel is located just outside of the property line between Carpeneria Road and the project parcel. The vegetation here is ruderal with many non-native, introduced species including melons (*Cucumis* sp.), rip-gut brome (*Bromus diandrus*), blackberry, crane's bill, dove foot crane's bill, annual blue grass (*Poa annua*), milk thistle (*Silybum marianum*), curly dock (*Rumex crispus*), sheep's sorrel, fumaria (*Fumaria officinalis*), *Calendula* sp., water potentilla, and miner's lettuce. The drainage channel connects to a riverine system that flows to Elkhorn Slough.

The soil throughout the site is sandy. Although no erosion was noted, a small natural drainage channel was observed within the Monterey pine and oak forest which acts to drain the steep slopes.

There are pocket gopher/small mammal burrows throughout the lower annual grassland area and within the sloped forested woodlands. There was also evidence of deer (*Odocoileus virginianus*), skunk (*Mephitis mephitis*), squirrel (*Sciurus* sp.), and racoon (*Procyon lotor*) throughout the parcel. Wildlife observed while on the project site included American crow (*Corvus brachyrhynchos*), Anna's hummingbird (*Calypte anna*), and red-shouldered hawk (*Buteo lineatus*). Other birds expected within the habitat include Bewick's wren (*Thryomanes bewickii*), black phoebe (*Sayornis nigricans*), house finch (*Haemorhous mexicanus*), red tailed hawk (*Buteo jamaicensis*), and turkey (*Meleagris gallopavo*).

Aquatic/Wetland. A drainage ditch runs parallel to the project site between Carpenteria Road and the project parcel. This drainage area is classified as a riverine intermittent streambed that is temporarily flooded (National Wetland Inventory (NWI) code: R4SBA) by the NWI (2024b). The small natural drainage appeared to direct excessive flows downslope through the channeled topography of the feature, but no wetland vegetation or hydrology was present, See Figure 7, National Wetland Inventory Map and Figure 8, Habitat Map

a. **Special-Status Species**. A search of the California Department of Fish and Wildlife *California Natural Diversity Database* (CNDDB) was conducted for the project parcel and the surrounding eight U.S. Geological Survey (USGS) quadrangles in order to generate a list of potentially occurring special-status species for the project vicinity. Records of occurrences for special-status plants were reviewed for those quadrangles in the CNPS *Inventory of Rare and Endangered Plants of California* (CNPS 2024). A USFWS *Endangered Species Program* threatened and endangered species list was also generated for San Benito and Monterey County, and the USFWS *Critical Habitat for Threatened & Endangered Species* online mapper was reviewed (USFWS 2024a & USFWS 2024c). Special-status species in this report are those listed as Endangered, Threatened, or Rare or as candidates for listing by the USFWS and/or CDFW; as Species of Special Concern or Fully Protected species by the CDFW; or as Rare Plant Rank 1B or 2B species by the California Native Plant Society (CNPS). Appendix B, Special-Status Species with Potential to Occur in the Project Vicinity, presents tables with special-status species search results, which lists the special-status species documented within the project vicinity, their listing status, suitable habitat description, and their potential to occur on the project site. Figure 9, Special-Status Species in the Project Vicinity, presents a map of the CNDDB results.

   Special-Status Plant Species. No special-status plants were observed during the reconnaissance site assessment. Additionally, existing disturbance and marginal habitat throughout the site, coupled with a small impact area make the presence of special-status species unlikely and the potential impact less than significant to no impact.

   Special-Status Wildlife Species. Special-status wildlife species with low potential to occur on the project site include California tiger salamander (*Ambystoma californiense*) and California red-legged frog (*Rana draytonii*). Nesting birds and roosting bats may also occur on the project site. These species are addressed below.

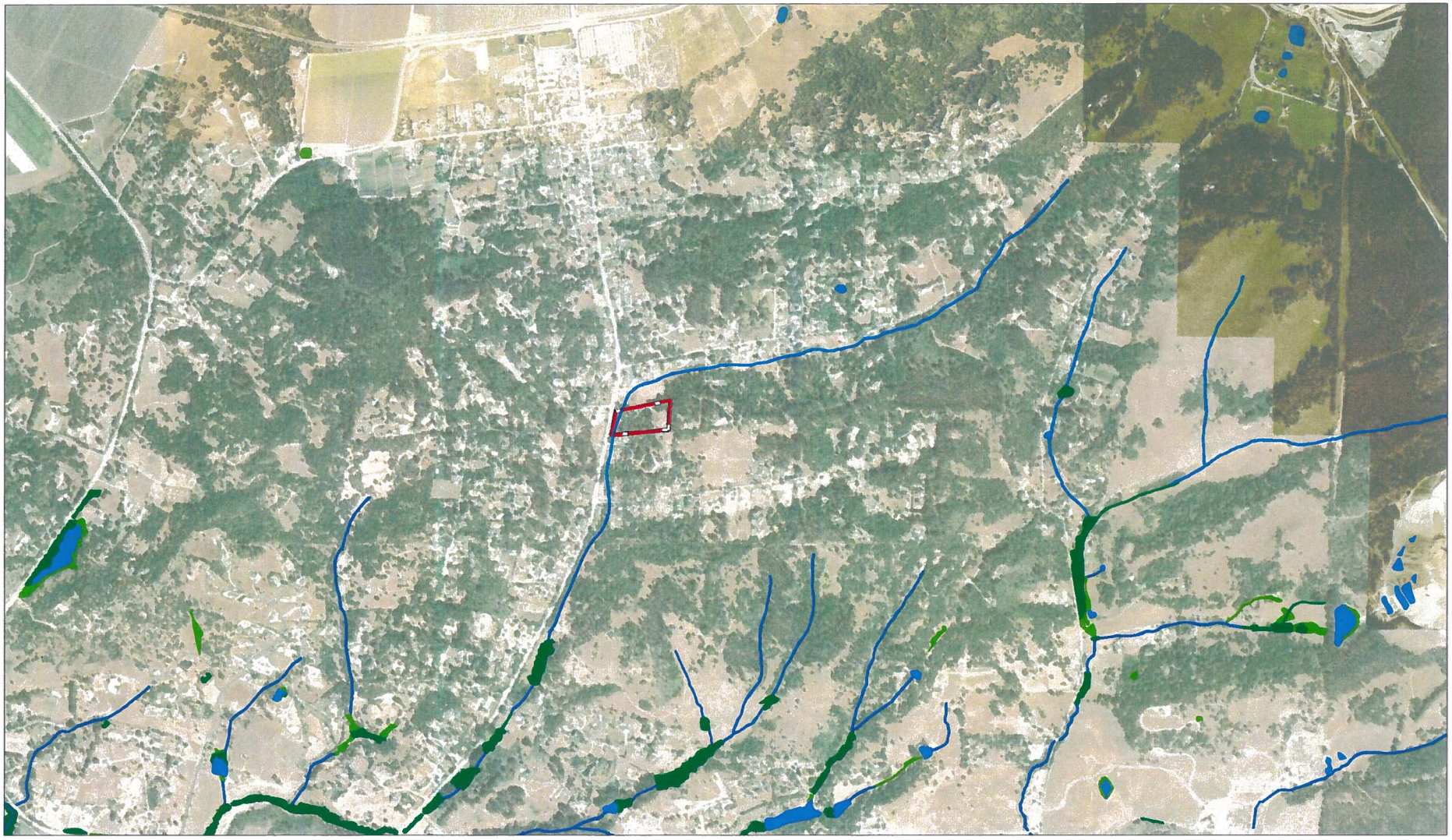


Figure 7

National Wetland Inventory Map

Carpenteria Road Minor Subdivision Initial Study

This side intentionally left blank.

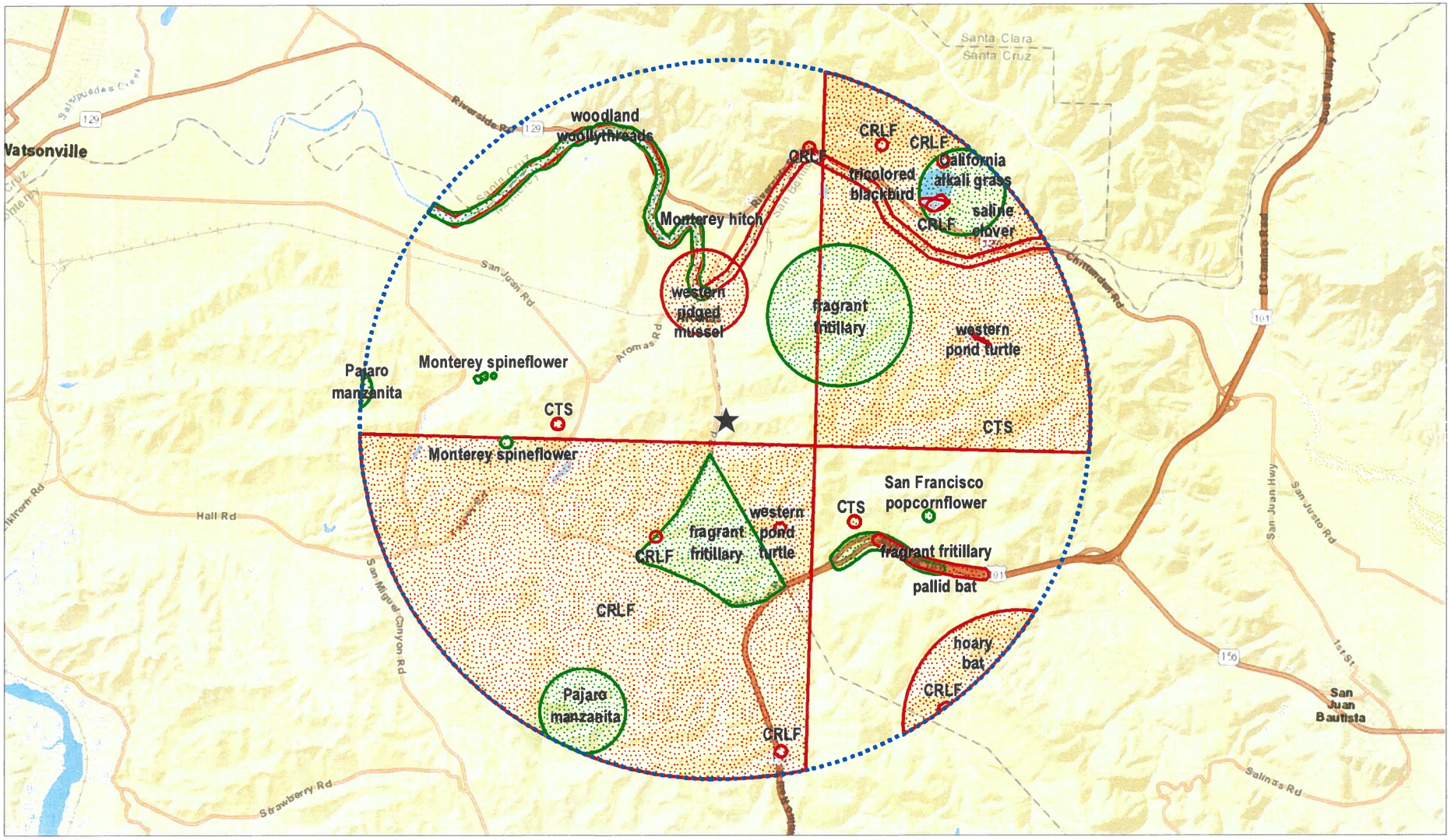
ESRI 2024, EMC Planning Group 2024

Figure 8

Habitat Map

Carpenteria Road Minor Subdivision Initial Study

This side intentionally left blank.



0 1.25 Miles

ESRI 2024, CDFW CNDDB 2024
CTS: California Tiger Salamander
CRLF: California Red-Legged Frog

★ Project Location | 3.1-Mile Buffer | Special-Status Plants | Special-Status Wildlife

Figure 9

Special-Status Species in the Project Vicinity Map

Carpenteria Road Minor Subdivision Initial Study

This side intentionally left blank.

California Tiger Salamander. The federally and state-listed threatened California tiger salamander (*Ambystoma californiense*) is a large terrestrial salamander. It occurs in central California from the Sacramento Valley to the south-central San Joaquin Valley, and in the surrounding foothills of both the Coast Ranges and the Sierra Nevada Mountains. California tiger salamanders are also recorded from the San Francisco Bay region, Sonoma County, the Monterey Bay region, and the valleys and foothills of San Luis Obispo and Santa Barbara counties. California tiger salamanders breed in temporary wetland pools, such as vernal pools, and other seasonal wetland bodies where ponded water is present for a minimum of three to four months, extending into the early spring. Such ponds and temporary wetlands provide necessary breeding and larval-stage habitat for the species. Adults spend most of the year in aestivation, underground in the burrows of small mammals, such as the California ground squirrel (*Otospermophilus beecheyi*) and/or Botta's pocket gopher (*Thomomys bottae*), or within other suitable subterranean retreats up to two kilometers (1.24 miles) away from their breeding pond.

CNDDB records indicate that the closest known occurrence of California tiger salamander to the project site was recorded in 2007, in a small freshwater pond to the east of Cole Road, 1.3 miles southeast of the site (Occurrence No. 823, CNDDB 2024a). The next closest record is 1.4 miles northwest of the project site recorded in 2010 (Occurrence No. 1266, CNDDB 2024a). There are twelve seasonal ponds present in the immediate vicinity (1.3-mile buffer) of the project that may provide breeding opportunities for California tiger salamander. Moderate barriers such as development and roads are located to the north and west of the project and minimal barriers to the east and south. The project lies within California tiger salamander migration range, and small mammal burrows within the project parcel provide marginal habitat for migrating California tiger salamander. If present, the proposed project has the potential to result in impacts to California tiger salamander, and impacts to the species are considered significant. Implementation of mitigation measures BIO-1 and BIO-2 (below) would reduce this potential, significant impact to California tiger salamander to a less-than-significant level.

California Red-legged Frog. A federally-listed Threatened species and California Species of Special Concern, California red-legged frog occurs in lowlands and foothills primarily in perennial or ephemeral ponds, pools, and streams where water remains long enough (14-28 weeks) for breeding and metamorphosis of tadpoles. Specific breeding sites include streams, creeks, ponds, marshes, sag ponds, deep pools, backwater areas, dune ponds, lagoons, and estuaries. California red-legged frog may disperse from their aquatic breeding habitats to upland habitats during the dry season. They prefer upland habitats that provide moisture to prevent desiccation and protection from predators, including downed logs, woody vegetation, boulders, moist leaf litter, or other refugia during the dry season. In areas where upland habitats do not contain structure, they take refuge in burrows. However, if there is sufficient water at their breeding location, they may remain in aquatic habitats year-round instead of moving to adjacent uplands.

During wet seasons, frogs can move long distances between habitats, traversing upland areas or ephemeral drainages. Dispersal distances are typically less than 0.3 mile, with a few individuals moving 1.2-2.2 miles. Seeps and springs in open grasslands can function as foraging habitat or refugia for wandering frogs.

CNDDB records indicate that the closest known occurrence of California red-legged frog was recorded 1.1-miles south of the project in 2002 within the same riparian system that passes in front of the property (Occurrence No. 790, CNDDB 2024a). Numerous riparian corridors/riverine systems to the south of the property and freshwater ponds to the north and east provide good habitat for breeding. Based on known occurrence within the existing riparian/drainage channel, proximity to other potential breeding ponds, and marginal upland habitat within the parcel, there is potential for California red-legged frogs to exist within the project site. If present, the proposed project has a potential to result in impacts to California red-legged frog, and impacts to the species are considered significant. Implementation of mitigation measures BIO-1 and BIO-2 would reduce this potential, significant impact to California red-legged frog to a less-than-significant level.

Mitigation Measures

BIO-1 California tiger salamander and California red-legged frog have been recorded in proximity to the project site, however suitable habitat for either species is considered limited within the site. One of the following options shall be implemented to reduce potential impacts to California tiger salamander and California red-legged frog:

Option 1. Assume Presence of California Red-Legged Frog and Obtain Incidental Take Authorization

If the presence of California red-legged frog and/or California tiger salamander is assumed on the project site, the project applicant shall obtain Incidental Take Permit(s) from the U.S. Fish and Wildlife Service and the California Department of Fish and Wildlife. The project applicant, with oversight by San Benito County Resource Management Agency, shall implement all avoidance, minimization, and compensatory mitigation measures required in the permit(s) to minimize the potential for "take" of California red-legged frog and/or California tiger salamander.

Option 2. Pre-Construction Surveys and Biological Monitoring for Protected Amphibians

Due to the small impact area, marginal habitat, and low probability of occurrence of California red-legged frog and/or California tiger salamander, the project applicant may choose to conduct construction surveys and biological monitoring instead of assuming presence and obtaining Incidental Take Permit(s). However, if California red-legged frog or California tiger salamander is found at any point during surveys or project activities, the project applicant would need to proceed with obtaining the permits in Option 1, prior to any grading or construction activities.

1. A qualified biologist shall conduct preconstruction surveys for California red-legged frog and California tiger salamander no more than two weeks (14 days) prior to the start of construction activities. The project site shall be surveyed for potential migratory

and/or upland activity. The qualified biologist shall prepare a report documenting the results of the preconstruction surveys for submittal to the San Benito County Resource Management Agency prior to ground disturbance.

2. A qualified biologist shall conduct biological construction monitoring for California tiger salamander and California red-legged frog during ground-disturbing activities. Before the start of work each day, a biologist or their designee shall check for wildlife under any equipment such as vehicles and stored pipes within active construction zones. A biologist or their designee shall also check all excavated steep-walled holes or trenches greater than one foot deep for trapped animals. If California tiger salamander or California red-legged frog is observed within an active construction zone, a biologist shall be notified immediately and all work shall be halted and all equipment turned off. Work may not proceed until consultation with the U.S. Fish and Wildlife and/or the California Department of Fish and Wildlife has been completed.

3. If California red-legged frog and/or California tiger salamander is observed within the project area, work shall cease and Incidental Take Permit(s) (Option 1) shall be obtained before work can resume. Work shall re-commence only when authorized by the U.S. Fish and Wildlife and California Department of Fish and Wildlife. The project applicant, with oversight by San Benito County Resource Management Agency, shall implement all avoidance, minimization, and compensatory mitigation measures required in the permit(s).

BIO-2 Prior to ground disturbance, the project applicant shall hire a qualified biologist to conduct a training session for all construction personnel. At a minimum, the training shall include a description of special-status species potentially occurring in the project vicinity, including, but not limited to, California tiger salamander, California red-legged frog, special-status bats, and nesting birds and raptors. Their habitats, general measures that are being implemented to conserve species as they relate to the project, and the boundaries within which construction activities shall occur shall be explained. Informational handouts with photographs clearly illustrating the species' appearances shall be used in the training session. All new construction personnel shall undergo this mandatory environmental awareness training.

The qualified biologist shall provide documented evidence of completion of this training to San Benito County Resource Management Agency prior to ground disturbance.

Special-Status Bats. Bats were not observed during the reconnaissance-level biological field survey. However, trees in the project area and/or buildings or structures on or adjacent to the project site could provide roosting habitat for special-status bat species known to occur in the vicinity of the project site, including the California Species of Special Concern hoary bat (*Lasiurus cinereus*).

Bat species inhabit a wide variety of habitats including grasslands, woodlands, and forests. Project development and construction activities at the project site could result in the disturbance of roost and/or natal sites occupied by special-status bats on or adjacent to

the project site, if present. Loss or harm to special-status bats is considered a significant adverse impact. Implementation of Mitigation Measure BIO-2, which requires all new construction personnel to undergo environmental awareness training, and the following mitigation measure will reduce the potential impact to special-status bats to a less-than-significant level.

Mitigation Measure

BIO-3 The following measures shall be implemented to avoid loss of or harm to special-status bat species:

1. Approximately 14 days prior to tree removal or any construction activities, a qualified biologist shall conduct a habitat assessment for bats and potential roosting sites in trees or buildings within 50 feet of the construction easement. These surveys shall include a visual inspection of potential roosting features (bats need not be present) and a search for presence of guano within the project site, construction access routes, and 50 feet around these areas. Cavities, crevices, exfoliating bark, and bark fissures that could provide suitable potential nest or roost habitat for bats shall be surveyed. Assumptions can be made on what species is present due to observed visual characteristics along with habitat use, or the bats can be identified to the species level with the use of a bat echolocation detector such as an "Anabat" unit. Potential roosting features found during the survey shall be flagged or marked.

2. If no roosting sites or bats are found, a letter report shall be prepared by the biologist and submitted to San Benito County Resource Management Agency, where it shall be kept on file, and no further measures are required.

3. If bats or roosting sites are found, bats shall not be disturbed without specific notice to and consultation with California Department of Fish and Wildlife.

4. The nursery season is typically from May 1 to October 1. If bats are found roosting outside of the nursery season, California Department of Fish and Wildlife shall be consulted prior to any eviction or other action. If avoidance or postponement is not feasible, a Bat Eviction Plan shall be submitted to California Department of Fish and Wildlife for written approval prior to project implementation. A request to evict bats from a roost includes details for excluding bats from the roost site and monitoring to ensure that all bats have exited the roost prior to the start of activity and are unable to re-enter the roost until activity is completed. Any bat eviction shall be timed to avoid lactation and young-rearing. If bats are found roosting during the nursery season, they shall be monitored to determine if the roost site is a maternal roost. This could occur by either visual inspection of the roost bat pups, if possible, or by monitoring the roost after the adults leave for the night to listen for bat pups. Because bat pups cannot leave the roost until they are mature enough, eviction of a maternal roost cannot occur during the nursery season. Therefore, if a maternal roost is present, a 50-foot buffer zone (or different size if determined in consultation with the California Department of Fish and Wildlife) shall be established around the roosting site within which no construction activities including tree removal or structure disturbance shall occur until after the nursery season.

Nesting Birds. Protected raptors including Cooper's hawk (*Accipter cooperii*) a species of special concern, the White-tailed kite (*Elanus leucurus*) a Fully Protected Species, and nesting bird species protected under the federal Migratory Bird Treaty Act and California Fish and Game Code, have the potential to nest in buildings or structures, on open ground, or in any type of vegetation, including trees, during the nesting bird season (January 15 through September 15). The project site contains trees that are suitable for nesting, as well as in potted plants, machinery, and other materials stored at the bottom of the site. Construction activities, including tree removal, can impact protected bird species, should nesting birds be present during construction. If protected bird species are nesting adjacent to the project site during the bird nesting season, then noise-generating construction activities could result in the loss of fertile eggs, nestlings, or otherwise lead to the abandonment of nests. Implementation of Mitigation Measure BIO-2, which requires all new construction personnel to undergo environmental awareness training, and the following mitigation measure would reduce the potential impact to nesting birds to a less-than-significant level.

Mitigation Measure

BIO-4 To avoid impacts to nesting birds during the nesting season (January 15 through September 15), tree removal and all construction activities should be conducted between September 16 and January 14, which is outside of the bird nesting season. If construction or project-related work is scheduled during the nesting season (February 15 to August 30 for small bird species such as passerines; January 15 to September 15 for owls; and February 15 to September 15 for other raptors), a qualified biologist shall conduct nesting bird surveys.

1. Two surveys for active bird nests shall occur within 14 days prior to start of construction, with the final survey conducted within 48 hours prior to construction. Appropriate minimum survey radii surrounding each work area are typically 250 feet for passerines, 500 feet for smaller raptors, and 1,000 feet for larger raptors. Surveys shall be conducted at the appropriate times of day to observe nesting activities. Locations off the site to which access is not available may be surveyed from within the site or from public areas. If no nesting birds are found, a letter report confirming absence shall be prepared and submitted to San Benito County Resource Management Agency and no further mitigation is required.

2. If the qualified biologist documents active nests within the project site or in nearby surrounding areas, an appropriate buffer between each nest and active construction shall be established. The buffer shall be clearly marked and maintained until the young have fledged and are foraging independently. Prior to construction, the qualified biologist shall conduct baseline monitoring of each nest to characterize "normal" bird behavior and establish a buffer distance, which allows the birds to exhibit normal behavior. The qualified biologist shall monitor the nesting birds daily during construction activities and increase the buffer if birds show signs of unusual or distressed behavior (e.g., defensive flights and vocalizations, standing up from a brooding position, and/or flying away from the nest). If buffer establishment is not

possible, the qualified biologist or construction foreman shall have the authority to cease all construction work in the area until the young have fledged and the nest is no longer active. Once the absence of nesting birds has been confirmed, a letter report shall be prepared and submitted to San Benito County Resource Management Agency.

b. **Riparian Habitat or Sensitive Natural Communities.** There are no riparian habitats or sensitive natural communities within the project site. Native closed cone Monterey pine forest is considered endemic and threatened. The endemic closed cone Monterey pine forest is characterized by poor edaphic conditions (low nutrients, low organic material, poor drainage, hardpan conditions, etc.), and an understory of manzanitas, ceanothus, and other endemic species. The Monterey pine forest on the project parcel does not include these characteristics. Monterey pine trees onsite are growing in sandy loam soils, with high permeability, and abundant growth of other species not associated with the native closed cone forest. Because of this, the onsite Monterey pine woodlands are not considered a sensitive natural community, but occurrences of Monterey pines outside of the endemic Monterey pine forest.

c. **Waters of the United States**. A review of the NWI online database was conducted to identify potential jurisdictional aquatic features on or adjacent to the project site (USFWS 2024b). The results showed an offsite riverine, intermittent streambed which is seasonally flooded (NWI Classification Code: R4SBA) (offsite drainage channel) outside of the western boundary of the project site (Figure 7, National Wetlands Inventory Map). The drainage feature was observed during the reconnaissance site assessment. An additional onsite drainage channel was observed within the Monterey pine forest outside of the project footprint. The onsite drainage channel does not appear to have hydric soils, hydrology, or wetland plants present and is not considered jurisdictional.

The offsite drainage channel was inundated with approximately one to four inches of water at the time of the survey, and dominant plants included many non-native plants: melons, rip-gut brome, crane's bill, dove foot crane's bill, annual blue grass, milk thistle, curly dock, sheep's sorrel, fumaria, *Calendula* sp., *Brassica* sp., common groundsel (*Senecio vulgaris*); and native miner's lettuce. The drainage appeared heavily disturbed with non-native species and bare soil, and this drainage channel was reinforced with small pebbles and weed cloth south of the property boundary. Although this feature is outside of the project parcel, required wetland buffers may apply to potential construction activities. Additionally, future driveway improvements, should it be determined they are necessary, may impact this potentially jurisdictional feature. Impacts to jurisdictional aquatic features are considered potentially significant. Implementation will reduce the potential impact to a less-than-significant level.

Mitigation Measures

BIO-5 Grading activities within 50-foot buffers (measured horizontally) from the drainage along Carpenteria Road shall be avoided. Prior to issuance of a grading permit, grading plans shall show the 50-foot buffer with a notation that no disturbance, including storing construction equipment, is allowed within this area.

BIO-6 If improvements to the driveway over the drainage channel become necessary, the improvements shall be designed to minimize impacts to the drainage to the extent feasible. Prior to ground disturbance and issuance of a grading permit, the extent of potential wetlands and waterways regulated by the United States Army Corps of Engineers (USACE), Regional Water Quality Control Board (RWQCB), and California Department of Fish and Wildlife (CDFW) should be determined (wetland delineation report), and regulatory agency consultations should occur.

1. If impacts to a federally jurisdictional feature may occur as a result of the project, a Clean Water Act Section 404 Nationwide Permit (NWP) may be appropriate. If the proposed activity would not otherwise qualify for a NWP, the applicant should proceed with obtaining an Individual Permit from the USACE. For either permit, a formal wetland delineation report should first be submitted to the USACE for a jurisdictional determination.

2. If wetlands or waters of the State are present, the applicant should coordinate with the RWQCB to obtain a Clean Water Act Section 401 Water Quality Certification. If impacts to wetlands, riparian areas, or streams are identified, the applicant should coordinate with the CDFW to obtain a Streambed Alteration Agreement.

d. **Wildlife Movement.** Wildlife movement corridors provide connectivity between habitat areas, enhancing processes like nutrient flow, gene flow, seasonal migration, pollination, and predator-prey relationships. Increasing connectivity is a critical strategy for addressing habitat loss and fragmentation, a top threat to biodiversity.

The project parcel is not located within any previously defined essential habitat connectivity areas as mapped by the *California Essential Habitat Connectivity Project* (CDFW 2024d). There are no fences on three sides of the property and movement of larger mammals between the project site and regional undeveloped lands is largely unrestricted. The offsite drainage channel west of the site provides poor opportunity for wildlife movement and exchange of genetic material for larger animals due to the lack of larger shrub and tree vegetation in portions of the drainage channel. Dispersal to and from the project site by small mammals, amphibians, and reptiles is possible, but limited by existing roads, residential development, and fencing outside of the project parcel. The project parcel does not act as a major wildlife corridor, movement pathway, or linkage between larger habitat areas for terrestrial wildlife and the proposed project would have a less-than-significant impact on wildlife movement.

e. **Local Biological Resource Policies/Ordinances.** The San Benito County General Plan was adopted by the Board of Supervisors in 2015 and applies to unincorporated lands and communities in San Benito County (San Benito County, July 2015. The 2035 San Benito County General Plan Natural and Cultural Resources (NCR) element contains the following goal and policies associated with biological resources that are applicable to the proposed project:

Goal NCR-2. To protect and enhance wildlife communities through a comprehensive approach that conserves, maintains, and restores important habitat areas.

NCR-2.5 Mitigation for Wetland Disturbance or Removal. The County shall encourage the protection of the habitat value and biological functions of oak woodlands, native grasslands, riparian and aquatic resources, and vernal pools and wetlands. The County shall require that development avoid encroachment and require buffers around these habitats to the extent practicable. The County shall further require mitigation for any development proposals that have the potential to reduce these habitats. [...] Exceptions to this action include irrigation pumps, roads and bridges, levees, docks, public boat ramps, and similar uses. In all cases where intrusions into these buffers are made, only the minimum amount of vegetation necessary to construct the feature shall be removed. (RDR)

NCR-2.6 Regeneration of Oak Woodland Communities. The County shall promote the restoration, restocking, and protection of oak woodland habitat on public and private lands in the county through a combination of the habitat conservation planning, inter-agency coordination, and updated development review or tree preservation procedures. (RDR/MPSP/IGC)

Policy NCR-2.8. The County shall require the preparation of biological resource assessments for new development proposals as appropriate. The assessment shall include the following: a biological resource inventory based on a reconnaissance-level site survey, and an analysis of anticipated project impacts to: potentially occurring special-status species (which may require focused special-status plant and/or animal surveys); an analysis of sensitive natural communities; wildlife movement corridors and nursery sites on or adjacent to the project site; potentially jurisdictional wetlands/waterways; and locally protected biological resources such as trees. The assessment shall contain suggested avoidance, minimization, and/or mitigation measures for significant impacts to biological resources.

NCR- 2.10 Invasive Species. The County shall require that new developments avoid the introduction or spread of invasive plant species during construction by minimizing surface disturbance, seeding and mulching disturbed areas with certified weed-free native mixes, and using native or noninvasive species in erosion control plantings.

San Benito County Code of Ordinances: The County Code of Ordinance contain local legislation that is applicable to the proposed project:

Section 19.17.005 Riparian Protection. Grading activity shall not take place within 50ft (measured horizontally) from the top bank of a stream, creek, or river or within 50 ft of a wetland or body of water. (1966 Code, § 7A-5) (Ord. 708, § 1)

> **Chapter 19.33 Management and Conservation of Woodlands.** The San Benito County Code of Ordinances limits the removal of trees and woodlands countywide. No person may conduct any tree cutting or removal without first obtaining a Tree Removal permit from the San Benito County Director of Planning.
>
> **Section 19.33.005 Discretionary Permit.** A discretionary permit shall be required for the removal of woodlands when: (A) The removal of individual and or masses of trees within woodlands of between 90 percent and 100 percent as per the canopy retention standard in Table 19.33.007(1) within a period of ten years; or (B) Any tree removal is located on slopes greater than or equal to 30 percent. (1966 Code, § 33-5) (Ord. 757, § 1(part)).

Protected Trees and Woodlands. Project plans indicate approximately 16 native trees within the project area are slated for removal. An analysis of tree cover based on 1993 aerial coverage was prepared per San Benito County planning staff recommendations (Michael Kelly, pers. comm. May 20, 2024). In 1993 there was approximately 3.0 acres of canopy on the project site, and removal of the trees would result in the loss of 0.06 acres, or approximately two percent. According to ordinance Section 19.33.005, a permit is required if the project would result in the removal of individual and or masses of trees within woodlands of between 90 percent and 100 percent within a period of ten years; or tree removal is located on slopes greater than or equal to 30 percent. The proposed project does not exceed either limit, therefore a permit is not required.

With the implementation of the mitigation measures above, the proposed project would not conflict with the San Benito County Code of Ordinances, nor would it conflict with any of the policies described in the San Benito County General Plan that protect biological resources.

f. **Conservation Plans.** There are no critical habitat boundaries, habitat conservation plans, natural community conservation plans, or other approved local, regional, or state habitat conservation plans applicable to the proposed project site (CDFW 2023d, USFWS 2023a).

5. CULTURAL RESOURCES

Would the project:

		Potentially Significant Impact	Less-than-Significant Impact with Mitigation Measures Incorporated	Less-Than-Significant Impact	No Impact
a.	Cause a substantial adverse change in the significance of a historical resource pursuant to section 15064.5?	☐	☐	☐	☒
b.	Cause a substantial adverse change in the significance of an archaeological resource pursuant to section 15064.5?	☐	☒	☐	☐
c.	Disturb any human remains, including those interred outside of dedicated cemeteries?	☐	☒	☐	☐

Comments:

Information for this section is derived from the cultural resource evaluation report by Archaeological Resource Management dated February 12, 2024. The project site is located at 494A Carpenteria Road in unincorporated San Benito County on the Watsonville United States Geological Survey (USGS) quadrangle, Universal Transverse Mercator Grid (UTMG) 6 21 270mE/40 82 081mN, with an elevation of approximately 420 feet MSL. No significant water sources are located within the area of the proposed project site, however multiple small seasonal drainages are present within the vicinity of the project area.

a. **Historical Resources.** There are no previously recorded prehistoric or historical resources within the project site. Therefore, the proposed project would not cause a substantial adverse change in the significance of a historical resource pursuant to section 15064.5

b. **Archaeological Resources.** There are no recorded sites within the proposed project area, and no previously identified cultural resources are located within a one-quarter mile radius of the proposed project area. No previous studies have been carried out which included the current proposed project area within their scope.

A surface reconnaissance was completed and resulted in no significant cultural materials, prehistoric or historic, being observed. Therefore, no impacts to archaeological resources are expected. However, there is always the potential to encounter unknown subsurface unique archaeological resources. Implementation of the following mitigation measure would ensure this potential impact would be less-than-significant.

Mitigation Measure

CR-1 The following language shall be added to all project plans associated with tree removal, grading, and construction.

"Per the San Benito County Code of Ordinance Chapter 19.05, if archaeological resources are discovered during construction, then work shall be halted within 200 feet of the find until a qualified professional archaeologist can evaluate it. If the find is determined to be significant, then appropriate mitigation measures shall be formulated and implemented."

c. **Accidental Disturbance of Human Remains.** Although no evidence of potentially sensitive cultural resources is associated with the project site, there is the possibility of an accidental discovery of archaeological resources or human remains during construction activities. Disturbance of Native American human remains is considered a significant adverse environmental impact. Implementation of the following mitigation measure would reduce this potential impact to a less-than-significant level.

Mitigation Measure

CR-2 The following language shall be added to all project plans associate with tree removal, grading, and construction.

"If human remains are encountered during construction, the county coroner shall be notified immediately. The San Benito County Code of Ordinances Chapter 19.05 and Section 7050.5 of the California Health and Safety Code require that construction or excavation be stopped in the vicinity of discovered human remains until the coroner can determine whether the remains are those of a Native American. A qualified archaeologist shall also be contacted immediately. If the county coroner determines that the remains are Native American, the coroner shall then contact the Native American Heritage Commission (NAHC), pursuant to Section 7050.5(c) of the California Health and Safety Code (see Section 1.2 Regulatory Setting).

The county coordinator of Indian Affairs shall also be contacted. There will be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie human remains until the county coroner has determined that no investigation of the cause of death is required; and, if the remains are of Native American origin.

The NAHC shall identify a Native American most likely descendant to make a recommendation with regards to appropriate treatment of human remains within 24 hours after being notified by the commission.

If the NAHC fails to make a recommendation, the descendants of the deceased Native Americans shall make a recommendation to the landowner or the person responsible for the excavation work for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in the Public Resources Code Section 5097.98.

According to the California Health and Safety Code, six or more human burials at one location constitutes a cemetery (Sec. 8100), and disturbance of Native American cemeteries is a felony (Sec. 7052)."

6. ENERGY

Would the project:

		Potentially Significant Impact	Less-than-Significant Impact with Mitigation Measures Incorporated	Less-Than-Significant Impact	No Impact
a.	Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	☐	☐	☒	☐
b.	Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☐	☒

Comments:

a-b. The proposed project includes the construction of a single-family residence, which will result in increased demand for energy during its construction and long-term operation. Primary sources of energy use will be transportation fuels, electricity, and natural gas. Due to the small scale of the project, increases in demand for energy related to long-term operation will be minimal.

The project represents a common land use development type whose energy demand would not be excessive. The project energy demand would not be excessive relative to cumulative energy demand in the county. Further, the County of San Benito enforces the California Building Standards Code through the development review process. That enforcement is the primary mechanism through which the project will be required to implement energy efficiency/conservation measures that are within the control of the applicant and the county. Consequently, the proposed project would not conflict with or obstruct a state or local plan and would not result in inefficient, wasteful, and unnecessary consumption of energy.

7. GEOLOGY AND SOILS

Would the project:

		Potentially Significant Impact	Less-than-Significant Impact with Mitigation Measures Incorporated	Less-Than-Significant Impact	No Impact
a.	Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
	(1) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42?	☐	☐	☐	☒
	(2) Strong seismic ground shaking?	☐	☒	☐	☐
	(3) Seismic-related ground failure, including liquefaction?	☐	☒	☐	☐
	(4) Landslides?	☐	☐	☒	☐
b.	Result in substantial soil erosion or the loss of topsoil?	☐	☒	☐	☐
c.	Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	☐	☒	☐	☐
d.	Be located on expansive soil, creating substantial direct or indirect risks to life or property?	☐	☒	☐	☐
e.	Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☒	☐
f.	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☒	☐	☐

Comments:

A geotechnical report titled *Geotechnical Investigation Design Phase Proposed Residential Construction 494A Carpenteria Road, Aromas, San Benito County, California* was prepared for the proposed project by Butano Geotechnical Engineering Inc., and is included as Appendix C. The report presents the results of the geotechnical investigation to evaluate soil and groundwater conditions at the

project sites, geotechnical engineering recommendations for use in design of specific construction elements, provides criteria for site preparation and engineering fill construction.

a. Potential impacts from exposure to geologic risks are as follows:

(1) Surface Fault Ruptures. The project site is not located in an Alquist-Priolo Fault Zone. There are no known faults that traverse the project site.

(2) Ground Shaking. San Benito County is a region of high seismic activity. Major faults showing evidence of earthquake activity within the past 200 years include the Calaveras fault, San Andreas fault, Quien Sabe fault, Zayante-Vergeles fault, and Ortigalita fault. The San Andreas fault is located more than one mile east of the project site and the Zayante-Vergeles fault is located more than one mile west of the project site. It is reasonable to expect that the project area would be subject to intense ground shaking during an earthquake. The potential for damage during strong seismic shaking cannot be eliminated. Ground shaking and ground failure can result in structural failure and collapse, local damage to underground utilities, and the cracking of paved areas, presenting a hazard to people and structures. Implementation of the following mitigation measure would reduce this impact to a less-than-significant level.

Mitigation Measure

GEO-1 The applicant shall include the recommendations presented in the Geotechnical Investigation Design Phase Proposed Residential Construction 494A Carpenteria Road, Aromas, San Benito County, California by Butano Geotechnical Engineering Inc. in the project plans, and the recommendations shall be implemented during construction of the project.

(3) Liquefaction. Soil liquefaction is a state of soil particles suspension caused by a complete loss of strength when the effective stress drops to zero. Liquefaction usually occurs under vibratory conditions such as those induced by seismic event. The geotechnical report evaluated the potential for soil liquefaction at the project site during a seismic event and found that the soils at the project site consist of silty sand with a very low potential for expansion. The potential for collateral seismic hazards to affect the site and to damage the proposed structure is low. Implementation of Mitigation Measure GEO-1 would reduce any adverse impacts associated with liquefaction to a less-than-significant level.

(4) Landslides. The project site is located within a hillside that is less than 30 percent grade. According to San Benito County's Landslide Susceptibility Map, the project site is located within an area with low landslide incidence, i.e. less than 1.5 percent of the area is involved in landslides. Therefore, the potential for the proposed project to result in adverse effects, including the risk of loss, injury, or death involving landslides is less than significant.

b. Construction activities involving demolition, excavation, and grading expose soils to wind, water, and other eroding elements. The proposed project includes demolition and grading at the project site, which could result in substantial erosion. Implementation of the following mitigation measure would ensure erosion impacts are less-than-significant.

Mitigation Measure

GEO-2 Prior to issuance of a grading permit, the applicant shall prepare an erosion control plan indicating proposed methods for the control of runoff, erosion, and sediment control, subject to review and approval by the County Resources Management Agency. The erosion control plan shall be implemented during construction.

c-d. According to the geotechnical report, the upper soils at the project site consist of 2 ½ feet of very loose to loose silty sand overlying medium dense to very dense silty sand. These soils have very low potential for expansion. Static groundwater was not encountered in any of the soil boring tests, however, the depth to groundwater may vary seasonally. Implementation of Mitigation Measure GEO-1 would reduce any adverse impacts associated with expansive soils to a less-than-significant level.

e. The State Water Resources Control Board requires a permit for all new or replacement septic systems, either through a local jurisdiction or from the Central Coast Water Board. The State Water Resources Control Board *Onsite Wastewater Treatment Systems (OWTS) Policy*, amended in April 2023, identifies tiers for OWTS based on if the septic system is existing, new, or a replacement and if the jurisdiction has an approved Local Agency Management Plan (LAMP). Each tier includes specific siting, design standards, and construction and installation standards that must be met for permit approval of OWTS.

San Benito County does not have an approved LAMP (State Water Resources Control Board, page last updated January 2023) and thereby, the proposed project is subject to Tier 1 of the OWTS Policy and must meet the minimum site and design standards. Compliance with the OWTS Policy would help ensure the proposed project would not result in adverse environmental impacts related to OWTS. Additionally, the existing single-family residence on the project site utilizes an OWTS and thereby, development of the proposed project and an OWTS would not be inconsistent with existing uses on the property. Therefore, this impact would be less-than-significant.

f. There are no unique geologic features within the project site. Therefore, the proposed project would not have an impact on a unique geological feature.

Paleontological resources, including a range of plant and animal fossil remains, have been encountered at many locations within the county, including Tumey Gulch, Griswold Hills, Lariaus Creek, San Carlos Creek, the Bolsa Valley, Tres Pinos Creek, the San Benito River Valley, and within formations, including the Moreno and Tremblor Formations and the Panoche Formation within the Panoche-Coalinga area (general plan EIR, page 9-25). There are no known paleontological resources within the boundaries of the project site; however, it is possible that undiscovered paleontological resources exist within the

project site. Disturbance of paleontological resources would be considered a significant impact. Implementation of the following mitigation measure would reduce impacts to paleontological resources to a less-than-significant level.

Mitigation Measure

GEO-3 Due to the possibility that buried paleontological resources might be discovered during construction, the following language shall be included on all construction documents and on any permits issued for the project site, including, but not limited to, grading and building permits associated with proposed project:

"If paleontological resources are unexpectedly discovered during construction, work shall be halted immediately within 50 meters (160 feet) of the find, and the Planning Department notified, until it can be evaluated by a qualified professional paleontologist. If the find is determined to be significant, an appropriate resource recovery shall be formulated, with the concurrence of the San Benito County, and implemented."

8. GREENHOUSE GAS EMISSIONS

Would the project:

		Potentially Significant Impact	Less-than-Significant Impact with Mitigation Measures Incorporated	Less-Than-Significant Impact	No Impact
a.	Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
b.	Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☐	☒

Comments:

a-b. The California Legislature has enacted a series of statutes in recent years addressing the need to reduce greenhouse (GHG) emissions across the State. In September 2006, the California State Legislature enacted the California Global Warming Solutions Act of 2006, also known as Assembly Bill (AB) 32. AB 32 required that statewide GHG emissions be reduced to 1990 levels by 2020. AB 32 was amended by Senate Bill (SB) 32. Effective January 1, 2017, SB 32 requires that statewide GHG emissions be reduced to 40 percent below 1990 levels by 2030. SB 32 represents the current state legislative framework commonly used by local and regional agencies across the state as guidance for reducing GHG emissions from activities within their respective jurisdictions.

The project site is located within the boundaries of the Monterey Bay Air Resources District (hereinafter "air district"). To date, the air district has not adopted CEQA guidance for analysis of GHG effects of land use projects (e.g. numerical thresholds of significance) nor has it prepared a qualified GHG reduction plan for use/reference by local agencies located within the air district. Further, San Benito County has not adopted a GHG reduction emissions plan or climate action plan that is applicable to new development within the county. Absent other local or regional plans for reducing GHG emissions, state legislative guidance included in SB 32 is considered to be the plan for reducing GHG emissions that is applicable to the proposed project.

Since the proposed project includes the construction of one single-family residence, the project would not generate GHG emissions, either directly or indirectly, that would have a significant impact on the environment. Therefore, the environmental impact related to GHG emissions would be less than significant. Further, the proposed project would not conflict with SB 32 emissions reduction goals.

9. HAZARDS AND HAZARDOUS MATERIALS

Would the project:

		Potentially Significant Impact	Less-than-Significant Impact with Mitigation Measures Incorporated	Less-Than-Significant Impact	No Impact
a.	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☐	☒
b.	Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☐	☒
c.	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒
d.	Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code section 65962.5 and, as a result, create a significant hazard to the public or the environment?	☐	☐	☐	☒
e.	For a project located within an airport land-use plan or, where such a plan has not been adopted, within two miles of a public airport or a public-use airport, result in a safety hazard or excessive noise for people residing or working in the project area?	☐	☐	☐	☒
f.	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
g.	Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	☐	☐	☒	☐

Comments:

a. Construction of the proposed single-family residence may involve the use and storage of some materials that are considered hazardous. Hazardous materials used during construction may include fuels, oils, mechanical fluids, and other chemicals. Hazardous materials associated with operation of the proposed project may include typical solvents, paints, chemicals used for cleaning and building maintenance, and landscaping supplies. Transportation, storage, use and disposal of hazardous materials during construction and operation of the proposed project would be required to comply with applicable federal,

state, and local statutes and regulations. Therefore, the proposed project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.

b. Existing use on the project site includes a single-family residence. Based on historic aerial photographs, the project site appears to have been developed with an orchard in the 1930s, which was cleared by the mid-1950s. The site remained undeveloped until the construction of the existing single-family residence in the early 2000s. This has remained the existing use on the parcel since. Therefore, the proposed project would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.

c. No schools are located within a quarter mile of the project site. Therefore, the proposed project would not emit or handle hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.

d. The following lists were reviewed:

- Hazardous Materials Waste and Substances Sites from the Department of Toxic Substances Control EnviroStor Database (Department of Toxic Substances Control 2024;
- Leaking Underground Storage Tank Sites from the State Water Board's GeoTracker Database (State Water Resources Board 2024);
- Solid Waste Disposal Sites Identified by Water Board with Waste Constituents Above Hazardous Waste Levels Outside the Waste Management Unit (California Environmental Protection Agency 2024);
- "Active" Cease and Desist Order and Cleanup and Abatement Orders from Water Board (California Environmental Protection Agency 2024); and
- List of hazardous waste facilities subject to corrective action pursuant to Section 25187.5 of the Health and Safety Code, identified by the Department of Toxic Substances Control (California Environmental Protection Agency 2024).

The project site is not identified on any of these lists. Therefore, the proposed project would not create a significant hazard to the public or the environment.

e. The nearest public airport to the project site is the Watsonville Municipal Airport, located approximately 10.7 miles northwest of the project site. The project site is not located within an airport land use plan or within two miles of a public airport. Therefore, the proposed project would not result in a safety hazard or excessive noise for people residing or working in the project area.

f. Circulation within the project site will be provided by the existing S-shaped driveway. A proposed driveway that connects the proposed single-family residence to the existing S-shaped driveway would be constructed. The connection between the existing driveway and proposed driveway requires removal and replacement of approximately 150 linear

feet of existing driveway, which will be constructed to comply with relevant San Benito County Fire Department standards and other applicable requirements. The existing driveway currently provides emergency access to the project site as well as evacuation routes from the project site. The existing driveway meets San Benito County Fire Department standards and other applicable requirements. Therefore, the proposed project will not interfere with any adopted emergency or evacuation plans.

The unincorporated area's emergency evacuation/response plans are coordinated with the San Benito County Operational Area Emergency Operations Plan. As identified in the general plan, the area's primary evacuation routes would be along State Route 25 and State Route 156. The proposed project would not impair or obstruct these evacuation routes. Therefore, the proposed project would not impede or conflict with any adopted emergency response or evacuation plans.

g. According to the California Department of Forestry and Fire Protection's map for Fire Hazard Severity Zones in State Responsibility Areas in San Benito County, the project site is located within a very high fire severity zone in a state responsibility area. The project site is surrounded by wooded hillside and adjacent residential and commercial uses. While the use of the project site would not be inconsistent with adjacent uses, due to the proximity of the proposed single-family residence to wooded hillsides, and because of the high fire severity zone rating of the area, the potential to expose people and structures to risk from wildland fires is high and could expose people or structures to significant risks associated with wildland fires.

   The proposed project includes design features and infrastructure improvements that are discussed throughout this section, which help to further reduce the overall risk of the project site to wildfire hazards.

   County Code Chapter 23.27 sets forth fire design standards that apply to all uses within fire hazard severity zones. In accordance with the County Code, the proposed project shall be developed to meet County fire design standards. Additionally, vegetation management and operational activities on the project site would be required to comply with defensible space requirements found in the County Code Section 23.27.003. All measures to reduce risk related to wildfire hazards are intended to comply with both Aromas Tri-County Fire Protection District and California Fire Code requirements and improve overall firefighting capabilities of fire personnel on and around the project site.

   Compliance with the abovementioned design requirements and infrastructure improvements would help further ensure the proposed project would not result in significant exposure of people or structures to wildland fire risk. Therefore, this impact would be less than significant.

   See also Section 20.0, Wildfire, for discussion of wildland fires.

10. HYDROLOGY AND WATER QUALITY

Would the project:

	Potentially Significant Impact	Less-than-Significant Impact with Mitigation Measures Incorporated	Less-Than-Significant Impact	No Impact
a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	☐	☐	☐	☒
b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☒	☐
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
(1) Result in substantial erosion or siltation on- or off-site;	☐	☒	☐	☐
(2) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;	☐	☐	☒	☐
(3) Create or contribute runoff water that would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff; or	☐	☒	☐	☐
(4) Impede or redirect flood flows?	☐	☐	☐	☒
d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☐	☒
e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☐	☒

Comments:

a. **Water Quality Standards or Waste Discharge Requirements Associated with Construction.** The State Water Resources Control Board has implemented a National Pollutant Discharge Elimination System (NPDES) Program to control and enforce storm water pollutant discharge reduction per the Clean Water Act. The Central Coast Regional Water Quality Control Board issues and enforces the NPDES permits for discharges to water bodies in San Benito County.

Development of the project site with the proposed single-family residence has the potential to increase discharge of storm water pollutants during construction due to ground disturbance. Projects disturbing more than one acre of land during construction are required to file a notice of intent to be covered under the State NPDES Construction General Permit for discharges of storm water associated with construction activities. The Construction General Permit requires the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP) that details how water quality would be protected during construction activities. The SWPPP must contain a site map(s) that shows the construction site perimeter, existing and proposed buildings, lots, roadways, storm water collection and discharge points, general topography (both before and after construction), and drainage patterns across the project. Best Management Practices, which are detailed within each permit, are to be implemented to protect water quality.

The project applicant would be required to obtain a State NPDES Construction General Permit for development on the project site. By complying with the Construction General Stormwater Permit requirements, the proposed project would not violate any water quality standards or degrade water quality.

b. **Groundwater Supplies.** Water service to the project site will be provided by the Aromas Water District ("water district"), which derives its supply from three groundwater wells located in the Aromas area. As described in Section 19, Utilities and Service Systems, sufficient water is available to serve the proposed project.

Groundwater Recharge. According to the Groundwater Basin Boundary Assessment Tool by the Department of Water Resources, the project site lies within the Corralitos - Pajaro Valley Groundwater Basin, which includes approximately 75,000 acres in southern Santa Cruz County, northern Monterey County, and a small portion in the northwestern portion of San Benito County. Development of the proposed project (one house) would minimally increase the amount of impervious surfaces and therefore, would not substantially interfere with groundwater recharge.

c. **Post-Construction Water Quality Standards or Waste Discharge Requirements.** The project site does not contain any streams or rivers. The project site consists of wooded hillside. The proposed project would increase the amount of impervious surfaces due to the construction of the single-family residence and driveway and therefore, would minimally alter the existing drainage pattern of the site. Potential impacts from the increase in impervious surfaces are discussed below:

(1) Erosion. Development of the proposed project may lead to significant siltation and/or erosion on-or off-site due to the proposed amount of grading. Implementation of Mitigation Measure GEO-2 presented in Section 7, Geology and Soils would reduce this potentially significant impact to less-than-significant level.

(2) **Flooding.** The preliminary site and grading plan (sheet 2 in Appendix A) indicates that storm water from the proposed project will drain into a dispersion trench located on the project site, just southwest of the proposed single-family residence. Therefore, the dispersion trench eliminates the potential for flooding on- or off-site, creating a less-than-significant impact.

(3) **Runoff.** Development of the proposed project would create storm water runoff. The preliminary site and grading plan (sheet 2 in Appendix A) indicates that storm water from the proposed project will drain into a dispersion trench located on the project site, just southwest of the proposed single-family residence. To ensure that the proposed project does not provide additional sources of polluted runoff, the following mitigation measure shall be required.

Mitigation Measure

HYD-1Prior to issuance of a grading permit, the applicant shall prepare a drainage plan that complies with the San Benito County Best Management Practices and standards established for compliance with non-point discharge emissions for storm water. The drainage plan shall incorporate Low Impact Development strategies and Best Management Practices to reduce storm water runoff, encourage infiltration, and reduce pollutant transmission. The drainage plan shall be subject to review and approval by County Resource Management Agency, and be implemented with development of the project.

(4) **Flood flows.** As discussed under checklist item "d" below, the project site is located within an area of minimal flood hazard. Therefore, development of the proposed project would not impede or redirect flood flows.

d. According to the Federal Emergency Management Agency's (FEMA) Flood Map Service Center, the project site is located within an area of minimal flood hazard. Additionally, the California Department of Conservation does not identify the project site within a tsunami hazard area, nor a seiche zone. Therefore, development of the proposed project would not risk the release of pollutants due to project inundation.

e. The Sustainable Groundwater Management Act is a State law requiring groundwater basins to be sustainable. The act enables eligible local agencies to form groundwater sustainability agencies, develop groundwater sustainability plans for designated basins in their jurisdiction by 2020, and achieve groundwater sustainability within 20 years of plan implementation. The project site is located within the Pajaro Valley groundwater basin. The Pajaro Valley Water Management Agency is the groundwater sustainability agency for the Pajaro Valley groundwater basin. The Pajaro Valley Water Management District last updated and adopted its groundwater sustainability plan on November 17, 2021 and submitted the plan to the California Department of Water Resources in December 2021. The proposed project includes the development of a single-family residence and therefore, will not conflict with or obstruct the implementation of the sustainable groundwater management plan.

The *Water Quality Control Plan for the Central Coastal Basin* (hereinafter "Basin Plan") shows how the quality of the surface and ground waters in the Central Coast Region should be managed to provide the highest water quality reasonably possible. The Regional Water Quality Control Board implements the Basin Plan by issuing and enforcing waste discharge requirements to individuals, communities, or businesses whose waste discharges can affect water quality. These requirements can be either State Waste Discharge Requirements for discharges to land, or federally delegated NPDES permits for discharges to surface water. As discussed under checklist item "a" above, the project applicant would be required to obtain a State NPDES Construction General Permit for development on the project site. By complying with the Construction General Stormwater Permit requirements, the proposed project would not conflict with the Basin Plan.

11. Land Use and Planning

Would the project:

		Potentially Significant Impact	Less-than-Significant Impact with Mitigation Measures Incorporated	Less-Than-Significant Impact	No Impact
a.	Physically divide an established community?	☐	☐	☐	☒
b.	Cause any significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☒	☐

Comments:

a. The project site is located in unincorporated San Benito County, approximately seven miles southeast of the City of Watsonville and approximately six miles northwest of the City of San Juan Bautista. Existing use on the project site includes a single-family residence. Land uses adjacent to the project site include rural residences to the east, south, and west, and the Aromas Tri-County Fire Protection District fire station immediately to the north. Therefore, development of the project site with a single-family residence would not physically divide an established community.

b. The general plan policies addressing environmental resources were evaluated for consistency with the proposed project. The consistency analysis is presented below:

Section 3.0, Air Quality, states that the proposed project would not result in a significant increase in the population, and thereby would not exceed the population projections of the air quality management plan. Therefore, the proposed project would not conflict with or obstruct implementation of the air quality management plan.

Section 4.0, Biological Resources, addresses several relevant policies that protect sensitive biological resources. With implementation of mitigation measures BIO-1 through BIO-6, the proposed project would not conflict with the San Benito County Code of Ordinances, nor would it conflict with any of the policies described in the San Benito County General Plan that protect biological resources. Therefore, the proposed project would not cause a significant environmental impact due to conflict with a local policy or plan.

Section 6.0, Energy, states that the proposed project's energy demand would not be excessive relative to cumulative energy demand in the county. The County of San Benito enforces the California Building Standards Code through the development review process. That enforcement is the primary mechanism through which the project will be required to implement energy efficiency/conservation measures that are within the control of the applicant and the county. Therefore, the proposed project would not conflict with or obstruct a state or local plan and would not result in inefficient, wasteful, and unnecessary consumption of energy.

Section 8.0, Greenhouse Gas Emissions, states that San Benito County has not adopted a GHG reduction emissions plan or climate action plan that is applicable to new development within the county. Therefore, the proposed project is subject to state legislative guidance included in SB 32 for reducing GHG emissions applicable to the proposed project. Since the proposed project includes the construction of one single-family residence, the project would not generate GHG emissions, either directly or indirectly, that would have a significant impact on the environment. Therefore, the environmental impact related to GHG emissions would be less-than-significant.

As concluded in Section 10.0, Hydrology and Water Quality, the proposed project would not conflict with an adopted groundwater sustainability plan or groundwater basin plan.

As discussed in Section 13.0, Noise, compliance with applicable general plan policies, San Benito County Code requirements, and Mitigation Measure N-1 would ensure less-than-significant impacts associated with reducing exposures to unacceptable noise due to project construction.

Section 17.0, Transportation, concludes that compliance with applicable General Plan and Regional Transportation Plan policies related to the county's circulation system and the applicant's payment of the traffic impact fee would offset any potential impacts the project could have to the circulation system. Therefore, the proposed project would not conflict with a program, plan, ordinance, or policy addressing the circulation system.

12. MINERAL RESOURCES

Would the project:

		Potentially Significant Impact	Less-than-Significant Impact with Mitigation Measures Incorporated	Less-Than-Significant Impact	No Impact
a.	Result in loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
b.	Result in the loss of availability of a locally important mineral resource recovery site delineated in a local general plan, specific plan, or other land-use plan?	☐	☐	☐	☒

Comments:

a-b. The State Mining and Geology Board has designated portions of San Benito County as having construction aggregate deposits (sand, gravel, and crushed rock) of regional significance, pursuant to the Surface Mining and Reclamation Act (general plan, page 7.3). These resource areas remain available near the San Benito River (San Benito County Zoning Map). The project site is located approximately four miles from the San Benito River. Therefore, the proposed project would not result in impacts to known mineral resources or result in the loss of availability of a locally important resource recovery site.

13. NOISE

Would the project result in:

		Potentially Significant Impact	Less-than-Significant Impact with Mitigation Measures Incorporated	Less-Than-Significant Impact	No Impact
a.	Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or in applicable standards of other agencies?	☐	☒	☐	☐
b.	Generation of excessive ground-borne vibration or ground borne noise levels?	☐	☐	☒	☐
c.	For a project located within the vicinity of a private airstrip or an airport land-use plan or, where such a plan has not been adopted, within two miles of a public airport or public-use airport, expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

Comments:

a. The noise element of the general plan establishes land use compatibility criteria for transportation noise sources in terms of the Day-Night Average Level (L_{dn}) to describe noise exposure for noise compatibility planning purposes. The guidelines define an outdoor level of 60 dB L_{dn} as being "normally acceptable" for residential uses. The noise element requires that interior noise levels for all new residential construction not exceed 45 dB L_{dn}.

Construction Noise. The majority of construction activities within the project site would generally occur at distances of greater than 200 to 300 feet from nearby noise-sensitive land uses (residences). Construction noise could result in a short-term significant increase in ambient noise levels at nearby noise sensitive land uses. Implementation of the following mitigation measure would reduce this potentially significant impact to a less-than-significant level.

Mitigation Measure

N-1 To reduce construction-related noise, the applicant shall include the following measures in the project plans:

a. Operation of construction equipment shall be limited to the hours of 7:00 a.m. and 6:00 p.m. on weekdays and 8:00 a.m. and 5:00 p.m. on Saturdays. No construction shall be allowed on Sundays or federal holidays;

b. All internal combustion engine-driven equipment shall be equipped with mufflers;

c. All stationary noise-generating equipment, such as air compressors and portable power generators, shall be located as far away as possible from adjacent land uses;

d. Staging areas and construction material areas shall be located as far away as possible from adjacent land uses;

e. Unnecessary idling of internal combusting engines shall be prohibited; and

f. The days and hours of construction, as well as, the name and phone number of a designated representative to be contacted for noise-related concerns, should be posted at the perimeter of the project site.

Operational Noise. The proposed project includes the construction of a single-family residence and a driveway, which would not result in a significant increase in ambient noise levels in excess of standards established in the San Benito County 2035 General Plan (interior noise levels of 45 dB Ldn and exterior noise levels of 60 dB Ldn). Further, the proposed project would not result in ambient noise levels inconsistent with adjacent residential uses. Therefore, operational noise level impacts associated with the proposed project would be less-than-significant.

b. Standard construction methods are anticipated, and these methods do not involve significant vibration-causing activities. Vibration levels generated during project construction activities may at times be perceptible at neighboring land uses, but vibration levels would not be excessive causing cosmetic or structural damage to buildings. Therefore, this impact would be less than significant.

Long-term operational activities associated with the proposed project would not involve the use of any equipment or processes that would result in potentially significant levels of ground vibration.

c. The nearest public airport to the project site is the Watsonville Municipal Airport, located approximately 10.7 miles northwest of the project site. The project site is not located within an airport land use plan or within two miles of a public airport. Therefore, the proposed project would not expose residents or workers to excessive noise levels from airport or airstrip operations.

14. POPULATION AND HOUSING

Would the project:

		Potentially Significant Impact	Less-than-Significant Impact with Mitigation Measures Incorporated	Less-Than-Significant Impact	No Impact
a.	Induce substantial unplanned population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)?	☐	☐	☐	☒
b.	Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

Comments:

a. With a general plan designation of Rural Transitional (RT) and zoning district of Rural Transitional (RT), the project site was anticipated for residential development not to exceed one dwelling unit per 2.5 acres of land. Development of the project site with the proposed single-family residence will be consistent with the general plan designation and zoning district. Therefore, the proposed project would not induce substantial unplanned population growth in an area, either directly or indirectly.

b. The project includes a minor subdivision process to split the five-acre parcel into two 2.5-acre parcels. The project site includes one existing single-family residence located on the easterly portion of the site, which is intended to remain. The proposed single-family residence would be constructed on the westerly portion of the site. Therefore, the proposed project would not displace existing people or housing and would not necessitate the construction of replacement housing elsewhere.

15. PUBLIC SERVICES

Would the project result in substantial adverse physical impacts associated with the provision of or need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the following public services:

	Potentially Significant Impact	Less-than-Significant Impact with Mitigation Measures Incorporated	Less-Than-Significant Impact	No Impact
a. Fire protection?	☐	☐	☒	☐
b. Police protection?	☐	☐	☒	☐
c. Schools?	☐	☐	☒	☐
d. Parks?	☐	☐	☒	☐
e. Other public facilities?	☐	☐	☒	☐

Comments:

a. The project site is located within the Aromas Tri-County Fire Protection District (LAFCO of Monterey, 2020). The closest fire station is located at 492 Carpenteria Road, approximately 500 feet from the project site (Aromas Tri-County Fire Protection District, 2024). The proposed project would not result in a substantial increase in population in the region and is not anticipated to result in a significant increase in demand for fire services, resulting in the need for new or physically altered governmental facilities to serve the project.

b. The San Benito County Sherriff's Department provides police protection services to unincorporated San Benito County, including the project site, which is designated as Responsibility Area Five (San Benito County Office of the Sherrif, 2024). The San Benito County Sherriff's Department is headquartered at 2301 Technology Parkway in Hollister, approximately 19.2 miles from the project site. The proposed project would not result in a substantial increase in population in the region and is not anticipated to result in a significant increase in demand for police services, resulting in the need for new or physically altered governmental facilities to serve the project. Therefore, the proposed project would have a less-than-significant impact.

c. The Aromas-San Juan Unified School District provides educational services to areas within unincorporated San Benito County, including the project site. The proposed single-family residence would not result in a substantial increase in population in the region and is not anticipated to result in a significant increase in demand greater than existing levels of demand for schools.

The proposed project would be subject to the applicable school impact fees as calculated by the school district. The applicant would be required to pay the applicable school impact fees, which would ultimately be programmed by the school districts, in combination with fees collected from other projects, to improve or expand school facilities. Pursuant to California Government Code Section 65996, payment of these fees is deemed to fully mitigate CEQA impacts of new development on school facilities.

d. San Benito County provides and maintains approximately 475.5 acres of parkland not including federal and state parks and wildlife areas (general plan, FEIR, page 3-33). There are 11 public parks located within a 10-mile radius of the project site, including two that are less than two miles from the project site. The proposed single-family residence would not result in a substantial increase in population in the region and is not anticipated to result in a significant increase in demand for additional park space.

San Benito County requires that residential projects either dedicate land and/or pay park and recreation impact fees to offset the need for expanded park facilities. The proposed project would be subject to park and recreation impact fees as calculated by the county. The applicant would be required to pay the applicable park and recreation impact fees that would be used to improve or expand existing park facilities. Payment of the applicable park and recreation impact fees would reduce the proposed project's impact on parks to a less-than-significant level.

e. The proposed project would not result in a substantial increase in population in the region and is not anticipated to result in a significant increase in demand for services, resulting in the need for new or physically altered facilities to serve the project. The proposed project would not increase demand for schools or parks, greater than existing levels of demand. Therefore, the proposed project would not result in physical impacts associated with the provision of or need for new or physically altered governmental facilities.

16. RECREATION

		Potentially Significant Impact	Less-than-Significant Impact with Mitigation Measures Incorporated	Less-Than-Significant Impact	No Impact
a.	Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☒	☐
b.	Does the project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?	☐	☐	☒	☐

Comments:

a-b. As discussed in Section 15, Public Services, development of the project site with a single-family residence would not result in a substantial increase in population in the region and is not anticipated to result in a significant increase in demand for services, resulting in the need for new or physically altered facilities to serve the project. San Benito County requires that residential projects either dedicate land and/or pay park and recreation impact fees to offset the need for expanded park facilities.

The proposed project does not include parkland. The proposed project would be subject to park and recreation impact fees as calculated by the county. The applicant would be required to pay the applicable park and recreation impact fees, to help with maintenance and operation of existing park facilities. Payment of the applicable park and recreation impact fees would reduce the physical impacts on recreational facilities to a less-than-significant level.

17. TRANSPORTATION

Would the project:

		Potentially Significant Impact	Less-than-Significant Impact with Mitigation Measures Incorporated	Less-Than-Significant Impact	No Impact
a.	Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	☐	☐	☐	☒
b.	Conflict or be inconsistent with CEQA guidelines section 15064.3, subdivision (b)?	☐	☐	☐	☒
c.	Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☒
d.	Result in inadequate emergency access?	☐	☐	☐	☒

Comments:

a-b. The 2045 San Benito Regional Transportation Plan (hereinafter "RTP") includes both a long and short-range program of strategies and actions that lead to the development of an integrated intermodal transportation system that facilitates the efficient movement of people and goods. The proposed project was reviewed against the transit-related goals and strategies in the RTP and was found to be consistent.

The County established a Traffic Impact Fee (Ordinance No. 554) for the purpose of mitigating the costs of transportation and transit facilities and adverse impacts necessitated by new development in the county. Per the San Benito County Code Chapter 5.01, all new residential and commercial development is required to pay the traffic impact fee prior to issuance of a building permit.

Further, the proposed project is consistent with existing adjacent residential uses, and therefore would not result in a significant impact to existing traffic operations in the area. A vehicle miles traveled assessment was not conducted based on the small size of the proposed project (construction of single-family residence), which would not significantly increase the population size or vehicle miles traveled in the area.

c-d. Vehicular access to the project site from Carpenteria Road would be provided by the existing driveway. The proposed project includes removal and replacement of 150 linear feet of the existing driveway upon entering the property and adding a vertical extension to the proposed single-family residence. The proposed driveway vertical extension will be 16-feet wide and provide a 12-foot-wide turnaround. The proposed driveway will be

designed to adhere to the San Benito County design guidelines and standards and would be subject to approval by the San Benito County Public Works and San Benito County Fire Department. This would ensure that the proposed project is adequately designed to minimize hazards associated with design. Therefore, the proposed project would not increase hazards due to a design feature or result in inadequate emergency access.

18. TRIBAL CULTURAL RESOURCES

Would the project:

		Potentially Significant Impact	Less-than-Significant Impact with Mitigation Measures Incorporated	Less-Than-Significant Impact	No Impact
a.	Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, or cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
(1)	Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources code section 5020.1(k), or	☐	☐	☐	☒
(2)	A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☐	☐	☒

Comments:

a. The CEQA statute as amended by Assembly Bill 52 (Public Resources Code Sections 21073 and 21074) define "California Native American tribe" and "tribal cultural resources." A California Native American tribe is defined as a Native American tribe located in California that is on the contact list maintained by the Native American Heritage Commission. "Public Resources Code Section 21080.3.1 outlines procedures for tribal consultation as part of the environmental review process.

Jonathan Olivas (email message, January 22, 2024) stated that no California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1.

19. Utilities and Service Systems

Would the project:

		Potentially Significant Impact	Less-than-Significant Impact with Mitigation Measures Incorporated	Less-Than-Significant Impact	No Impact
a.	Require or result in the relocation or construction of new or expanded water, wastewater treatment, storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☒	☐
b.	Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, single-dry and multiple- dry years?	☐	☐	☐	☒
c.	Result in a determination by the wastewater treatment provider, which serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☐	☒
d.	Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	☐	☐	☐	☒
e.	Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☐	☒

Comments:

a. The Aromas Water District ("water district") will provide water service to the proposed project (see discussion "b" below). Pacific Gas and Electric provides electricity and natural gas to San Benito County, including the project site. Telecommunication services, including telephone, mobile phone, cable television, and broadband internet services, in the county are provided by companies like AT&T and Charter (general plan, page 7-13).

The proposed project would not require relocation or construction of new or expanded water, electric power, natural gas, or telecommunication facilities, except as necessary to reach the proposed new house. However, the proposed project would require installation of a new on-site septic system and construction of a storm water dispersion trench.

As described in Section 7, Geology and Soils, the proposed project would be subject to the State Water Resources Control Board *Onsite Wastewater Treatment Systems (OWTS) Policy*, which defines minimum site and design standards and construction and installation

standards that must be met for permit approval of OWTS. Compliance with the OWTS Policy would ensure the proposed project would not result in adverse environmental impacts. Therefore, environmental impacts related to OWTS would be less than significant.

The preliminary site and grading plan (sheet 2 in Appendix A) indicates that storm water from the proposed project will drain into a newly constructed dispersion trench located on the project site, just southwest of the proposed single-family residence. As described in Section 10, Hydrology and Water Quality, the proposed project would be required to obtain a State NPDES Construction General Permit for development, which requires development and implementation of a Storm Water Pollution Prevention Plan (SWPPP) and Best Management Practices to be implemented to protect water quality. Further, Mitigation Measure HYD-1 would ensure environmental pollutants related to storm water runoff would not result in adverse environmental impacts. Therefore, environmental impacts related to storm water would be less than significant.

b. The water district is a water purveyor whose service area includes parts of Monterey County and San Benito County. The project site is located within the water district's service boundary. Robert Johnson with the water district (letter to Elijah Vinculado, January 26, 2022) stated that the water district's system has sufficient water production, distribution capacity, and infrastructure to effectively serve the proposed project. Therefore, there are sufficient water supplies available to serve the project. No off-site water system improvements are necessary.

c. The proposed project would require installation of a new on-site septic system and would not require wastewater treatment services from a service provider. Therefore, the proposed project is not subject to the capacity limits of service providers. No off-site wastewater system improvements are necessary.

d-e. The proposed project would result in the construction of one house and therefore, would not generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals.

Additionally, recycle opportunities would be made available to the occupant of the house and therefore, the project would comply with federal, state, and local management and reduction statutes and regulations related to solid waste.

20. WILDFIRE

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:

		Potentially Significant Impact	Less-than-Significant Impact with Mitigation Measures Incorporated	Less-Than-Significant Impact	No Impact
a.	Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
b.	Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of wildfire?	☐	☐	☐	☒
c.	Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☒	☐
d.	Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☐	☒

Comments:

According to the California Department of Forestry and Fire Protection's map for Fire Hazard Severity Zones in State Responsibility Areas in San Benito County, the project site is located within a very high fire severity zone in a state responsibility area.

a. The proposed project includes the construction of a single-family residence. The unincorporated area's emergency evacuation/response plans are coordinated with the San Benito County Operational Area Emergency Operations Plan. As identified in the San Benito County General Plan, the area's primary evacuation routes would be along State Route 25 and State Route 156. The project site is located a minimum of one and a half miles from State Route 156 and State Route 25. The proposed project would not impair or obstruct these evacuation routes. Therefore, the proposed project would not impair an adopted emergency response plan or emergency evacuation plan.

b. The project site slopes to the west at less than 30 percent grade. This slope could increase the speed and intensity of wildfires exacerbating wildfire risks. However, development of the proposed single-family residence would not exacerbate wildfire risks and thereby expose people to pollutant concentrations from a wildfire or the uncontrolled spread of wildfires.

c. The proposed single-family residence has the ability to connect into existing water lines and have access to existing overhead electricity power lines. The proposed project would require installation of a new on-site septic system and construction of a storm water dispersion trench. With the exception of installation of a new on-site septic system and construction of a storm water dispersion trench, the proposed project would not require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment.

As described in Section 7, Geology and Soils, the proposed project would be subject to the State Water Resources Control Board Onsite Wastewater Treatment Systems (OWTS) Policy, which defines minimum site and design standards and construction and installation standards that must be met for permit approval of OWTS. Compliance with the OWTS Policy would ensure the proposed project would not result in adverse environmental impacts. Therefore, environmental impacts related to OWTS would be less than significant.

As described in Section 10, Hydrology and Water Quality, the proposed project would be required to obtain a State NPDES Construction General Permit for development, which requires development and implementation of a Storm Water Pollution Prevention Plan (SWPPP) and Best Management Practices to be implemented to protect water quality. Further, Mitigation Measure HYD-1 would ensure environmental pollutants related to storm water runoff would not result in adverse environmental impacts. Therefore, environmental impacts related to storm water drainage would be less-than-significant.

d. According to San Benito County's Landslide Susceptibility Map, the project site is located within an area with low landslide incidence, i.e. less than 1.5 percent of the area is involved in landslides. Construction of the proposed project would not expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire instability, or drainage changes.

21. MANDATORY FINDINGS OF SIGNIFICANCE

		Potentially Significant Impact	Less-than-Significant Impact with Mitigation Measures Incorporated	Less-Than-Significant Impact	No Impact
a.	Does the project have the potential to substantially degrade the quality of the environment; substantially reduce the habitat of a fish or wildlife species; cause a fish or wildlife population to drop below self-sustaining levels; threaten to eliminate a plant or animal community; substantially reduce the number or restrict the range of an endangered, rare, or threatened species; or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐
b.	Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)	☐	☒	☐	☐
c.	Does the project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☒	☐	☐

Comments:

a. As discussed in Section 4.0, Biological Resources, the proposed project has the potential to have a substantial adverse effect through habitat modifications. Implementation of Mitigation Measures BIO-1 through BIO-6 would reduce potential impacts to a less-than-significant level.

As discussed in Section 5.0, Cultural Resources, the project site is not known to contain any historic resources, archaeological resources, or Native American human remains. However, it is possible that these resources could be accidentally uncovered during grading and construction activities. In the event this should occur, Mitigation Measures CR-1 and CR-2 would reduce potential impacts to a less-than-significant level.

b. The proposed project has the potential to result in cumulatively considerable impacts in the areas of air quality (construction-related impacts), biological resources (potential disturbance to existing habitats), geology and soils (construction-related impacts), and hydrology (construction-related impacts). However, with the implementation of Mitigation Measures AQ-1; BIO-1 through BIO-6; GEO-1 and GEO-3; and HYD-1, impacts of the proposed project would not be cumulatively considerable.

c. The proposed project has the potential to result in adverse environmental effects that could cause substantial adverse effects on human beings from construction-related fugitive dust emissions and construction-related emissions of dust and diesel exhaust. Implementation of Mitigation Measure AQ-1 would reduce potential impacts to a less-than-significant level.

E. Sources

Setting and Background

County of San Benito. Municipal Code Chapter 25.05, Zoning Map and Zoning Districts. https://codelibrary.amlegal.com/codes/sanbenitocounty/latest/sanbenito_ca/0-0-0-11462#JD_Chapter25.03

County of San Benito. GIS Viewer. Accessed on December 19, 2023.

https://gis.cosb.us/Html5Viewer_2_0/Index.html?configBase=https://gis.cosb.us/Geocortex/Essentials/REST/sites/SBC/viewers/Public/virtualdirectory/Resources/Config/Default

Google Earth Pro. 2024.

Project Description

County of San Benito. July 2015. *2035 San Benito County General Plan.* https://www.cosb.us/home/showpublisheddocument/5859/637347294134470000

Aesthetics

County of San Benito. Municipal Code. Chapter 25.07, Outdoor Lighting. https://codelibrary.amlegal.com/codes/sanbenitocounty/latest/sanbenito_ca/0-0-0-36811#JD_25.07.012

County of San Benito. July 2015. *2035 San Benito County General Plan.* https://www.cosb.us/home/showpublisheddocument/5859/637347294134470000

County of San Benito. December 1975. *Conservation and Scenic Easement Deed.*

California Department of Transportation. "California State Scenic Highway System Map." Accessed on January 10, 2024. https://caltrans.maps.arcgis.com/apps/webappviewer/index.html?id=465dfd3d807c46cc8e8057116f1aacaa. Accessed on January 4, 2024.

Agriculture

California Department of Conservation. Farmland Mapping and Monitoring Program. Accessed on January 4, 2024. https://www.conservation.ca.gov/dlrp/fmmp.

Air Quality

Monterey Bay Air Resources District. 2012-2015. *Air Quality Management Plan.* Monterey, CA. Accessed on January 4, 2024. https://www.mbard.org/files/6632732f5/2012-2015-AQMP_FINAL.pdf

Monterey Bay Unified Air Pollution Control District. February 2008. *CEQA Air Quality Guidelines.* Accessed January 6, 2024. https://www.co.monterey.ca.us/home/showdocument?id=22559.

Biological Resources

Baldwin, B. et al. 2012. *The Jepson Manual: Vascular Plants of California. Second Edition.* University of California Press, Berkeley, CA.

Calflora Database. 2023. *Calflora: Information on California plants for education, research and conservation online database.* Berkeley, California. Accessed February 2024. https://www.calflora.org/

California Department of Fish and Wildlife (CDFW). 2023a. *California Natural Diversity Database (CNDDB)* online database. Sacramento, California. Accessed January 2024. https://wildlife.ca.gov/data/cnddb

CDFW. 2023b. *Biogeographic Information and Observation System (BIOS)* online database. Sacramento, California. Accessed January 2024. http://bios.dfg.ca.gov

CDFW. 2023c. *California Natural Community List.* Sacramento, California. Accessed January 2024. https://wildlife.ca.gov/Data/VegCAMP/Natural-Communities

CDFW. 2023d. *California Essential Habitat Connectivity Project.* Sacramento, California. Accessed January 2024. https://wildlife.ca.gov/Conservation/Planning/Connectivity/CEHC

CDFW. 2008b. *Life History Account for California Red-legged Frog.* Wildlife Habitat Relationships System. California Interagency Wildlife Task Group.

CDFW. 2018. *Protocols for Surveying and Evaluating Impacts to Special-Status Native Plant Populations and Sensitive Natural Communities.* Sacramento, California. https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=18959&inline

California Invasive Plant Council (Cal-IPC). 2023. *Cal-IPC Invasive Plant Inventory* online database. Accessed January 2024. https://www.cal-ipc.org/plants/inventory/

California Native Plant Society (CNPS). 2001. CNPS Botanical Survey Guidelines. Sacramento, California. https://www.cnps.org/plant-science/field-protocols-guidelines

California Native Plant Society (CNPS). 2023. *Inventory of Rare and Endangered Plants of California online database.* Records of occurrence for San Felipe, Chittenden, Watsonville East, Salinas, Natividad, Mt. Harlan, Prunedale, San Juan Bautista, and Hollister USGS quadrangles. Sacramento, California. Accessed December 2023. http://www.rareplants.cnps.org

City of San Juan Bautista. City of San Juan Batista 2035 General Plan. November 1, 2015.

City of San Juan Bautista. San Juan Bautista Municipal Code. Updated October 17, 2023. Accessed December 2023. https://www.codepublishing.com/CA/SanJuanBautista/

County of San Benito. July 2015. *2035 San Benito County General Plan.* Accessed February 2024. https://www.cosb.us/departments/resource-management-agency/building-planning/general-plan

Jepson Flora Project. 2023. *Jepson eFlora* online database. Accessed February 2024. https://ucjeps.berkeley.edu/eflora/

San Benito County. 2024. Personal communication between Michael Kelley, Senior Planner, and Rose Ashbach, Associate Biologist. May 20, 2024.

Sawyer, J. O., T. Keeler-Wolf, and J.M. Evens. 2009. *A Manual of California Vegetation.* California Native Plant Society, Sacramento, CA.

Sibley, David A. 2016. *The Sibley Field Guide to Birds of Western North America: Second Edition.* New York, Alfred A. Knopf.

U.S. Fish and Wildlife Service (USFWS). 2023a. *Critical Habitat for Threatened and Endangered Species* online mapper. Accessed February 2024. https://fws.maps.arcgis.com/home/webmap/viewer.html?webmap=9d8de5e265ad4fe09893cf75b8dbfb77

USFWS. 2023b. *Endangered Species Program* online database. Species list for San Benito County. Washington, D.C. Accessed February 2024. http://www.fws.gov/endangered/

USFWS. 2023c. *National Wetlands Inventory* online database. Washington, D.C. Accessed February 2024. http://www.fws.gov/wetlands/

USFWS. 2003. *Interim Guidance on Site Assessment and Field Surveys for Determining Presence or a Negative Finding of the California Tiger Salamander.*

USFWS. 2005. *Revised Guidance on Site Assessments and Field Surveys for the California Red-Legged Frog.*

Cultural Resources

Archaeological Resource Management. February 12, 2024. *Cultural Resources Evaluation of the Project at 494A Carpenteria Road in the County of San Benito.*

Energy

California Energy Commission. 2022. *Building Energy Efficiency Standards.* Accessed on January 6, 2024. https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards/2022-building-energy-efficiency.

Geology and Soils

Butano Geotechnical Engineering, Inc. April 2022. *Geotechnical Investigation Design Phase Proposed Residential Construction 494A Carpenteria Road, Aromas, San Benito County, California.*

California Department of Conservation. "Earthquake Zones of Required Investigation." Accessed on January 4, 2024. https://maps.conservation.ca.gov/cgs/EQZApp/app/

California State Water Resources Control Board. Water Quality Control Policy for Siting, Design, Operation and Maintenance of Onsite Wastewater Treatment Systems (OWTS) Policy. Accessed on February 28, 2024. https://www.waterboards.ca.gov/water_issues/programs/owts/

California State Water Resources Control Board. April 18, 2023. *Onsite Wastewater Treatment Systems Policy.* Accessed on February 28, 2024. https://www.waterboards.ca.gov/water_issues/programs/owts/docs/adopted_owts_policy.pdf

County of San Benito. June 19, 2015. *Final Environmental Impact Report 2035 San Benito County General Plan Update.*

County of San Benito. Landslide Susceptibility Map. Last modified April 6, 2016. Accessed on January 4, 2024. https://www.arcgis.com/home/webmap/viewer.html?webmap=0af0afa9c5e94943a8fd570ec153c936

Greenhouse Gas Emissions

California Air Resources Board. Assembly Bill 32. Global Warming Solutions Act of 2006. Accessed on January 4, 2024. https://ww2.arb.ca.gov/resources/fact-sheets/ab-32-global-warming-solutions-act-2006

California Senate Bill 32. September 8, 2016. *California Global Warming Solutions Act of 2006: Emissions Limit.* Accessed on January 4, 2024. https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201520160SB32

Hazards and Hazardous Materials

California Department of Toxic Substances Control. "Envirostor – Hazardous Waste and Substances Site List (Cortese)." Accessed on January 4, 2024. https://www.envirostor.dtsc.ca.gov/public/search.asp?page=1&cmd=search&business_name=&main_street_name=&city=&zip=&county=&status=ACT%2CBKLG%2CCOM&branch=&site_type=CSITES%2CFUDS&npl=&funding=&reporttitle=HAZARDOUS+WASTE+AND+SUBSTANCES+SITE+LIST+%28CORTESE%29&reporttype=CORTESE&federal_superfund=&state_response=&voluntary_cleanup=&school_cleanup=&operating=&post_closure=&non_operating=&corrective_action=&tiered_permit=&evaluation=&spec_prog=&national_priority_list=&senate=&congress=&assembly=&critical_pol=&business_type=&case_type=&searchtype=&hwmp_site_type=&cleanup_type=&ocieerp=&hwmp=False&permitted=&pc_permitted=&inspections=&inspectionsother=&complaints=&censustract=&cesdecile=&school_district=&orderby=county

California Environmental Protection Agency. "List of solid waste disposal sites identified by Water Board with waste constituents above hazardous waste levels outside the waste management unit (PDF)." Accessed on January 10, 2024. https://calepa.ca.gov/wp-content/uploads/sites/6/2016/10/SiteCleanup-CorteseList-CurrentList.pdf

California Environmental Protection Agency. "List of "active" CDO and CAO from Water Board (MS Excel, 1,453 KB)." Accessed on January 10, 2024. https://calepa.ca.gov/sitecleanup/corteselist/

California Environmental Protection Agency. "List of hazardous waste facilities subject to corrective action pursuant to Section 25187.5 of the Health and Safety Code, identified by DTSC." Accessed on January 10, 2024. https://calepa.ca.gov/sitecleanup/corteselist/section-65962-5a/?emrc=63f01af3d8806

California Department of Forestry and Fire Protection. "FHSZ Viewer." Accessed on January 10, 2024. https://egis.fire.ca.gov/FHSZ/

California State Water Resources Control Board. "Geo Tracker: Leaking Underground Storage Tank Sites." Accessed on March 5, 2024. https://geotracker.waterboards.ca.gov/map/?CMD=runreport&myaddress=494a+carpenteria+road%2C+aromas

County of San Benito. January 2023. *San Benito County Operational Area Emergency Operations Plan.* Accessed on January 10, 2024. https://www.cosb.us/home/showpublisheddocument/11957/638415122753530000

Google Earth. 2023.

State Water Resources Control Board. "GeoTracker." Accessed on January 10, 2024. https://geotracker.waterboards.ca.gov/map/?myaddress=California&from=header&cqid=9235730826

Hydrology and Water Quality

San Benito County. "San Benito County Groundwater Basins." Last modified July 13, 2020. Accessed on February 28, 2024. https://cosb.maps.arcgis.com/home/webmap/viewer.html?webmap=dd0a1bb9a4dd433abc54c598d7eb738f

California Department of Conservation. "Tsunami Hazard Area Maps." Accessed on February 28, 2024. https://www.conservation.ca.gov/cgs/tsunami/maps

Department of Water Resources. "Groundwater Basin Boundary Assessment Tool." Accessed on February 27, 2024. https://gis.water.ca.gov/app/bbat/

Federal Emergency Management Agency (FEMA). "FEMA Flood Map Service Center: Search by Address." Accessed on February 27, 2024. https://msc.fema.gov/portal/search#searchresultsanchor

Land Use and Planning

County of San Benito. July 2015. *2035 San Benito County General Plan, Land Use Element.*

County of San Benito. June 2022. *2020-2045 San Benito County Regional Transportation Plan.*

Mineral Resources

California Department of Conservation State Mining and Geology Board. "CGS Information Warehouse: Mineral Land Classification." Accessed on January 12, 2024. https://maps.conservation.ca.gov/cgs/informationwarehouse/index.html?map=mlc

Noise

County of San Benito. July 2015. *2035 San Benito County General Plan, Noise Element.*

Population and Housing

County of San Benito. July 2015. *2035 San Benito County General Plan.*

County of San Benito. Municipal Code. Chapter 25.03. Accessed on February 10, 2024. https://codelibrary.amlegal.com/codes/sanbenitocounty/latest/sanbenito_ca/0-0-0-11462#JD_Chapter25.03

Public Services

Aromas-San Juan Unified School District. Accessed on January 10, 2024. https://www.asjusd.org/

Aromas Tri-County Fire Protection District. Accessed on January 10, 2024. https://www.atcfire.org/

County of San Benito. July 2015. *2035 San Benito County General Plan.*

County of San Benito. June 19, 2015. *Final Environmental Impact Report 2035 San Benito County General Plan Update.*

County of San Benito. "Office of the Sherriff: Beats and Responsibility Areas Map." Accessed on January 10, 2024. https://cosb.maps.arcgis.com/apps/webappviewer/index.html?id=dd97f1e499364c07903d4664418f2e57

County of San Benito. "Office of the Sherrif: Jurisdiction Map." Accessed on January 10, 2024. https://www.cosb.us/departments/sheriff-s-office/jurisdiction-map

County of San Benito. "Safety." Accessed on January 10, 2024. https://www.cosb.us/services/safety

LAFCO of Monterey. July 2020. "Aromas Tri-County Fire Protection District." Accessed on January 10, 2024. https://www.co.monterey.ca.us/home/showpublisheddocument/95013/637305869014030000

Recreation

County of San Benito. Municipal Code. Chapter 5.01, Article IV. Park and Recreation Impact Fees. Accessed on February 11, 2024. https://codelibrary.amlegal.com/codes/sanbenitocounty/latest/sanbenito_ca/0-0-0-1460

Transportation

County of San Benito. July 2015. *2035 San Benito County General Plan.*

County of San Benito. June 2022. *2020-2045 San Benito County Regional Transportation Plan.*

County of San Benito. Municipal Code. Chapter 5.01, Article VII. Traffic Impact Fees. Accessed on February 22, 2024. https://codelibrary.amlegal.com/codes/sanbenitocounty/latest/sanbenito_ca/0-0-0-1712

Tribal Cultural Resources

Jonathan Olivas, MUP, Associate Planner, County of San Benito. Planning and Land Use Division. Email message to consultant, January 22, 2024.

Utilities and Service Systems

California State Water Resources Control Board. Water Quality Control Policy for Siting, Design, Operation and Maintenance of Onsite Wastewater Treatment Systems (OWTS) Policy. Accessed on February 28, 2024. https://www.waterboards.ca.gov/water_issues/programs/owts/

California State Water Resources Control Board. April 18, 2023. *Onsite Wastewater Treatment Systems Policy.* Accessed on February 28, 2024. https://www.waterboards.ca.gov/water_issues/programs/owts/docs/adopted_owts_policy.pdf

CalRecycle. Jurisdiction Diversion/Disposal Rate Detail. Accessed on February 28, 2024. https://www2.calrecycle.ca.gov/LGCentral/DiversionProgram/slcp/capacityplanning/recycling/JurisdictionDiversionDetail?year=2022&jurisdictionID=423

County of San Benito. July 2015. *2035 San Benito County General Plan.*

Johnson, Robert, General Manager, Aromas Water District. Letter correspondence with Kelley Engineering, Elijah Vinculado, January 26, 2022.

Wildfire

California Department of Forestry and Fire Protection. "FHSZ Viewer." Accessed on February 27, 2024. https://egis.fire.ca.gov/FHSZ/

County of San Benito. January 2023. *San Benito County Operational Area Emergency Operations Plan.* Accessed on February 27, 2024. https://www.cosb.us/home/showpublisheddocument/11957/638415122753530000

County of San Benito. July 2015. *2035 San Benito County General Plan.*

Civil Plans

APPENDIX A

VESTING TENTATIVE MAP

MARIA SALAZAR SEGOVIA

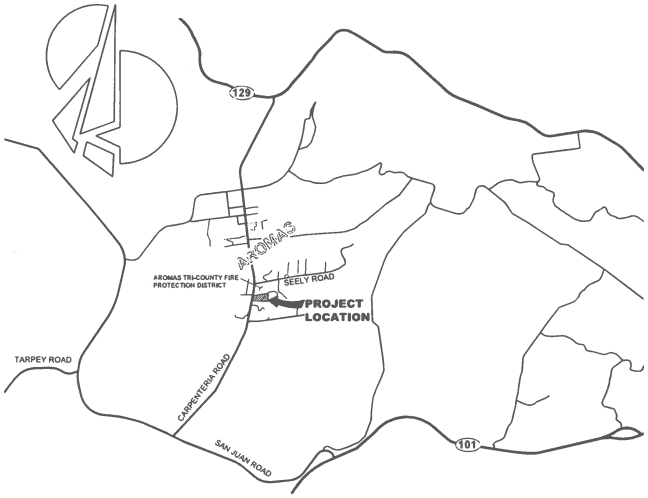
494A CARPENTERIA RD, AROMAS, CA

ABBREVIATIONS

AB	AGGREGATE BASE	FF	FINISH FLOOR	RT	RIGHT
AC	ASPHALTIC CONCRETE	FT	FEET OR FOOT	SBC	SAN BENITO COUNTY
APN	ASSESSOR'S PARCEL NUMBER	GB	GRADE BREAK	SD	STORM DRAIN
BVC	BEGIN VERTICAL CURVE	HP	HIGH POINT	SDE	STORM DRAIN EASEMENT
BOW	BOTTOM OF WALL	INV	INVERT	SF	SQUARE FEET
CB	CATCH BASIN	L	ARC LENGTH OF CURVE	SS	SANITARY SEWER
CF	CUBIC FEET	LF	LINEAR FEET	STA	STATION
CL	CENTERLINE	LP	LOW POINT	STD	STANDARD
CY	CUBIC YARDS	LT	LEFT	TB	TOP OF BANK
DET	DETAIL	(N)	NEW	TBD	TO BE DETERMINED
EG	EXISTING GROUND	P/L	PROPERTY LINE	TC	TOP OF CURB
EP	EDGE OF PAVEMENT	PCC	PORTLAND CEMENT CONCRETE	TOE	TOE OF SLOPE
ES	EDGE OF SHOULDER	PG&E	PACIFIC GAS & ELECTRIC	TW	TOP OF WALL
ESMT	EASEMENT	PM	PARCEL MAPS	TYP	TYPICAL
EVC	END OF VERTICAL CURVE	PUE	PUBLIC UTILITY EASEMENT	VC	VERTICAL CURVE
(E)	EXISTING	PVC	POLYVINYL CHLORIDE	WV	WATER VALVE
FG	FINISH GRADE	R	RADIUS		
FL	FLOWLINE	R/W	RIGHT OF WAY		

LEGEND

EXISTING		PROPOSED
	BUILDING	
	BOUNDARY	
	CENTERLINE	
	EASEMENT	
	EDGE OF PAVEMENT	
x	FENCE	x
	LOT LINE	
	STORM DRAIN	
	SANITARY SEWER	
	TOP OF CURB	
	WATER	
	BENCHMARK	
	WATER METER	
	WATER VALVE	
	FIRE HYDRANT	
	CATCH BASIN	
	POLE	
	GUY	
	ELECTROLIER	
	ELECTRICAL SERVICE	
	RETAINING WALL	
	SIGN	
	SECTION VIEW	A / 1



VICINITY MAP
1" = 1/4 mile

PROJECT INFORMATION

OWNER MARIA SALAZAR SEGOVIA
SEGOVIA GILBERTO-MARIA SALAZAR TRUST
347 CARMEL AVENUE SPACE 56
MARINA CA 93933
(831) 254-8271

APPLICANT MARIA SALAZAR SEGOVIA
SEGOVIA GILBERTO-MARIA SALAZAR TRUST
347 CARMEL AVENUE SPACE 56
MARINA CA 93933
(831) 254-8271

ENGINEER MATTHEW J. KELLEY RCE 62098
KELLEY ENGINEERING & SURVEYING
400 PARK CENTER DRIVE SUITE #4
HOLLISTER CA 95023
(831) 636-1104

ASSESSOR'S PARCEL NUMBERS 011-210-095

TOTAL AREA	5 ACRES
# OF LOTS	2
GROSS AREA	217 969 SF (5 ACRES)
PUBLIC STREET DEDICATIONS	NONE
TYPE OF SUBDIVISION	MINOR
PROPOSED LOT COVERAGE	TBD
AVERAGE LOT SIZE	2.5 ACRES
MINIMUM LOT SIZE	2.5 ACRES
MAXIMUM LOT SIZE	2.5 ACRES
EXISTING LAND USE	RESIDENTIAL
PROPOSED LAND USE	RESIDENTIAL
EXISTING GENERAL PLAN	RURAL TRANSITION
PROPOSED GENERAL PLAN	RURAL TRANSITION
EXISTING ZONING	RURAL TRANSITION
PROPOSED ZONING	RURAL TRANSITION
REQUIRED SETBACKS	
FRONT	25 FEET
SIDE	32 FEET
REAR	35 FEET
REQUIRED MIN. BUILDING SITE AREA	2.5 ACRES
PROPOSED MIN. BUILDING SITE AREA	2.5 ACRES
FIRE SEVERITY	VERY HIGH
FLOOD HAZARD ZONE	ZONE X
SEISMIC HAZARD ZONE	OUTSIDE OF SPECIAL STUDIES ZONE
TYPE OF SUBDIVISION	MINOR
SOURCE OF WATER	AROMAS WATER DISTRICT
SEWER SERVICE	ON-SITE SEPTIC
GAS & ELECTRIC SERVICE	PG&E

SHEET INDEX

NOTES

1. THE TYPES, LOCATIONS, SIZES AND/OR DEPTHS OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THIS PLAN ARE APPROXIMATE AND WERE OBTAINED FROM SOURCES OF VARYING RELIABILITY. ONLY ACTUAL EXCAVATION WILL REVEAL THE TYPES, EXTENT, SIZES, LOCATIONS AND DEPTHS OF SUCH UNDERGROUND UTILITIES. A REASONABLE EFFORT HAS BEEN MADE TO LOCATE AND DELINEATE ALL KNOWN UNDERGROUND UTILITIES. HOWEVER THE ENGINEER CAN ASSUME NO RESPONSIBILITY FOR THE COMPLETENESS OR ACCURACY OF ITS DELINEATION OF SUCH UNDERGROUND UTILITIES WHICH MAY BE ENCOUNTERED SHOWN OR NOT SHOWN ON THIS PLAN.
2. FLOOD ZONE: ACCORDING TO THE FEMA FLOOD MAP SERVICE, FIRM 06069C0020D, REVISED APRIL 16, 2009, AND FIRM 06053C0044D, EFFECTIVE APRIL 2, 2009, THE PROJECT SITE IS LOCATED IN ZONE X, AN AREA OF MINIMAL FLOOD HAZARD AND DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN.
3. SEISMIC ZONE: ACCORDING TO THE ALQUIST PRIOLO SPECIAL STUDIES ZONE MAP, WATSONVILLE EAST QUADRANGLE, DATED 1/1/1982 THIS PROJECT DOES NOT LIE WITHIN ANY SPECIAL STUDIES ZONE AREA.
4. ADJACENT USES:
   NORTH: SINGLE FAMILY RESIDENTIAL
   WEST: SINGLE FAMILY RESIDENTIAL
   SOUTH: SINGLE FAMILY RESIDENTIAL
   EAST: SINGLE FAMILY RESIDENTIAL
5. THE TOPOGRAPHY DEPICTED IN THIS PLAN SET WAS DERIVED FROM AN AERIAL TOPOGRAPHIC SURVEY PERFORMED BY KELLEY ENGINEERING & SURVEYING IN SEPTEMBER 2021.

BENCHMARK

THIS BENCHMARK WAS ESTABLISHED BY RECORDING STATIC GPS OBSERVATIONS WITH A TRIMBLE 5800 RECEIVER AND PROCESSING THEM THROUGH NATIONAL GEODETIC SURVEY'S ONLINE POSITIONING USER SERVICE (OPUS). THE ELEVATION WAS COMPUTED USING GEOID 18.

3/4" IRON PIPE WITH RED CONTROL PLUG, NEAR THE NORTH WEST PROPERTY CORNER OF THE PROJECT SITE. SEE SHEET 2 FOR LOCATION

ELEVATION 283.83 US FT
DATUM NAVD88

SOILS REPORT

THE SOILS REPORT USED FOR THIS DESIGN WAS PREPARED BY BUTANO GEOTECHNICAL ENGINEERING, INC., APRIL 2022, PROJECT NO. 22-114-SB.

In accordance with section 6735 (a) of the Professional Engineer's Act these plans are

PRELIMINARY

and therefore do not bear the signature and seal of a registered civil engineer.

BY	DATE	REVISIONS	APPR

KELLEY
ENGINEERING & SURVEYING
400 PARK CENTER DRIVE, SUITE #4
HOLLISTER, CA 95023
OFFICE (831) 636-1104 FAX (831) 636-1837

DATE:	JULY 2022
SCALE:	AS NOTED
DESIGNED:	MJK, TJK
DRAWN:	TJK, EDV
JOB NO.:	21004

TITLE SHEET
MARIA SALAZAR SEGOVIA
494A CARPENTERIA RD, AROMAS, CA

SHEET 1 OF 2

FILE NAME = S:\Projects\2021\21004 - Maria Salazar Segovia\dwg\21004 Segovia SV Title Sheet.dwg Plotted on: Thursday, 30 June 2022 at 1:43pm by ELLIAH

PROJECT INFORMATION

OWNER MARIA SALAZAR SEGOVIA
SEGOVIA GILBERTO-MARIA SALAZAR TRUST
347 CARMEL AVENUE, SPACE 56
MARINA, CA 93933
(831) 254-8271

APPLICANT MARIA SALAZAR SEGOVIA
SEGOVIA GILBERTO-MARIA SALAZAR TRUST
347 CARMEL AVENUE, SPACE 56
MARINA, CA 93933
(831) 254-8271

ENGINEER MATTHEW J. KELLEY, RCE 62098
KELLEY ENGINEERING & SURVEYING
400 PARK CENTER DRIVE SUITE #4
HOLLISTER, CA 95023
(831) 636-1104

ASSESSOR'S PARCEL NUMBERS	011-210-095
TOTAL AREA	5 ACRES
# OF LOTS	2
GROSS AREA	217 989 SF (5 ACRES)
PUBLIC STREET DEDICATIONS	NONE
TYPE OF SUBDIVISION	MINOR
PROPOSED LOT COVERAGE	TBD
AVERAGE LOT SIZE	2.5 ACRES
MINIMUM LOT SIZE	2.5 ACRES
MAXIMUM LOT SIZE	2.5 ACRES
EXISTING LAND USE	RESIDENTIAL
PROPOSED LAND USE	RESIDENTIAL
EXISTING GENERAL PLAN	RURAL TRANSITION
PROPOSED GENERAL PLAN	RURAL TRANSITION
EXISTING ZONING	RURAL TRANSITION
PROPOSED ZONING	RURAL TRANSITION

REQUIRED SETBACKS

FRONT	25 FEET
SIDE	32 FEET
REAR	35 FEET
REQUIRED MIN. BUILDING SITE AREA	2.5 ACRES
PROPOSED MIN. BUILDING SITE AREA	2.5 ACRES
FIRE SEVERITY	VERY HIGH
FLOOD HAZARD ZONE	ZONE X
SEISMIC HAZARD ZONE	OUTSIDE OF SPECIAL STUDIES ZONE
TYPE OF SUBDIVISION	MINOR
SOURCE OF WATER	AROMAS WATER DISTRICT
SEWER SERVICE	ON-SITE SEPTIC
GAS&ELECTRIC SERVICE	PG&E

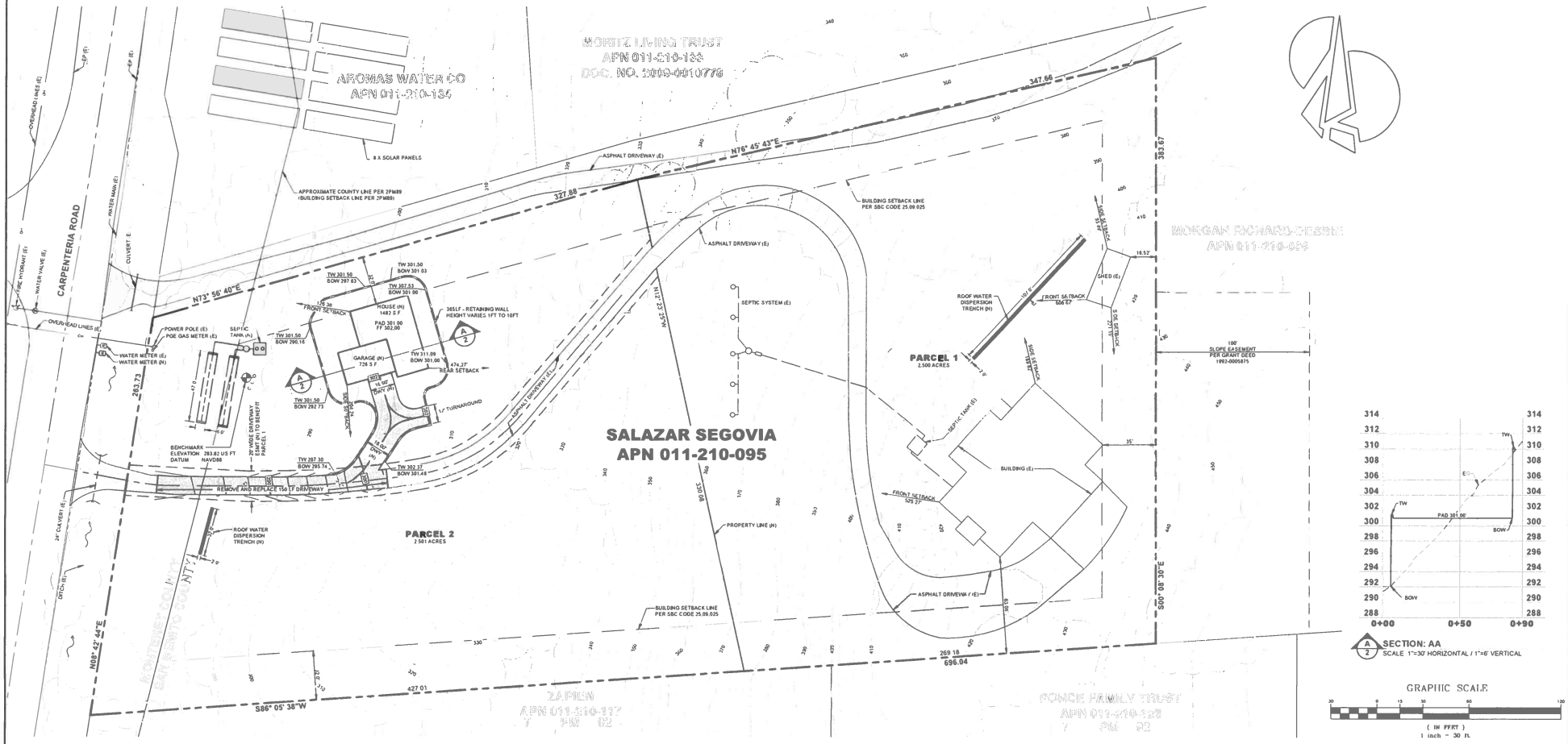
NOTES

1. THE PROJECT SITE IS SUBJECT TO A SCENIC EASEMENT AS DESCRIBED BY VOLUME 402 OF OFFICIAL RECORDS PAGE 772 ON DECEMBER 18 1975.

PRELIMINARY EARTHWORK ESTIMATE

CUT	(-) 500 CY
FILL	(+) 580 CY
SHRINKAGE (-)	80 CY
NET	0 CY

THE EARTHWORK QUANTITIES ABOVE ARE APPROXIMATE AND BASED ON PRELIMINARY AND INCOMPLETE DESIGN. THE EARTHWORK QUANTITIES ABOVE MAY OR MAY NOT REPRESENT THE FINAL EARTHWORK AT THE COMPLETION OF THE PROJECT DUE TO, BUT NOT LIMITED TO: ACTUAL SHRINKAGE, FOUNDATION SPOILS, CONSTRUCTION TOLERANCES, TOPOGRAPHIC SURVEY TOLERANCES, PAD FINISH GRADING, AND UNFORESEEN CHANGES TO DESIGN.



A/2 SECTION: AA
SCALE 1"=30' HORIZONTAL / 1"=6' VERTICAL

GRAPHIC SCALE
30 0 15 30 60 120
(IN FEET)
1 inch = 30 ft

In accordance with section 6735 (a) of the Professional Engineer's Act these plans are
PRELIMINARY
and therefore do not bear the signature and seal of a registered civil engineer.

BY	DATE	REVISIONS	APPR

KELLEY
ENGINEERING & SURVEYING
400 PARK CENTER DRIVE, SUITE #4
HOLLISTER, CA 95023
OFFICE (831) 636-1104 FAX (831) 636-1837

DATE:	JULY 2022
SCALE:	1" = 30'
DESIGNED:	MJK, TJK
DRAWN:	TJK, EDV
JOB NO.:	21004

SITE & GRADING PLAN
MARIA SALAZAR SEGOVIA
494A CARPENTERIA ROAD, AROMAS, CA

SHEET 2 OF 2

Special-Status Species Tables

APPENDIX B

Appendix B Special-Status Plant Species with Potential to Occur in the Project Vicinity

Species	Status (Federal/State/ CNPS)	Suitable Habitat Description	Potential to Occur on Project Site
Anderson's manzanita *(Arctostaphylos andersonii)*	--/--/1B.2	Broadleaved upland forest, chaparral, and North Coast coniferous forest. Known only from the Santa Cruz Mountains. Prefers open sites in redwood forest; elevation 180-800m. Blooming Period: November - April	Not expected to occur. No suitable forest or chapparal habitat present.
Arcuate bush-mallow *(Malacothamnus arcuatus)*	--/--/1B.2	Chaparral, in gravelly alluvium; elevation 80-355m. Blooming Period: April - September	Not expected to occur. No suitable chaparral habitat present.
Ben Lomond buckwheat *(Eriogonum nudum* var. *decurrens)*	--/--/1B.1	Chaparral, cismontane woodland, lower montane coniferous forest, and ponderosa pine sand hills; elevation 50-800m. Blooming Period: June - October	Not expected to occur. No suitable habitat present.
Ben Lomond spineflower *(Chorizanthe pungens* var. *hartwegiana)*	FE/--/1B.1	Lower montane coniferous forest; found on Ben Lomond sands and Zayante coarse sands in maritime ponderosa pine sand hills; elevation 120-470m. Blooming Period: April - July	Not expected to occur. No suitable habitat. Outside of known range.
Bent-flowered fiddleneck *(Amsinckia lunaris)*	--/--/1B.2	Coastal bluff scrub, cismontane woodland, and valley and foothill grassland, on decomposed shale soils; elevation 3-500m. Blooming Period: March - June	Not expected to occur. No suitable habitat present.
Big-scale balsamroot *(Balsamorhiza macrolepis)*	--/--/1B.2	Valley and foothill grassland, and cismontane woodland; sometimes on serpentine; elevation 35-1000m. Blooming Period: March - June	Not expected to occur. No suitable habitat.
Blasdale's bent grass *(Agrostis blasdalei)*	--/--/1B	Sandy or gravelly soil close to rocks, often in nutrient-poor soil with sparse vegetation. Blooming Period: May - July	Not expected to occur. No suitable habitat. Outside of known range.
Bonny Doon manzanita *(Arctostaphylos silvicola)*	--/--/1B.2	Chaparral, closed-cone coniferous forest, and lower montane coniferous forest. Known only from inland marine Zayante sands in Santa Cruz County; elevation 120-390m. Blooming Period: February – March	Not expected to occur. No suitable habitat. Outside of known range.
Bristly sedge *(Carex comosa)*	--/--/2B.1	Coastal prairie, marshes and swamps (lake margins), and valley and foothill grassland; elevation 0-625m. Blooming Period: May - September	Not expected to occur. No suitable coastal prairie, marshes, swamps, and grasslands present.
California alkali grass *(Puccinellia simplex)*	--/--/1B.2	Meadows and seeps, chenopod scrub, valley and foothill grasslands, vernal pools. Alkaline, vernally mesic. Sinks, flats, and lake margins; elevation 1-915m. Blooming Period: March - May	Not expected to occur. No suitable alkaline sinks, lake margins, and habitat present.
Chaparral ragwort *(Senecio aphanactis)*	--/--/2B.2	Cismontane woodland and coastal scrub. Prefers drying alkaline flats; elevation 20-575m. Blooming Period: January - April	Not expected to occur. No suitable alkaline flats present. No known occurrences within the project vicinity.
Choris' popcorn-flower *(Plagiobothrys chorisianus* var. *chorisianus)*	--/--/1B.2	Chaparral, coastal scrub, coastal prairie, mesic sites; elevation 15-100m. Blooming Period: March - June	Not expected to occur. No suitable mesic coastal prairie, chaparral, or coastal scrub present.

Species	Status (Federal/State/ CNPS)	Suitable Habitat Description	Potential to Occur on Project Site
Congdon's tarplant *(Centromadia parryi* spp. *congdonii)*	--/--/1B.1	Valley and foothill grassland (alkaline); elevation 1-230m. Known to occur on various substrates, and in disturbed and ruderal (weedy) areas. Blooming Period: June - November	Low probability of occurrence. Suitable ruderal area present. Closest know occurrence 4.5 miles to the south west (occurrence No. 25).
Coyote ceanothus *(Ceanothus ferrisiae)*	FE/--/1B.1	Serpentine sites in chaparral, coastal scrub, and valley and foothill grassland; elevation 120-460m. Blooming Period: January - May	Not expected to occur. No suitable serpentine chaparral, scrub, or grasslands present.
Dudley's lousewort *(Pedicularis dudleyi)*	--/SR/1B.2	Chaparral, North Coast coniferous forest, valley and foothill grassland. Deep shady woods of older coast redwood forests, also in maritime chaparral; elevation 100-490m. Blooming Period: April - June	Not expected to occur. No suitable redwood forest, chaparral, or grassland present.
Eastwood's goldenbush *(Ericameria fasciculata)*	--/--/1B.1	Closed cone coniferous forest, chaparral (maritime), coastal dunes, and coastal scrub/sand; elevation 30 - 275 meters. Blooming Period: July - October	Low probability to occur. Marginal closed cone forest present on site. Multiple observation ~ 4-5 miles southwest of project site (occurrence 25, 27, 28, 31).
Fragrant fritillary *(Fritillaria liliacea)*	--/--/1B.2	Coastal scrub, valley and foothill grassland, and coastal prairie. Often on serpentine; various soils reported though usually clay in grassland; elevation 3-410m. Blooming Period: February - April	Not expected to occur. Marginal to absent suitable habitat within the project site. Multiple observations adjacent to project site (occurrence No. 29 (0.5 miles south), 85 (0.75 miles northeast), 89 (1.5 miles southeast)).If present, this perennial would have been observed during site reconnaissance.
Hooker's manzanita *(Arctostaphylos hookeri* ssp. *hookeri)*	--/--/1B.2	Sandy soils in coastal scrub, chaparral, and closed-cone forest habitats; evergreen; elevation 45-215m. Blooming Period: February - April	Low probability to occur. Marginal closed cone forest present. Occurrence greater than 3.5 miles away (occurrence 20, 21, 26).
Hoover's button-celery *(Eryngium aristulatum* var. *hooveri)*	--/--/1B.1	Vernal pools. Alkaline depressions, roadside ditches, and other wet places near the coast; elevation 5-45m. Blooming Period: July	Low probability to occur. Roadside drainage channel located adjacent to property. Occurrence greater than 8 miles northeast (occurrence No. 4).
Kellogg's horkelia *(Horkelia cuneata* ssp. *sericea)*	--/--/1B.1	Closed-cone coniferous forest, maritime chaparral, coastal scrub, sandy or gravelly openings; elevation 10-200m. Blooming Period: April - September	Not expected to occur. Marginal closed cone forest present. Occurrence greater than 10 miles away (occurrence 25). If present, this perennial would have been observed during site reconnaissance.
Legenere *(Legenere limosa)*	--/--/1B.1	In beds of vernal pools; elevation 1-880m. Blooming Period: April - June	Not expected to occur. No suitable vernal pools present.
Loma Prieta hoita *(Hoita strobilina)*	--/--/1B.1	Wet areas on serpentine substrate in chaparral, cismontane woodland, and riparian woodland; elevation 30-860m. Blooming Period: May - October	Not expected to occur. No suitable serpentine substrate present.

Species	Status (Federal/State/ CNPS)	Suitable Habitat Description	Potential to Occur on Project Site
Marsh microseris *(Microseris paludosa)*	--/--/1B.2	Closed-cone coniferous forest, cismontane woodland, coastal scrub, valley and foothill grassland; elevation 5-300m. Blooming Period: April - June	Not expected to occur. No suitable open woodland and grassland present.
Monterey gilia *(Gilia tenuiflora* ssp. *arenaria)*	FE/ST/1B.2	Maritime chaparral, cismontane woodland, coastal dunes, coastal scrub, sandy openings; elevation 0-45m. Blooming Period: April - June	Not expected to occur. No suitable coastal dunes and coastal scrub present.
Monterey pine *(Pinus radiata)*	--/--/1B.1	Closed-cone coniferous forest, cismontane woodland; elevation 25-185m. Evergreen	Present onsite. Outside of native occurrence range. Locally abundant.
Monterey spineflower *(Chorizanthe pungens* var. *pungens)*	FT/--/1B.2	Sandy openings in maritime chaparral, cismontane woodland, coastal dunes, coastal scrub, and valley and foothill grassland; elevation 3-450m. Blooming Period: April - June	Not expected to occur. No suitable chaparral, coastal dunes, and coastal scrub present.
Most beautiful jewel-flower *(Streptanthus albidus* ssp. *peramoenus)*	--/--/1B.2	Chaparral, valley and foothill grassland, and cismontane woodland; serpentine outcrops, on ridges and slopes; elevation 120-730m. Blooming Period: April - June	Not expected to occur. No suitable serpentine substrate present.
Mt. Hamilton fountain thistle *(Cirsium fontinale* var. *campylon)*	--/--/1B.2	Serpentine seeps in chaparral, cismontane woodland, and valley and foothill grassland; elevation 100-890m. Blooming Period: February - October	Not expected to occur. Suitable serpentine substrate not present.
Ohlone manzanita *(Arctostaphylos ohloneana)*	--/--/1B.1	Endemic to northwest Santa Cruz County, where it is known only from four populations on Ben Lomond Mountain.	Not expected to occur. Outside of known range.
Pajaro manzanita *(Arctostaphylos pajaroensis)*	--/--/1B.1	Sandy soils in chaparral habitat; evergreen; elevation 30-760m. Blooming Period: December - March	Not expected to occur. No suitable chaparral habitat present.
Pine rose *(Rosa pinetorum)*	--/--/1B.2	Closed-cone coniferous forest; elevation 2-300m. Blooming Period: May - July	Low probability to occur. Marginal closed cone forest present.
Pink creamsacs *(Castilleja rubicundula* ssp. *rubicundula)*	--/--/1B.2	Chaparral, meadows and seeps, and valley and foothill grassland. Openings in chaparral or grasslands on serpentine soils; elevation 20-900m. Blooming Period: April - June	Not expected to occur. No suitable serpentine substrate present.
Pinnacles buckwheat *(Eriogonum nortonii)*	--/--/1B.3	Sandy sites in chaparral and valley and foothill grassland, often on recent burns; elevation 300-975m. Blooming Period: May - June	Not expected to occur. No suitable chaparral or grassland habitat present.
Point Reyes horkelia *(Horkelia marinensis)*	--/--/1B.2	Sandy sites in coastal dunes, coastal prairie, and coastal scrub; elevation 5-755m. Blooming Period: May - September	Not expected to occur. No suitable coastal scrub, dunes, and prairie present.
Robust spineflower *(Chorizanthe robusta* var. *robusta)*	FE/--/1B.1	Sandy or gravelly openings in cismontane woodland, coastal dunes, and coastal scrub; prefers sandy terraces and bluffs or loose sand; elevation 3-300m. Blooming Period: April - July	Not expected to occur. Marginal sandy openings in woodlands present. Closest known occurrence greater than 8 miles away.
Saline clover *(Trifolium hydrophilum)*	--/--/1B.2	Marshes and swamps, valley and foothill grassland, and vernal pools. Prefers wet, alkaline sites; elevation 0-300m. Blooming Period: April - June	Not expected to occur. No suitable marsh or grassland habitat present.

Species	Status (Federal/State/ CNPS)	Suitable Habitat Description	Potential to Occur on Project Site
San Francisco collinsia *(Collinsia multicolor)*	--/--/1B.2	Serpentine sites in closed cone coniferous forest and coastal scrub. Prefers decomposed shale (mudstone) mixed with humus; elevation 30-250m. Blooming Period: March - May	Not expected to occur. No suitable serpentine substrate present.
San Francisco popcornflower *(Plagiobothrys diffusus)*	--/SE/1B.1	Valley and foothill grassland, and coastal prairie. Historically from grassy slopes with marine influence; elevation 60-485m. Blooming Period: March - June	Not expected to occur. No suitable grassland present.
Sand-loving wallflower *(Erysimum ammophilum)*	--/--/1B.2	Maritime chaparral, coastal dunes, coastal scrub, sandy openings; elevation 0 – 60m. Blooming Period: February - June	Not expected to occur. No suitable chaparral, coastal dunes, coastal scrub habitats present.
Santa Clara Valley dudleya *(Dudleya abramsii* ssp. *setchellii)*	FE/--/1B.1	Valley and foothill grassland, and cismontane woodland. Endemic to serpentine outcrops and on rocks within grassland or woodland in Santa Clara County; elevation 80-335m. Blooming Period: April - June	Not expected to occur. No suitable serpentine substrate present.
Santa Cruz clover *(Trifolium buckwestiorum)*	--/--/1B.1	Broadleaved upland forest, cismontane woodland, and coastal prairie; prefers moist grassland and gravelly margins; elevation 105-610m. Blooming Period: April - October	Not expected to occur. No suitable habitat present.
Santa Cruz cypress *(Hesperocyparis abramsiana* var. *abramsiana)*	FE/SE/1B.2	Closed-cone coniferous forest and lower montane coniferous forest in the Santa Cruz Mountains on sandstone and granitic derived soils; elevation 300-800m. Evergreen	Not expected to occur. Outside of known range. No suitable substrate present.
Santa Cruz microseris *(Stebbinsoseris decipiens)*	--/--/1B	Broadleaved upland forest, closed-cone coniferous forest, chaparral, coastal prairie, coastal scrub, valley and foothill grassland, open areas, sometimes serpentine; elevation 10-500m. Blooming Period: April - May	Not expected to occur. Outside of known range.
Santa Cruz Mountains beardtongue *(Penstemon rattanii* var. *kleei)*	--/--/1B.2	Chaparral and lower montane coniferous forest. Sandy shale slopes in transition zone between forest and chaparral; elevation 400-1100m. Blooming Period: May - June	Not expected to occur. No suitable habitat or substrate present.
Santa Cruz Mountains pussypaws *(Calyptridium parryi* var. *hesseae)*	--/--/1B.1	Sandy or gravelly openings in chaparral and cismontane woodland; elevation 305-1530m. Blooming Period: May - August	Not expected to occur. Outside of elevation range.
Santa Cruz tarplant *(Holocarpha macradenia)*	FT/SE/1B.1	Coastal prairie, coastal scrub, and valley and foothill grassland; often on clay or sandy soils; elevation 10-220m. Blooming Period: June - October	Not expected to occur. No suitable coastal prairie, scrub, or valley grassland present.
Santa Cruz wallflower *(Erysimum teretifolium)*	FE/SE/1B.1	Lower montane coniferous forest and chaparral. Pine Parkland Area, on inland marine sands (Zayante coarse sand); elevation 120-610m. Blooming Period: March - July	Not expected to occur. No suitable Zayante coarse sand present.
Schreiber's manzanita *(Arctostaphylos glutinosa)*	--/--/1B	Closed-cone coniferous forest, chaparral. Mudstone or diatomaceous outcrops, often with Pinus attenuata; elevation 170-690m. Blooming Period: November - April	Not expected to occur. Suitable closed cone forest with mudstone outcrops not present.
Seaside bird's-beak *(Cordylanthus rigidus* ssp. *littoralis)*	--/SE/1B.1	Closed-cone coniferous forest, maritime chaparral, cismontane woodland, coastal dunes, coastal scrub, sandy often disturbed sites; elevation 0-215m. Blooming Period: May - October	Not expected to occur. Suitable site characteristics not present.

Species	Status (Federal/State/ CNPS)	Suitable Habitat Description	Potential to Occur on Project Site
Smooth lessingia *(Lessingia micradenia* var. *glabrata)*	--/--/1B.2	Chaparral; endemic to Santa Clara County. Serpentine, often on roadsides; elevation 120-485m. Blooming Period: July - November	Not expected to occur. No suitable serpentine substrate present.
White-flowered rein orchid *(Piperia candida)*	--/--/1B.2	Broadleaf upland forest, lower montane coniferous forest, and North Coast coniferous forest; sometimes serpentine; elevation 30-1310m. Blooming Period: May - September	Not expected to occur. No habitat present.
White-rayed pentachaeta *(Pentachaeta bellidiflora)*	FE/SE/1B.1	Valley and foothill grassland. Open dry, rocky slopes and grassy areas, often on soils derived from serpentine bedrock; elevation 35-620m. Blooming Period: March - May	Not expected to occur. No suitable serpentine substrate present. No suitable grassland habitat present.
Woodland woollythreads *(Monolopia gracilens)*	--/--/1B.2	Serpentine, open sites in broadleaved upland forest, chaparral, cismontane woodland, North Coast coniferous forest, and valley and foothill grassland; elevation 100-1200m. Blooming Period: March - July	Not expected to occur. No suitable serpentine substrate present.
Yadon's rein orchid *(Piperia yadonii)*	FE/--/1B.1	Sandy sites in coastal bluff scrub, closed cone coniferous forest, maritime chaparral; elevation 10-510m. Blooming Period: May - August	Not expected to occur. No suitable closed cone forest community present.

SOURCE: CDFW CNDDB 2023, CNPS 2023

NOTE: Status Codes:

Federal (USFWS)

FE: Listed as Endangered under the Federal Endangered Species Act.

FT: Listed as Threatened under the Federal Endangered Species Act.

FC: A Candidate for listing as Threatened or Endangered under the Federal Endangered Species Act.

FSC: Species of Special Concern.

FD: Delisted under the Federal Endangered Species Act.

State (CDFW)

SE: Listed as Endangered under the California Endangered Species Act.

ST: Listed as Threatened under the California Endangered Species Act.

SR: Listed as Rare under the California Endangered Species Act.

SC: A Candidate for listing as Threatened or Endangered under the California Endangered Species Act.

SSC: Species of Special Concern.

SFP: Fully Protected species under the California Fish and Game Code.

SD: Delisted under the California Endangered Species Act.

CNPS Rare Plant Ranks and Threat Code Extensions

1B: Plants that are considered Rare, Threatened, or Endangered in California and elsewhere.

2B: Plants that are considered Rare, Threatened, or Endangered in California, but more common elsewhere.

.1: Seriously endangered in California (over 80% of occurrences threatened/high degree and immediacy of threat).

.2: Fairly endangered in California (20-80% occurrences threatened).

.3: Not very endangered in California (<20% of occurrences threatened or no current threats known).

Appendix B Special-Status Wildlife Species with Potential to Occur in the Project Vicinity

Species	Status (Federal/State)	Suitable Habitat Description	Potential to Occur on Project Site
American badger *(Taxidea taxus)*	--/SSC	Most abundant in drier, open stages of most shrub, forest, and herbaceous habitats. Need sufficient food and open, uncultivated ground with friable soils to dig burrows. Prey on burrowing rodents.	Not expected to occur. Suitable open stage habitat not present. Few burrowing rodents.
American peregrine falcon *(Falco peregrinus anatum)*	FD/SD,SFP	Occurs near wetlands, lakes, rivers, or other waters on cliffs, banks, dunes, mounds, and human-made structures. Nest consists of a scrape on a depression or ledge in an open site.	Not expected to occur onsite. No suitable wetlands, lakes, rivers, etc., present. Possible flyover sightings.
Arroyo toad *(Bufo californicus)*	FE/SSC	Semi-arid regions near washes or intermittent streams, including valley-foothill and desert riparian, desert wash, etc. Rivers with sandy banks, willows, cottonwoods, and sycamores, loose, gravelly areas of streams in drier parts of range.	Not expected to occur. No riverine habitat with riparian vegetation present.
Bank swallow *(Riparia riparia)*	--/ST	Highly colonial species that nests in alluvial soils along rivers, streams, lakes, and ocean coasts. Nesting colonies only occur in vertical banks or bluffs of friable soils at least one meter tall, suitable for burrowing with some predator deterrence values. Breeding colony present in Salinas River.	Not expected to occur. No suitable habitat present. No nesting habitat present.
Bay checkerspot butterfly *(Euphydryas editha bayensis)*	FT/--	Restricted to native grasslands on outcrops of serpentine soil in the vicinity of San Francisco Bay. *Plantago erecta* is the primary host plant; *Castilleja densiflora* and *C. exserta* are secondary host plants.	Not expected to occur. Suitable grassland of serpentine soils is not present.
Black swift *(Cypseloides niger)*	--/SSC	Breeds in small colonies on cliffs behind or adjacent to waterfalls in deep canyons and sea bluffs above surf; forages widely.	Not expected to occur. No suitable habitat present. No nesting habitat present.
Blunt-nosed leopard lizard *(Gambelia silus)*	FE/SE	Resident of sparsely vegetated alkali and desert scrub habitats, in areas of low topographic relief. Seeks cover in mammal burrows, under shrubs or structures such as fence posts.	Not expected to occur. Suitable sparsely vegetated alkali and desert scrub habitat is not present.
Buena Vista Lake Ornate Shrew *(Sorex ornatus relictus)*	FE/--	Resident of moist habitat surrounding wetlands of the Kern, Buena Vista, Goos, and Tulare lakes on the San Joaquin Valley floor.	Not expected to occur. Outside of range. No suitable habitat.
Burrowing owl *(Athene cunicularia)*	--/SSC	Open, dry, annual or perennial grasslands, desert, or scrubland, with available small mammal burrows.	Not expected to occur. No suitable habitat present. No open grasslands with suitable nesting burrows.
California Clapper Rail *(Rallus longirostris obsoletus)*	FE/--	Resides exclusively in tidal and brackish marshes with intact marsh vegetation providing, invertebrate food, tidal channels, and suitable nesting and cover during extreme tides.	Not expected to occur. No tidal and brackish marshes and marsh vegetation present.
California condor *(Gymnogyps californianus)*	FE/SE	Requires vast expanses of open savannah, grasslands, and foothill chaparral in mountain ranges of moderate altitude. Deep canyons containing clefts in the rocky walls provide nesting sites. Forages up to 100 miles from roost/nest.	Not expected to occur. Very low possibility of foraging within marginal onsite habitat but highly unlikely due to distance from nesting sites (50 to 60 miles).

Species	Status (Federal/State)	Suitable Habitat Description	Potential to Occur on Project Site
California giant salamander *(Anodonta californiensis)*	--/SSC	Known from wet coastal forests near streams and seeps from Mendocino County south to Monterey County and east to Napa County. Aquatic larvae found in cold, clear streams, occasionally in lakes and ponds. Adults known from wet forests under rocks and logs near streams and lakes.	Not expected to occur. No wet forests near streams within the project vicinity. No suitable habitat present.
California least tern *(Sternula antillarum browni)*	FE/SE	Nests along the coast from San Francisco Bay south to northern Baja California. Colonial breeder on bare or sparsely vegetated, flat substrates (sand beaches, alkali flats, landfills, or paved areas).	Not expected to occur. Nesting requirements not available onsite.
California red-legged frog *(Rana draytonii)*	FT/SSC	Rivers, creeks, and stock ponds with pools and overhanging vegetation. Requires dense, shrubby or emergent riparian vegetation, and prefers short riffles and pools with slow-moving, well-oxygenated water. Needs upland habitat to aestivate (remain dormant during dry months) in small mammal burrows, cracks in the soil, or moist leaf litter.	Possible, but not observed. Small wetland feature and upland habitat adjacent to project site.
California tiger salamander *(Ambystoma californiense)*	FT/ST	Grasslands and oak woodlands near seasonal pools and stock ponds in central and coastal California. Needs upland habitat to aestivate (remain dormant during dry months) in small mammal burrows, cracks in the soil, or moist leaf litter. Requires seasonal water sources that persist into late March for breeding habitat.	Low probability of occurrence. Marginal habitat present. Low probability of migration through or to the site for estivation.
Coast horned lizard *(Phrynosoma blainvillii)*	--/SSC	Arid grassland and scrubland habitats; prefers lowlands along sandy washes with scattered low bushes. Requires open areas for sunning, bushes for cover, patches of loose soil for burrowing, and abundant supply of ants and other insects for feeding.	Not expected to occur. Suitable arid grassland or scrubland habitat is not present.
Coast Range newt *(Taricha torosa)*	--/SSC	Coastal drainages; lives in terrestrial habitats and can migrate over 1 km to breed in ponds, reservoirs, and slow-moving streams.	Not expected to occur. Suitable ponds, rivers, and stream habitat present 0.9 km from upper property, 1 km from proposed residence.
Coho salmon *(Oncorhynchus kisutch)*	FE/SE	Freshwater habitats; requires beds of loose, silt-free, coarse gravel for spawning, covered cool water, and sufficient oxygen levels.	Not expected to occur. No suitable freshwater habitat present.
Cooper's hawk *(Accipter cooperii)*	--/SSC	Oak or riparian woodlands.	Probable, but not observed. Suitable oak woodlands present.
Crotch bumble bee *(Bombus crotchii)*	--/SCE	Open grassland and scrub habitats. Require flowering plants and suitable nesting sites. Documented food plants include *Asclepias* sp., *Chaenactis* sp., *Lupinus* sp., *Medicago* sp., *Phacelia* sp., and *Salvia* sp.	Not expected to occur. Documented food plants not available onsite.
Foothill yellow-legged frog *(Rana boylii)*	--/SSC	Partly shaded, shallow streams and riffles with rocky substrate in a variety of habitats. Requires at least some cobble-sized substrate for egg-laying and 15 weeks of available water to attain metamorphosis.	Not expected to occur onsite. Suitable riparian habitat not present.
Giant kangaroo rat *(Dipodomys ingens)*	FE/SE	Annual grasslands on the western side of the San Joaquin Valley, marginal habitat in alkali scrub. Needs level terrain and sandy loam soils for burrowing.	Not expected to occur onsite. Suitable grassland\alkali scrub habitat not present.

Species	Status (Federal/State)	Suitable Habitat Description	Potential to Occur on Project Site
Golden eagle *(Aquila chrysaetos)*	--/SFP	Rolling foothill mountain areas, sage-juniper flats, and desert. Cliff-walled canyons provide nesting habitat in most parts of range. Also uses large trees in open areas.	Not expected to occur. Suitable nesting habitat not present.
Hoary bat *(Lasiurus cinereus)*	--/SSC	Prefers open habitats or habitat mosaics, with access to trees for cover and open areas or habitat edges for feeding. Roosts in dense foliage of medium to large trees. Feeds primarily on moths. Requires water.	Low probability to occur. Not observed during site visit. Suitable habitat in onsite trees. Open foraging habitat on adjacent site. Water seasonally available.
Least Bell's vireo *(Vireo bellii pusillus)*	FE/SE	Summer resident of southern and central California in riparian habitats below 2,000 feet in elevation. Often nests in large shrubs, along margins of bushes or on twigs projecting into pathways.	Not expected to occur. Suitable riparian habitat with shrubs layer not present.
Longfin smelt *(Spirinchus thaleichthys)*	FC/SE	Euryhaline, nektonic and anadromous fish found in open waters of estuaries, mostly in middle or bottom of water column. Prefers salinities of 15-30 ppt, but can be found in completely freshwater to almost pure seawater.	Not expected to occur. Suitable open water habitat not present.
Marbled murrelet *(Brachyramphus marmoratus)*	FT/SE	Feeds near shore, and nests up to six miles inland from coast from Half Moon Bay to Santa Cruz in old-growth redwood forests, often in Douglas fir trees.	Not expected to occur. Suitable old growth redwood habitat not present.
Monarch butterfly *(Danaus plexippus)*	FC/--	Winter roost sites. Wind protected tree groves (Eucalyptus, Monterey pine, cypress) with nectar and water sources nearby.	Not expected to occur. Monarch roost along coastal peninsulas in host trees. While host trees are present within the project site, the coastal peninsula is not.
Monterey hitch *(Lavinia exilicauda harengus)*	--/SSC	Inhabits slow warm water, including lakes and quiet stretches of rivers. Sometimes found in cool and clear low-gradient streams, hiding among aquatic vegetation in sandy runs or pools.	Not expected to occur. Suitable riverine habitat not present.
Monterey shrew *(Sorex ornatus salarius)*	--/SSC	Riparian, wetland and upland areas in the vicinity of the Salinas River delta. Prefers moist microhabitats. feeds on insects and other invertebrates found under logs, rocks and litter.	Not expected to occur. Outside of the vicinity of the Salinas River.
Northern California legless lizard *(Anniella pulchra)*	--/SSC	Sandy or loose loamy soils under sparse vegetation. Found in chaparral, coastal dunes, and coastal scrub habitats. Soil moisture is essential. They prefer soils with a high moisture content.	Not expected to occur. Suitable chaparral, coastal dunes, coastal scrub habitat not present.
Northwestern pond turtle *(Clemmys marmorata marmorata)*	--/SSC	Associated with permanent or nearly permanent water in a wide variety of habitats. Requires basking sites. Nest sites may be found up to 0.5 km from water.	Not expected to occur. Suitable permanent or nearly permanent water not present.
Obscure bumble bee *(Bombus caliginosus)*	--/SCE	Meadows and grasslands with flowering plants. May be found in some natural areas within urban environments. Require flowering plants that bloom and provide adequate nectar and pollen throughout the colony's flight period from as early as February to late November.	Not expected to occur. Suitable nectar plants not in abundance.
Opler's longhorn moth *(Adela oplerella)*	FSC/--	From Marin County and the Oakland area on the inner coast ranges south to Santa Clara County. Serpentine grassland, larvae feed on Platystemon californicus).	Not expected to occur. Suitable serpentine grassland habitat not present.

Species	Status (Federal/State)	Suitable Habitat Description	Potential to Occur on Project Site
Pallid bat *(Antrozous pallidus)*	--/SSC	Deserts, grasslands, scrublands, woodlands, and forests. Most common in open, dry habitats with rocky areas for roosting. Roosts must protect bats from high temperatures.	Not expected to occur. Suitable roosting areas not present.
Saltmarsh common yellowthroat *(Geothlypis trichas sinuosa)*	--/SSC	Fresh and saltwater marshes; requires thick continuous cover down to water surface for foraging, tall grasses, tule patches, and willows for nesting.	Not expected to occur. Suitable marshes and associated cover not present.
San Francisco garter snake *(Thamnophis sirtalis tetrataenia)*	FE/SE, SFP	Typically found in the vicinity of freshwater marshes, ponds and slow-moving streams in San Mateo County and extreme northern Santa Cruz County. Prefers dense cover and water depths of at least one foot. Upland areas near water are also very important.	Not expected to occur. Outside of known range. Suitable habitat not present.
San Francisco dusky-footed woodrat *(Neotoma fuscipes annectens)*	--/SSC	Forest habitats of moderate canopy and moderate to dense understory. Constructs nest of shredded grass, leaves, and other materials.	Not expected to occur. Outside of known range in SC mountains and SF bay area grasslands.
San Joaquin kit fox *(Vulpes macrotis mutica)*	FE/ST	Annual grasslands or grassy open stages with scattered shrubby vegetation. Needs loose-textured sandy soils for burrowing, and suitable prey base.	Not expected to occur. Suitable grassland habitat not present.
Santa Cruz black salamander *(Aneides flavipunctatus niger)*	--/SSC	Mixed deciduous and coniferous woodlands and coastal grasslands in San Mateo, Santa Cruz, and Santa Clara Counties. Adults found under rocks, talus, and damp woody debris.	Not expected to occur. Closest known occurrence 8 miles to the north.
Santa Cruz long-toed salamander *(Ambystoma macrodactylum croceum)*	FE/SE, SFP	Wet meadows near sea level in a few restricted locales in Santa Cruz and Monterey Counties. Aquatic larvae prefer shallow (<12 inches) water; use clumps of vegetation or debris for cover. Adults use mammal burrows.	Not expected to occur. Suitable wet meadow habitat not present.
Short-eared owl *(Asio flammeus)*	--/SSC	(Nesting) Found in swamp lands, both fresh and salt; lowland meadows; irrigated alfalfa fields. Tule patches/tall grass needed for nesting/daytime seclusion. Nests on dry ground in depression concealed in vegetation.	Not expected to occur. Suitable nesting habitat not present.
Smith's blue butterfly *(Euphilotes enoptes smithi)*	FE/--	Coastal dunes and coastal sage scrub plant communities. Host plants include *Eriogonum latifolium* and *E. parvifolium* for larval and adult stages.	Not expected to occur. Host plant not present.
Steelhead *(Oncorhynchus mykiss irideus)*	FT/--	Coastal stream with clean spawning gravel. Requires cool water and pools. Needs migratory access between natal stream and ocean.	Not expected to occur. Suitable riverine habitat not present.
Tidewater goby *(Eucyclogobius newberryi)*	FE/SSC	Brackish water habitats, found in shallow lagoons and lower stream reaches, still but not stagnant water with high oxygen levels.	Not expected to occur. Suitable aquatic habitat not present.
Townsend's big-eared bat *(Corynorhinus townsendii)*	--/SCT	Inhabits a wide variety of habitats. Most common in mesic sites. Roosts in the open, hanging from walls and ceilings. Roosting sites limiting. Extremely sensitive to human disturbance.	Not expected to occur. Suitable mesic sites not present.
Tricolored blackbird *(Agelaius tricolor)*	--/SE	Areas adjacent to open water with protected nesting substrate, which typically consists of dense, emergent freshwater marsh vegetation.	Not expected to occur. Suitable emergent freshwater marsh vegetation not present.
Vernal pool fairy shrimp *(Branchinecta lynchi)*	FT/--	Endemic to the grasslands of the Central Valley, Central Coast Mtns., and South Coast Mtns. in astatic rain-filled pools. Inhabits small, clear-water sandstone depression pools and grass swale, earth slump, or basalt-flow depression pools.	Not expected to occur. Suitable grassland vernal pools not present.

Species	Status (Federal/State)	Suitable Habitat Description	Potential to Occur on Project Site
Western pond turtle *(Emys marmorata)*	--/SSC	Ponds, marshes, rivers, streams, and irrigation ditches with aquatic vegetation. Needs basking sites (such as rocks or partially submerged logs) and suitable upland habitat for egg-laying (sandy banks or grassy open fields).	Not expected to occur. Suitable riverine habitat and basking site not present.
Western snowy plover *(Charadrius alexandrinus nivosus)*	FT/SSC	Sandy beaches, salt pond levees, shores of large alkali lakes; sandy, gravelly, or friable soils for nesting.	Not expected to occur. Suitable coastal habitat not present.
Western yellow-billed cuckoo *(Coccyzus americanus)*	FC/SE	Riparian forest nester, along the broad, lower flood-bottoms of larger river systems. Nests in riparian jungles of willow, often mixed with cottonwoods, with lower story of blackberry, nettles, or wild grape.	Not expected to occur. Suitable riparian forest not present.
White-tailed kite *(Elanus leucurus)*	--/SFP	Rolling foothills and valley margins with scattered oaks, and river bottomlands or marshes next to deciduous woodlands. Open grasslands, meadows, or marshes for foraging close to isolated, dense-topped trees for nesting and perching.	Low probability of occurrence. Marginal suitable habitat present.
Yellow rail *(Corturnicops noveboracensis)*	--/SSC	Summer resident in eastern Sierra Nevadas, prefers freshwater marshlands.	Not expected to occur. Suitable freshwater marshland habitat not present.
Zayante band-winged grasshopper *(Trimerotropis infantilis)*	FE/--	Isolated sandstone deposits in the Santa Cruz Mountains, Zayante Hills ecosystem.	Not expected to occur. Outside of known range. Suitable habitat not present.

SOURCE: CDFW 2023

NOTE: Status Codes:

Federal (USFWS)

FE: Listed as Endangered under the Federal Endangered Species Act.

FT: Listed as Threatened under the Federal Endangered Species Act.

FC: A Candidate for listing as Threatened or Endangered under the Federal Endangered Species Act.

FSC: Species of Special Concern.

FD: Delisted under the Federal Endangered Species Act.

State (CDFW)

SE: Listed as Endangered under the California Endangered Species Act.

ST: Listed as Threatened under the California Endangered Species Act.

SR: Listed as Rare under the California Endangered Species Act.

SC: A Candidate for listing as Threatened or Endangered under the California Endangered Species Act.

SSC: Species of Special Concern.

SFP: Fully Protected species under the California Fish and Game Code.

SD: Delisted under the California Endangered Species Act.

Geotechnical Report

APPENDIX C

GEOTECHNICAL INVESTIGATION
DESIGN PHASE

FOR
PROPOSED RESIDENTIAL CONSTRUCTION
494A CARPENTERIA ROAD
AROMAS, SAN BENITO COUNTY, CALIFORNIA

PREPARED FOR
MARIA SALAZAR SEGOVIA
PROJECT NO. 22-114-SB

PREPARED BY

BUTANO GEOTECHNICAL ENGINEERING, INC.
APRIL 2022

BUTANO GEOTECHNICAL ENGINEERING, INC.
231 GREEN VALLEY ROAD, SUITE E, FREEDOM, CALIFORNIA 95019
PHONE: 831.724.2612
WWW.BUTANOGEOTECH.COM

April 13, 2022
Project No. 22-114-SC

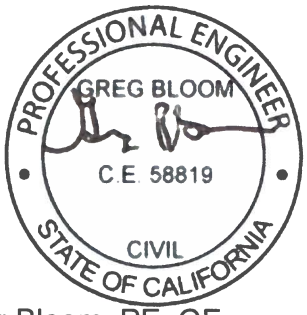
Maria Salazar Segovia
494A Carpenteria Road
Aromas, CA 95004

SUBJECT: **GEOTECHNICAL INVESTIGATION - DESIGN PHASE**
Proposed Residential Construction
494A Carpenteria Road (APN 011-210-095)
Aromas, San Benito County, California

In accordance with your authorization, we have completed a geotechnical investigation for the subject project. This report summarizes the findings, conclusions, and recommendations from our field exploration and engineering analysis. It is a pleasure being associated with you on this project. If you have any questions, or if we may be of further assistance, please do not hesitate to contact our office.

Sincerely,

BUTANO GEOTECHNICAL ENGINEERING, INC.



Greg Bloom, PE, GE
Principal Engineer

Appendices:
1. Appendix A Figures and Standard Details
2. Appendix B Field Exploration Program
3. Appendix C Laboratory Program
4. Appendix D Percolation Test Program

Distribution: (4) Addressee

1.0 INTRODUCTION

This report presents the results of our geotechnical investigation for the proposed residential construction at 494A Carpenteria Road in Aromas, San Benito County, California.

The purpose of our investigation is to provide preliminary geotechnical design parameters and recommendations for the proposed construction and percolation testing to assist with the design of an on-site wastewater treatment system (OSWTS). Conclusions and recommendations related to site grading, drainage, slab-on-grades, retaining walls and foundations are presented herein.

This work includes site reconnaissance, subsurface exploration, soil sampling, laboratory testing, engineering analyses, and preparation of this report. The scope of services for this investigation is outlined in our agreement as revised dated January 28, 2022.

The recommendations contained in this report are subject to the limitations presented in Section 8.0 of this report. The Association of Engineering Firms Practicing the Geosciences has produced a pamphlet for your information titled *Important Information About Your Geotechnical Report*. This pamphlet has been included with the copies of your report.

2.0 PROJECT DESCRIPTION

Based on our discussions with the client the project consists of splitting the existing parcel and constructing a new single-family residence (on parcel 2). The building site is to be located on a moderately steep hillside.

3.0 FIELD EXPLORATION AND LABORATORY TESTING PROGRAMS

Our field exploration program included drilling, logging, and interval sampling of five borings on March 22, 2022. The borings were advanced to depths ranging from 3 to 13 ½ feet using 6-inch solid stem augers on a tractor mounted drill rig. Details of the field exploration program, including the Boring Logs and the Key to the Logs, are presented in Appendix B, Figures B-3 through B-6.

Representative samples obtained during the field investigation were taken to the laboratory for testing. Laboratory tests were used to determine physical and engineering properties of the in-situ soils. Details of the laboratory testing program are presented in Appendix C. Test results are presented on the Boring Logs and in Appendix C.

4.0 SITE DESCRIPTION

4.1 Location

The project site is located south of Highway 129 at 494A Carpenteria Road in Aromas, San Benito County California. The site location is shown on the Site Location Plan, Appendix B, Figure B-1.

4.2 Surface Conditions

Parcel 2 is approximately 2.5 acres in size, irregular in shape, and generally slopes to the west at a moderate gradient within the proposed building envelope.

There is an existing paved driveway which services the existing single-family residence on Parcel 1. The improvements to Parcel 2 will be north of the existing driveway.

The proposed OSWTS will be located on level terrain adjacent to Carpenteria Road.

The parcel is vegetated with grass, brush and oak trees.

4.3 Subsurface Conditions

The parcel is geologically mapped as being underlain by aromas sand. Our geotechnical exploration generally agrees with the geologic mapping of the area.

The borings generally encountered 2 ½ feet of very loose to loose silty sand overlying medium dense to very dense silty sand.

Static groundwater was not encountered in any of the borings. The depth to groundwater may vary seasonally.

Complete soil profiles are presented in the Boring Logs, Appendix B, Figures B-4 through B-6. The boring locations are shown on the Boring Site Plan, Figure B-2.

5.0 GEOTECHNICAL HAZARDS

5.1 General

In our opinion the geotechnical hazards that could potentially affect the proposed project are:

- Intense seismic shaking
- Collateral seismic hazards

5.1.1 Intense Seismic Shaking

The hazard of intense seismic shaking is present throughout central California. Intense seismic shaking may occur at the site during the design lifetime of the proposed structure from an earthquake along one of the regions many faults. Generally, the intensity of shaking will increase the closer the site is to the epicenter of an earthquake, however, seismic shaking is a complex phenomenon and may be modified by local topography and soil conditions. The transmission of earthquake vibrations from the ground into the structure may cause structural damage.

The County of San Benito has adopted the seismic provisions set forth in the 2019 California Building Code to address seismic shaking. The seismic provisions in the 2019 CBC are minimum load requirements for the seismic design for the proposed structure. The provisions set forth in the 2019 CBC will not prevent structural and nonstructural damage from direct fault ground surface rupture, coseismic ground cracking, liquefaction and lateral spreading, seismically induced differential compaction, seismically induced landsliding, or seismically induced inundation.

Table 1 has been constructed based on the 2019 CBC requirements for the seismic design of the proposed structure. The Site Class has been determined based on our field investigation and laboratory testing.

Table 1. Seismic Design Parameters

S_S	S_1	Site Class	F_a	F_v	S_{DS}	S_{D1}	F_{PGA}	PGA_M	Risk Category	Seismic Design Category
2.181	0.902	D	1.0	null	1.454	null	1.1	1.022	II	null

Design Coordinates - (Lat: 36.8780203, Lng: -121.6415014)

*Site specific analysis required for site class D and building structures having a period within the velocity domain of the design response spectrum (T_s <T<=T_L).

5.1.2 Collateral Seismic Hazards

In addition to intense seismic shaking, other seismic hazards that may have an adverse affect to the site and/or the structure are: fault ground surface rupture, coseismic ground cracking, seismically induced liquefaction and lateral spreading, seismically induced differential compaction, seismically induced landsliding, and seismically induced inundation (tsunami and seiche). It is our opinion that the potential for collateral seismic hazards to affect the site and to damage the proposed structure is low.

6.0 DISCUSSIONS AND CONCLUSIONS

The on-site soil consists of silty sand with a very low potential for expansion.

7.0 RECOMMENDATIONS

7.1 General

Based on the results of our field investigation and engineering analysis it is our opinion that from the geotechnical standpoint, the subject site will be suitable for the construction of the proposed residential project.

7.2 Site Grading

7.2.1 Site Clearing

The site should be cleared of non-engineered fill, remaining root masses, loose soil, organics, and debris within the project limits.

7.2.2 Preparation of On-Site Soils

Areas to receive fill (subgrade) should be scarified, cleared of organics, moisture conditioned to 0 to 2 percent over optimum moisture, and compacted to a minimum of 90 percent relative compaction. The compacted subgrade should extend 2 feet laterally of any proposed improvements.

All fill should be compacted to a minimum of 90 percent relative compaction based on the optimum moisture and density in accordance with ASTM D1557. See Paved Areas for additional requirements.

Engineered fill should be well mixed and homogenous, moisture conditioned to within 2 percent of optimum moisture, placed in relatively thin lifts, and compacted using heavy vibratory equipment.

Site Grading-General

The on-site soil may be re-used as engineered fill after any deleterious material is removed.

Imported fill material should be approved by a representative of Butano Geotechnical Engineering, Inc. prior to importing.

Imported fill should be primarily granular with **no material greater than 2½ inches in diameter** and no more than 20 percent of the material passing the #200 sieve. The fines fraction of fill should not consist of expansive

material. The Geotechnical Engineer should be notified not less than 5 working days in advance of placing any fill or base course material proposed for import. Each proposed source of import material should be sampled, tested, and approved by the Geotechnical Engineer prior to delivery of any soils imported for use on the site.

Any surface or subsurface obstruction, or questionable material encountered during grading, should be brought immediately to the attention of the Geotechnical Engineer for proper processing as required.

Paved Areas

The paved areas should be prepared as above and the upper 6 inches of subgrade and all aggregate baserock in paved areas should be compacted to a minimum of **95 percent** relative compaction. The subgrade compaction should extend a minimum of 2 feet laterally of all paved areas.

7.2.3 Cut and Fill Slopes

No significant cuts or fills are anticipated for this project.

Permanent cut and fill slopes should be graded no steeper than 2:1 (H:V). Fill slopes should be keyed and benched into the hillside. A typical keying and benching detail is included in Appendix A.

Disturbed slopes should be erosion controlled.

7.2.4 Excavating Conditions

The on-site soil may be excavated with standard earthwork equipment.

7.2.5 Surface Drainage

Positive drainage should be maintained away from the structures at a minimum gradient of 3 percent for 10 feet. If this is not feasible swales may be constructed to control drainage. Collected drainage should be released at approved locations as indicated by the project civil engineer or designer into t-dissipators or other energy dissipator.

7.2.6 Utility Trenches

Utility trenches should be backfilled based on the County of San Benito standard details. At a minimum this should consist of 4 inches of bedding sand below the utility and 8 inches of bedding sand above the utility.

Backfill of all exterior and interior trenches should be placed in thin lifts not to exceed 8 inches and mechanically compacted to achieve a relative compaction of not less than 95 percent in paved areas and 90 percent in other areas per ASTM D1557. Care should be taken not to damage utility lines.

The on-site native soils may be utilized for trench backfill above the bedding sand. If sand or granular material is used for trench backfill, a 3 feet concrete plug should be placed in each trench where it passes under the exterior footings.

Utility trenches that are parallel to the sides of a building should be placed so that they do not extend below a line sloping down and away at an inclination of 2:1 (V:H) from the bottom outside edge of all footings.

Trenches should be capped with 1 1/2 feet of relatively impermeable material. Import material must be approved by the Geotechnical Engineer prior to its use.

Trenches must be shored as required by the local regulatory agency, the State of California Division of Industrial Safety Construction Safety Orders, and Federal OSHA requirements.

7.3 Foundations

7.3.1 Conventional Shallow Foundations

General

The proposed improvements may be supported on conventional shallow foundations bearing on medium dense in-situ soil or engineered fill per section 7.2.2.

Footing excavations must be checked by the Geotechnical Engineer before steel is placed and concrete is poured.

Footing Dimensions

Footing widths should be based on the allowable bearing value but not less than 15 inches. The minimum recommended depth of embedment is 12 inches into engineered fill per Section 7.2.2. The engineered fill should extend a minimum of 24 inches laterally of the footing. As an option, footings may be embedded a minimum of 6 inches into the underlying medium dense silty sand. This will be approximately 30 inches below existing grade. Footings should be level and stepped up the hillside. Embedment depths should not be allowed to be affected adversely, such as through erosion, softening, digging, etc. Should local building codes require deeper embedment of the footings or wider footings, the local codes must apply.

Bearing Capacity

The allowable bearing capacity used should not exceed 2,000 psf for footings bearing on medium dense in-situ soil or engineered fill. The allowable bearing capacity may be increased by one-third in the case of short duration loads, such as those induced by wind or seismic forces. In the event that footings are founded in structural fill consisting of imported materials, the allowable bearing capacities will depend on the type of these materials and should be re-evaluated.

Lateral Resistance

Friction coefficient - 0.35, between the engineered fill and rough concrete. A passive resistance of 360 pcf may be assumed below a depth of 12 inches for engineered fill. Where both friction and the passive resistance are utilized for sliding resistance, either of the values indicated should be reduced by one-third.

7.3.2 Concrete Slabs-on-Grade

General

We recommend that concrete slabs-on-grade be founded on engineered fill per section 7.2.2.

The subgrade for slab-on-grades should be kept moist prior to pouring concrete.

The subgrade should be proof-rolled just prior to construction to provide a firm, relatively unyielding surface, especially if the surface has been loosened by the passage of construction traffic.

Capillary Break and Vapor Barrier

The following paragraph outlines the minimum capillary break and vapor barrier that shall be utilized for interior slab-on-grades, or slab-on-grades where moisture sensitive floor coverings are anticipated.

The vapor barrier shall consist of a waterproof membrane (Stegowrap 15 Mil or equivalent) placed directly below the floor slab and in direct contact with the concrete. Sheet overlap for the vapor barrier shall be a minimum of 6 inches. A 4-inch minimum layer of ¾ inch drainrock shall be placed below the waterproof membrane to act as a capillary break. Care must be taken to not rip the vapor barrier. A 6-inch layer of compacted Class II Baserock may be employed to prevent rips or tears in the vapor barrier if desired, and to keep the subgrade from becoming saturated prior to pouring concrete.

If the manufacturer's recommendations or the project requirements for the capillary break and vapor barrier are more stringent than the minimums outlined above, the designer should follow those recommendations and requirements. Recommendations by the manufacturer may include but is not limited to specifications for; concrete mix design, puncture resistance of vapor barrier, permeance of vapor barrier, soil flatness, capillary break section, structural section, and testing recommendations.

7.3.3 Settlements

Total and differential settlements beneath the new foundation elements are expected to be within tolerable limits. Vertical movements are not expected to exceed 1 inch. Differential movements are expected to be within the normal range (½ inch) for the anticipated loads.

7.4 Retaining Structures

Proposed retaining walls should be supported by conventional shallow foundations bearing on medium dense in-situ soil or engineered fill per section 7.2.2.

7.4.1 Lateral Earth Pressures

The lateral earth pressures presented in Table 2 are recommended for the design of retaining structures with a gravel blanket and backfill soil consisting of the on-site silty sand soil.

Table 2. Lateral Earth Pressures

Soil Profile	Soil Pressure (psf/ft)	
	Active	At-rest
Level	37 ½	57 ½
2 ½ :1	45	65

Pressure due to any surcharge loads from adjacent footings, traffic, etc., should be analyzed separately. Pressures due to these loading can be supplied upon receipt of the appropriate plans and loads. Refer to Appendix A, Figure A-1-Surcharge Pressure Diagram.

An earthquake load (ultimate) may be considered for retaining walls as follows:

For unrestrained walls over 6 feet, as measured from the base of the footing, a seismic load of $10H^2$ may be applied at a height of 0.6H from the base of the wall.

No evaluation of seismic earth pressure is needed for restrained walls under 12 feet in height, as measured from the base of the footing, provided a minimum static factor of safety of 1.5 is achieved. For rigidly restrained walls over 12 feet a seismic load of $15H^2$ should be added to the active earth pressure and applied at a height of 0.3H from the base of the wall. The greater of the seismic loading and at rest loading conditions should be used for design. The recommendations for restrained retaining walls are based on the SEAOC 2010 Conventions Proceedings: *Seismic Earth Pressures on Deep Building Basements*, Lew, Sitar.

A factor of safety of 1.1 is considered appropriate with respect to earthquake loading.

7.4.2 Backfill

Backfill should be placed under engineering control. Backfill should be compacted per Subsection 7.2.2; however, precautions should be taken to ensure that heavy compaction equipment is not used immediately adjacent to walls, so as to prevent undue pressures against, and movement of the walls.

The granular backfill should be capped with at least 12 inches of relatively impermeable material.

7.4.3 Backfill Drainage

Retaining structures must be fully drained. Backdrains should consist of 4 inch diameter Schedule 40, PVC pipe or equivalent, embedded in 3/8 inch to 3/4 inch, clean crushed gravel, enveloped in **Mirafi 180N** or approved equivalent. The drain should be a minimum of 12 inches in thickness and should extend to within 12 inches from the surface. The pipe should be 4± inches above the trench bottom; a gradient of 2± percent being provided to the pipe and trench bottom; discharging into suitably protected outlets. As an option weep holes may be used instead of a pipe. See Appendix A, Figure A-2 for the standard detail for the backdrain.

7.5 Plan Review

The recommendations presented in this report are based on preliminary design information for the proposed project and on the findings of our geotechnical investigation. When completed, the Grading Plans, Foundation Plans and design loads should be reviewed by Butano Geotechnical Engineering, Inc. prior to submitting the plans and contract bidding. Additional field exploration and laboratory testing may be required upon review of the final project design plans.

7.6 Observation and Testing

Field observation and testing should be provided by a representative of Butano Geotechnical Engineering, Inc. to enable them to form an opinion regarding the adequacy of the site preparation, the adequacy of fill materials, and the extent to which the earthwork is performed in accordance with the geotechnical conditions

present, the requirements of the regulating agencies, the project specifications, and the recommendations presented in this report.

Butano Geotechnical Engineering, Inc. should be notified **at least 5 working days** prior to any site clearing or other earthwork operations on the subject project in order to observe the stripping and disposal of unsuitable materials and to ensure coordination with the grading contractor. During this period, a preconstruction meeting should be held on the site to discuss project specifications, observation and testing requirements and responsibilities, and scheduling.

8.0 LIMITATIONS

The recommendations contained in this report are based on our field explorations, laboratory testing, and our understanding of the proposed construction. The subsurface data used in the preparation of this report was obtained from the borings drilled during our field investigation. Variation in soil, geologic, and groundwater conditions can vary significantly between sample locations. As in most projects, conditions revealed during construction excavation may be at variance with preliminary findings. If this occurs, the changed conditions must be evaluated by the Project Geotechnical Engineer, and revised recommendations be provided as required. In addition, if the scope of the proposed construction changes from the described in this report, our firm should also be notified.

Our investigation was performed in accordance with the usual and current standards of the profession, as they relate to this and similar localities. No other warranty, expressed or implied, is provided as to the conclusions and professional advice presented in this report.

This report is issued with the understanding that it is the responsibility of the Owner, or of his Representative, to ensure that the information and recommendations contained herein are brought to the attention of the Engineer for the project and incorporated into the plans, and that it is ensured that the Contractor and Subcontractors implement such recommendations in the field. The use of information contained in this report for bidding purposes should be done at the Contractor's option and risk.

This firm does not practice or consult in the field of safety engineering. We do not direct the Contractor's operations, and we are not responsible for other than our own personnel on the site; therefore, the safety of others is the responsibility of the Contractor. The Contractor should notify the Owner if he considers any of the recommended actions presented herein to be unsafe.

The findings of this report are considered valid as of the present date. However, changes in the conditions of a site can occur with the passage of time, whether they are due to natural events or to human activities on this or adjacent sites. In addition, changes in applicable or appropriate codes and standards may occur, whether they result from legislation or the broadening of knowledge. Accordingly, this report may become invalidated wholly or partially by changes outside our control. Therefore, this report is subject to review and revision as changed conditions are identified.

The scope of our services mutually agreed upon did not include any environmental assessment or study for the presence of hazardous to toxic materials in the soil, surface water, or air, on or below or around the site. Butano Geotechnical Engineering, Inc. is not a mold prevention consultant; none of our services performed in connection with the proposed project are for the purpose of mold prevention. Proper implementation of the recommendations conveyed in our reports will not itself be sufficient to prevent mold from growing in or on the structures involved.

REFERENCES

ASTM International (2015). *Annual Book of ASTM Standards, Section Four, Construction*. Volume 4.08, Soil and Rock (I): D 430 - D 5611.

ASTM International (2016). *Annual Book of ASTM Standards, Section Four, Construction*. Volume 4.09, Soil and Rock (II): D 5714 - Latest.

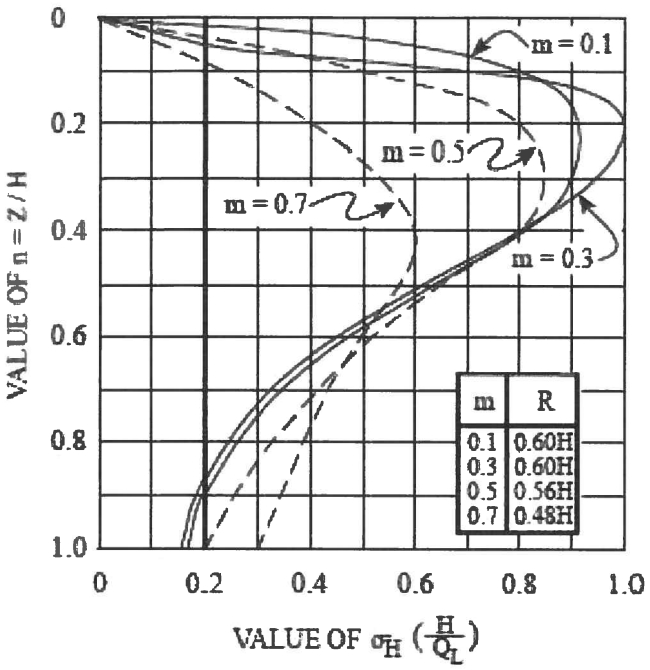
Dibblee, T.W. and Minch, J.A. (ed.), 2006, Geologic map of the Watsonville East quadrangle, Santa Clara, Santa Cruz, Monterey & San Benito Counties, California, Dibblee Geological Foundation, Dibblee Foundation Map DF-227, 1:24,000.

California Building Code (2019).

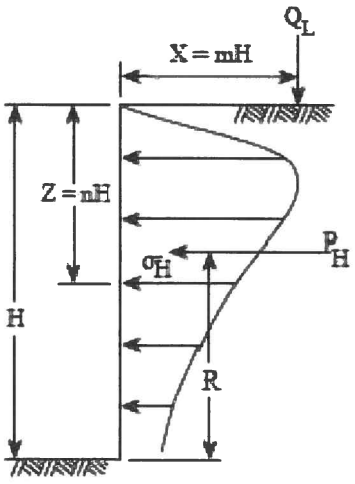
APPENDIX A

FIGURES AND STANDARD DETAILS

LINE LOAD



m	R
0.1	0.60H
0.3	0.60H
0.5	0.56H
0.7	0.48H



FOR m ≦ 0.4:

$$\sigma_H \left(\frac{H}{Q_L}\right) = \frac{0.20\,n}{(0.16+n^2)^2}$$

$$P_H = 0.55\,Q_L$$

FOR m > 0.4:

$$\sigma_H \left(\frac{H}{Q_L}\right) = \frac{1.28\,m^2 n}{(m^2+n^2)^2}$$

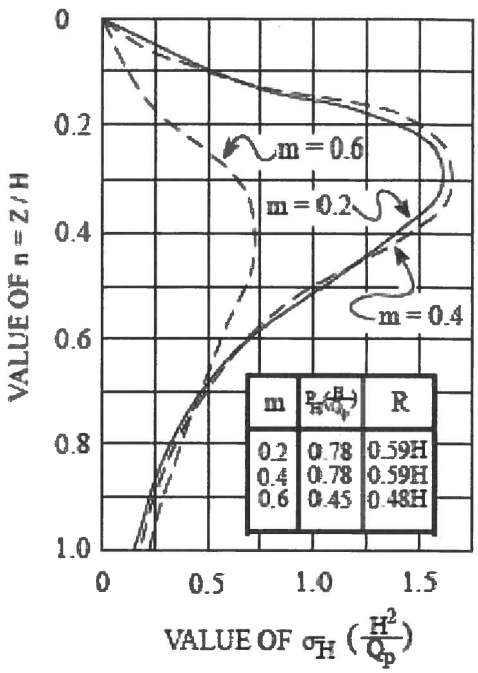
RESULTANT $P_H = \frac{0.64\,Q_L}{(m^2+1)}$

PRESSURES FROM LINE LOAD Q_L

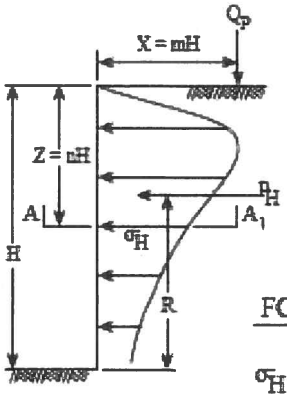
(BOISSINESQ EQUATION MODIFIED BY EXPERMENT)

REFERENCE: Design Manual
NAVFAC DM-7.02
Figure 11
Page 7.2-74

POINT LOAD



m	$P_H\left(\frac{H}{Q_p}\right)$	R
0.2	0.78	0.59H
0.4	0.78	0.59H
0.6	0.45	0.48H



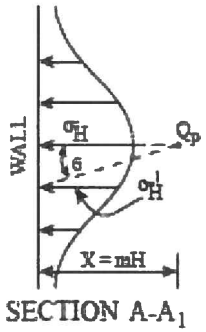
FOR m ≦ 0.4:

$$\sigma_H \left(\frac{H^2}{Q_p}\right) = \frac{0.28\,n^2}{(0.16+n^2)^3}$$

FOR m > 0.4:

$$\sigma_H \left(\frac{H^2}{Q_p}\right) = \frac{1.77\,m^2 n^2}{(m^2+n^2)^3}$$

$$\sigma_H^1 = \sigma_H \cos^2(1.1\,\theta)$$

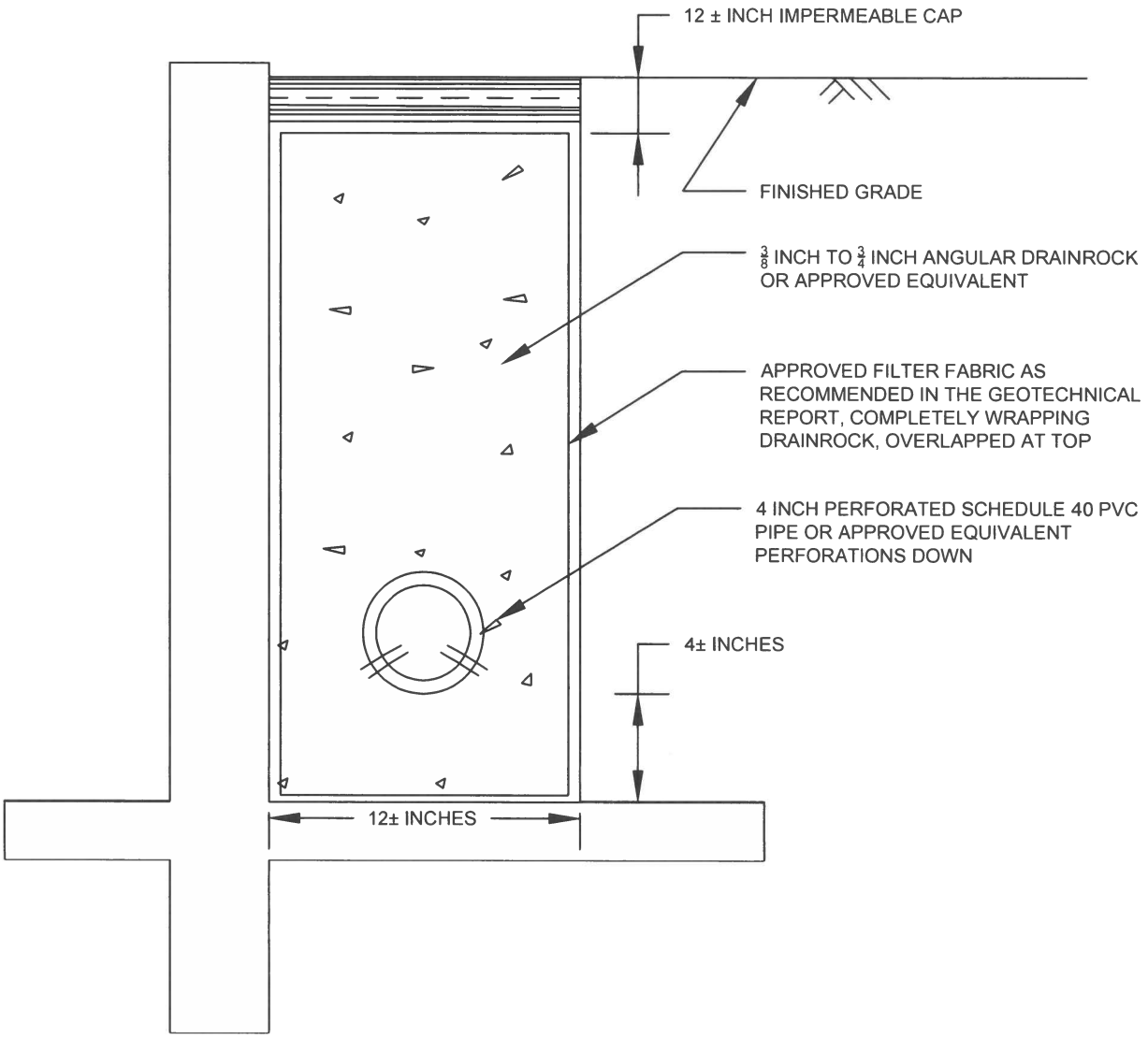


SECTION A-A_1

PRESSURES FROM POINT LOAD Q_P

(BOISSINESQ EQUATION MODIFIED BY EXPERMENT)

BUTANO GEOTECHNICAL ENGINEERING, INC.	**SURCHARGE PRESSURE DIAGRAM**	FIGURE A-1

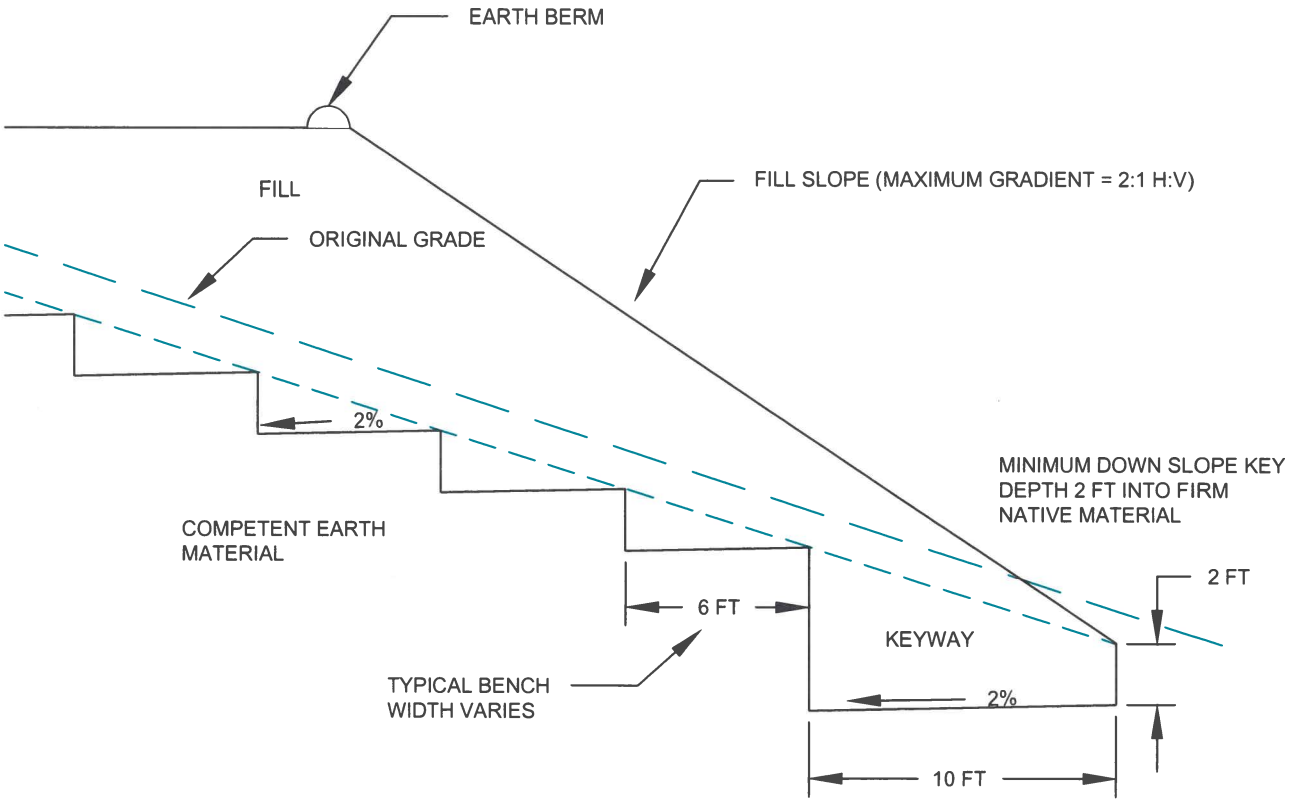


NOTES:

1. DRAWING IS NOT TO SCALE.
2. 2±% GRADIENT TO PIPE AND TRENCH BOTTOM CONNECTED TO A CLOSED CONDUIT THAT DISCHARGES TO AN APPROVED LOCATION.

N.T.S.

BUTANO GEOTECHNICAL ENGINEERING, INC.	**TYPICAL RETAINING WALL BACKDRAIN DETAIL**	FIGURE A-2



NOTES:

1. DRAWING IS NOT TO SCALE
2. FILLS SITUATED ON SLOPES STEEPER THAN 5:1 (H:V) SHOULD BE KEYED AND BENCHED.
3. FILL MATERIAL SHOULD BE PLACED PER THE RECOMMENDATIONS IN THE GEOTECHNICAL REPORT.
4. LOCATIONS SHALL BE DETERMINED IN THE FIELD BY THE GEOTECHNICAL ENGINEER.

N.T.S.

BUTANO GEOTECHNICAL ENGINEERING, INC.	**KEYING AND BENCHING DIAGRAM**	FIGURE A-3

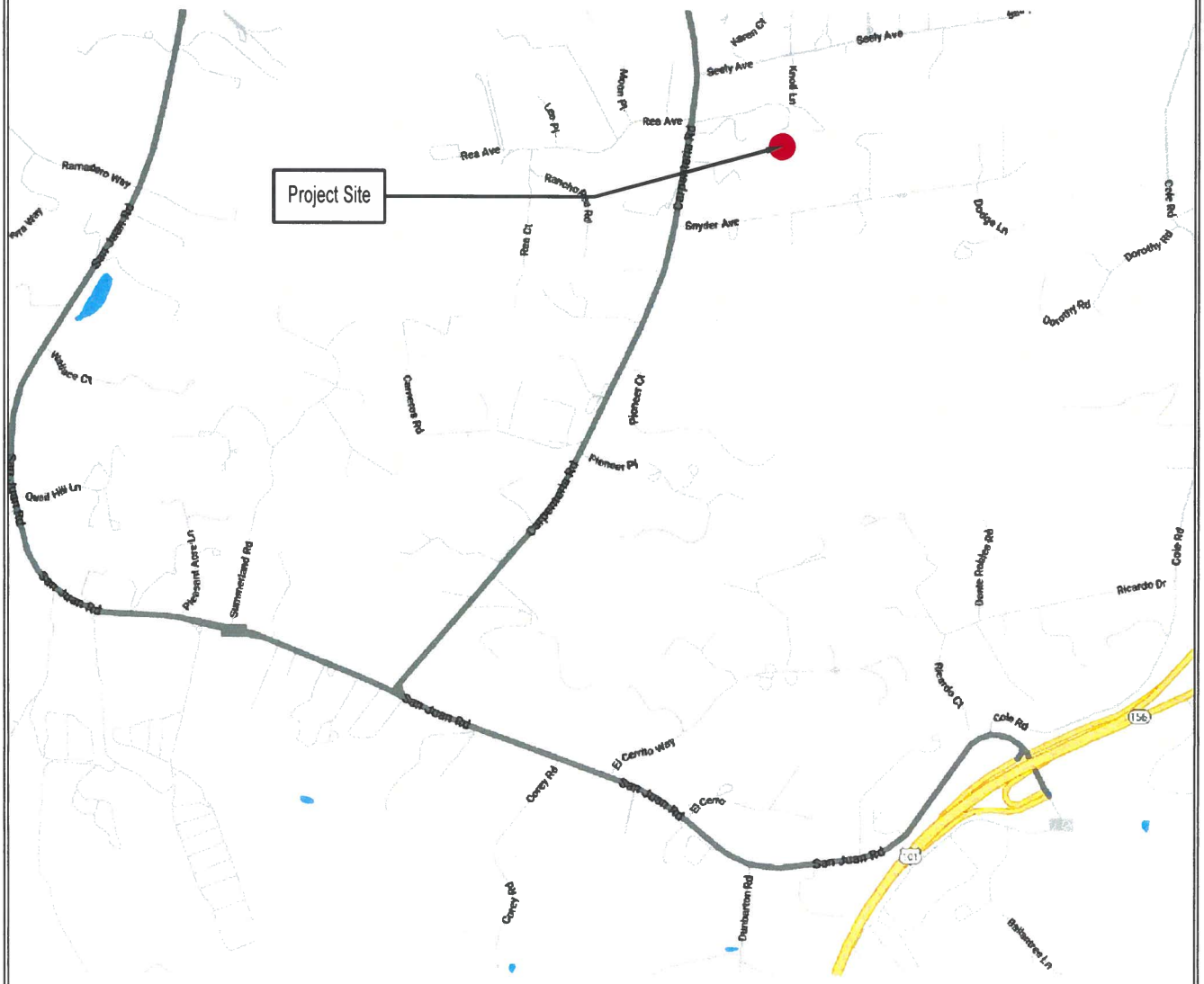
APPENDIX B

FIELD EXPLORATION PROGRAM

FIELD EXPLORATION PROCEDURES

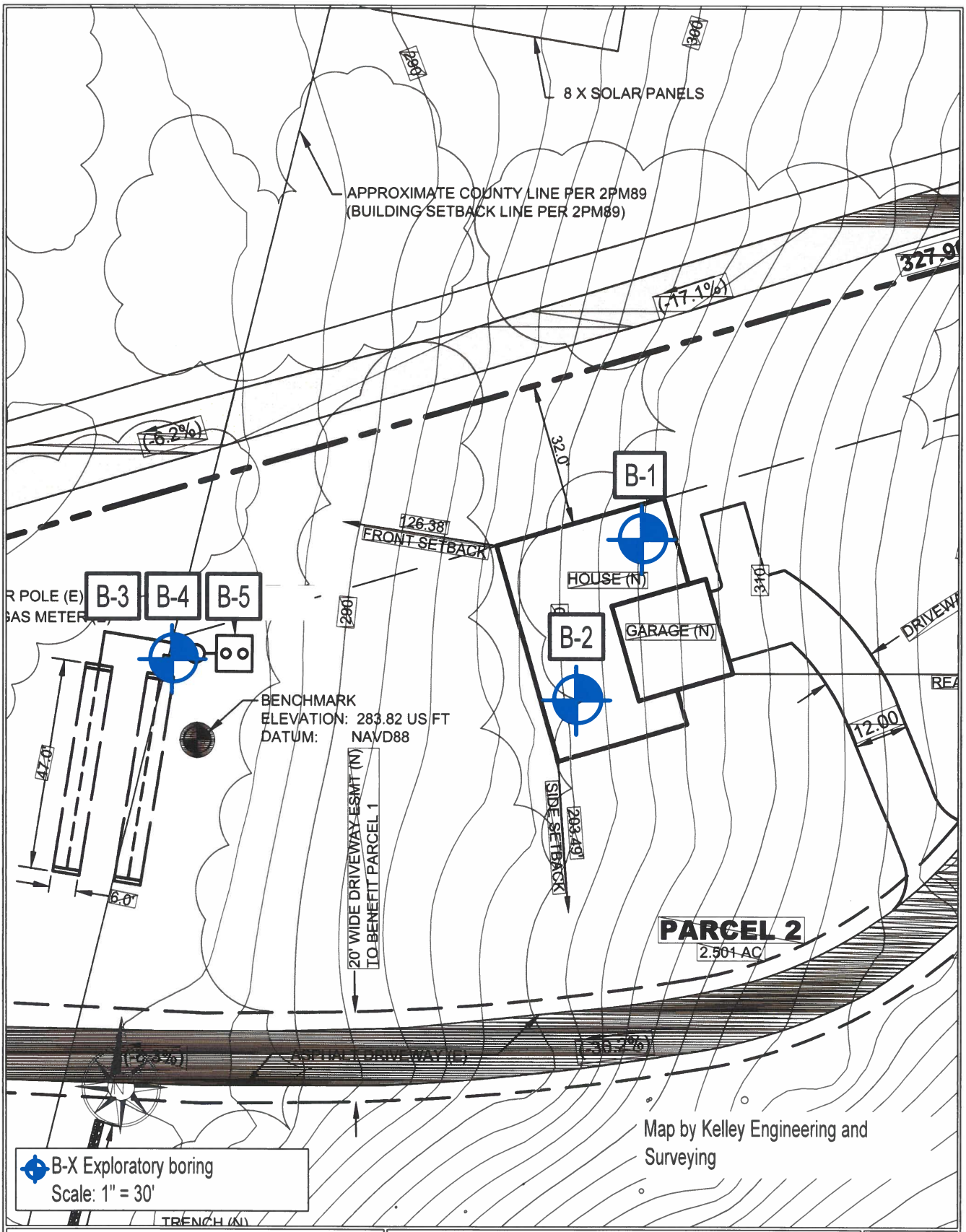
Subsurface conditions were explored by advancing five borings below the existing grade. The borings were advanced using a six-inch solid stem auger on a tractor mounted drill rig and a 3-inch hand auger. The Key to The Logs and the Logs of the Borings are included in Appendix B, Figures B-3 through B-6. The approximate locations of the borings are shown on the Boring Site Plan, Figure B-2. The borings were located in the field by tape measurements from known landmarks. Their locations as shown are therefore within the accuracy of such measurement.

The soils encountered in the borings were continuously logged in the field by a representative of Butano Geotechnical Engineering, Inc. Bulk and relatively undisturbed soil samples for identification and laboratory testing were obtained in the field. These soils were classified based on field observations and laboratory tests. The classifications are in accordance with the Unified Soil Classification System (USCS: Figure B-3).



N.T.S

BUTANO GEOTECHNICAL ENGINEERING, INC.	**SITE LOCATION PLAN** 494A Carpenteria Road	FIGURE B-1



BUTANO GEOTECHNICAL ENGINEERING, INC.	**BORING SITE PLAN** 494A Carpenteria Road	FIGURE B-2

KEY TO LOGS

UNIFIED SOIL CLASSIFICATION SYSTEM

PRIMARY DIVISIONS			GROUP SYMBOL	SECONDARY DIVISIONS
COARSE GRAINED SOILS More than half of the material is larger than the No. 200 sieve	GRAVELS More than half of the coarse fraction is larger than the No. 4 sieve	CLEAN GRAVELS (Less than 5% fines)	GW	Well graded gravels, gravel-sand mixtures, little or no fines
			GP	Poorly graded gravels, gravel-sand mixtures, little or no fines
		GRAVEL WITH FINES	GM	Silty gravels, gravel-sand-silt mixtures, non-plastic fines
			GC	Clayey gravels, gravel-sand-clay mixtures, plastic fines
	SANDS More than half of the coarse fraction is smaller than the No. 4 sieve	CLEAN SANDS (Less than 5% fines)	SW	Well graded sands, gravelly sands, little or no fines
			SP	Poorly graded sands, gravelly sands, little or no fines
		SAND WITH FINES	SM	Silty sands, sand-silt mixtures, non-plastic fines
			SC	Clayey sands, sand-clay mixtures, plastic fines
FINE GRAINED SOILS More than half of the material is smaller than the No. 200 sieve	SILTS AND CLAYS Liquid limit less than 50		ML	Inorganic silts and very fine sands, silty or clayey fine sands or clayey silts with slight plasticity
			CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays
			OL	Organic silts and organic silty clays of low plasticity
	SILTS AND CLAYS Liquid limit greater than 50		MH	Inorganic silts, micaceous or diatomacaceous fine sandy or silty soils, elastic silts
			CH	Inorganic clays of high plasticity, fat clays
			OH	Organic clays of medium to high plasticity, organic silts
HIGHLY ORGANIC SOILS			Pt	Peat and other highly organic soils

GRAIN SIZE LIMITS

SILT AND CLAY	SAND			GRAVEL		COBBLES	BOULDERS
	FINE	MEDIUM	COARSE	FINE	COARSE		
No. 200	No. 40	No. 10	No. 4	3/4 in.	3 in.	12 in.	

US STANDARD SIEVE SIZE

RELATIVE DENSITY	
SAND AND GRAVEL	BLOWS/FT*
VERY LOOSE	0 - 4
LOOSE	4 - 10
MEDIUM DENSE	10 - 30
DENSE	30 - 50
VERY DENSE	OVER 50

CONSISTENCY	
SILT AND CLAY	BLOWS/FT*
VERY SOFT	0 - 2
SOFT	2 - 4
FIRM	4 - 8
STIFF	8 - 16
VERY STIFF	16 - 32
HARD	OVER 32

MOISTURE CONDITION	
CLAY	DRY
	MOIST
	SATURATED
SAND	DRY
	DAMP
	WET
	SATURATED

* Number of blows of 140 pound hammer falling 30 inches to drive a 2 inch O.D. (1 3/8 inch I.D.) split spoon (ASTM D-1586).

LOG OF EXPLORATORY BORING

Project No.:	22-114-SB	Boring:	B1
Project:	494A Carpenteria Road	Location:	See Figure B2
		Elevation:	
Date:	March 22, 2022	Method of Drilling:	6-inch diameter solid stem augers,
Logged By:	EJ		tractor mounted drill rig

2" Ring Sample | 2.5" Ring Sample | Terzaghi Split Spoon Sample | Bulk Sample

Perched Water Table | Static Water Table | Water Encountered During Drilling

Change in Soil Classification _____ Gradation or Minor Change in Classification - - - - - - - -

Depth (ft.)	Soil Type	Undisturbed	Bulk	Description	Blows / Foot	N_{60}	Dry Density (pcf)	Moisture Content (%)	Expansion Index	Particle Size (% fines)	Unconfined - q_u (psf)	Atterberg Limits L.L.	Atterberg Limits P.I.
	SM			Greyish-brown Silty SAND, very loose, slightly damp, (Soil Development)	9	3	104.6	6.6				NP	NP
	SM			Brownish-tan Silty SAND, medium dense, slightly damp	15	12		7.4		17.3			
				Medium dense, slightly damp (Aromas Sand)	29	11	120.1	9.4					
5													
				Medium dense, slightly damp	23	19		8.2					
10													
				Dense, damp	39	35		12.6					
15													
				Boring terminated at a depth of 13 1/2 feet. Groundwater was not encountered during drilling.									
20													
25													
30													
35													

LOG OF EXPLORATORY BORING

Project No.:	22-114-SB	Boring:	B2
Project:	494A Carpenteria Road	Location:	See Figure B2
		Elevation:	
Date:	March 22, 2022	Method of Drilling:	6-inch diameter solid stem augers,
Logged By:	EJ		tractor mounted drill rig

2" Ring Sample | 2.5" Ring Sample | Terzaghi Split Spoon Sample | Bulk Sample

Perched Water Table | Static Water Table | Water Encountered During Drilling

Change in Soil Classification ———— | Gradation or Minor Change in Classification - - - - - -

Depth (ft.)	Soil Type	Undisturbed	Bulk	Description	Blows / Foot	N_{60}	Dry Density (pcf)	Moisture Content (%)	Expansion Index	Particle Size (% fines)	Unconfined - q_u (psf)	Atterberg Limits L.L.	Atterberg Limits P.I.
	SM			Greyish-brown Silty SAND,loose, slightly damp, (Soil Development)	18	7	103.8	4.9					
	SM			Brownish-tan Silty SAND, medium dense, slightly damp	22	18		6.0					
				Medium dense, damp (Aromas Sand)	20	16		10.5					
5													
				Very dense, slightly damp	63	57		8.9					
10													
				Boring terminated at a depth of 9 1/2 feet.									
				Groundwater was not encountered during drilling.									
15													
20													
25													
30													
35													

LOG OF EXPLORATORY BORING

Project No.:	22-114-SB	Boring:	B3 to B5
Project:	494A Carpenteria Road	Location:	See Figure B2
		Elevation:	
Date:	March 22, 2022	Method of Drilling:	6-inch diameter solid stem augers,
Logged By:	EJ		tractor mounted drill rig

2" Ring Sample | 2.5" Ring Sample | Terzaghi Split Spoon Sample | Bulk Sample

Perched Water Table | Static Water Table | Water Encountered During Drilling

Change in Soil Classification _____ | Gradation or Minor Change in Classification - - - - - - - -

Depth (ft.)	Soil Type	Undisturbed	Bulk	Description	Blows / Foot	N_{60}	Dry Density (pcf)	Moisture Content (%)	Expansion Index	Particle Size (% fines)	Unconfined - q_u (psf)	Atterberg Limits L.L.	Atterberg Limits P.I.
0	SM			Brown Silty SAND									
1													
2													
3													
4				B3 drilled to 2 feet. B4 drilled to 3 feet. B5 drilled to 4 feet. No groundwater was encountered. The borings were converted to percolation test holes after drilling.									
5													
6													
7													

APPENDIX C

LABORATORY TESTING PROGRAM

LABORATORY TESTING PROCEDURES

Classification

Soils were classified according to the Unified Soil Classification System in accordance with ASTM D 2487 and D 2488. Moisture content and density determinations were made for representative samples in accordance with ASTM D 2216. Results of moisture density determinations, together with classifications, are shown on the Boring Logs, Figures B-4 through B-6.

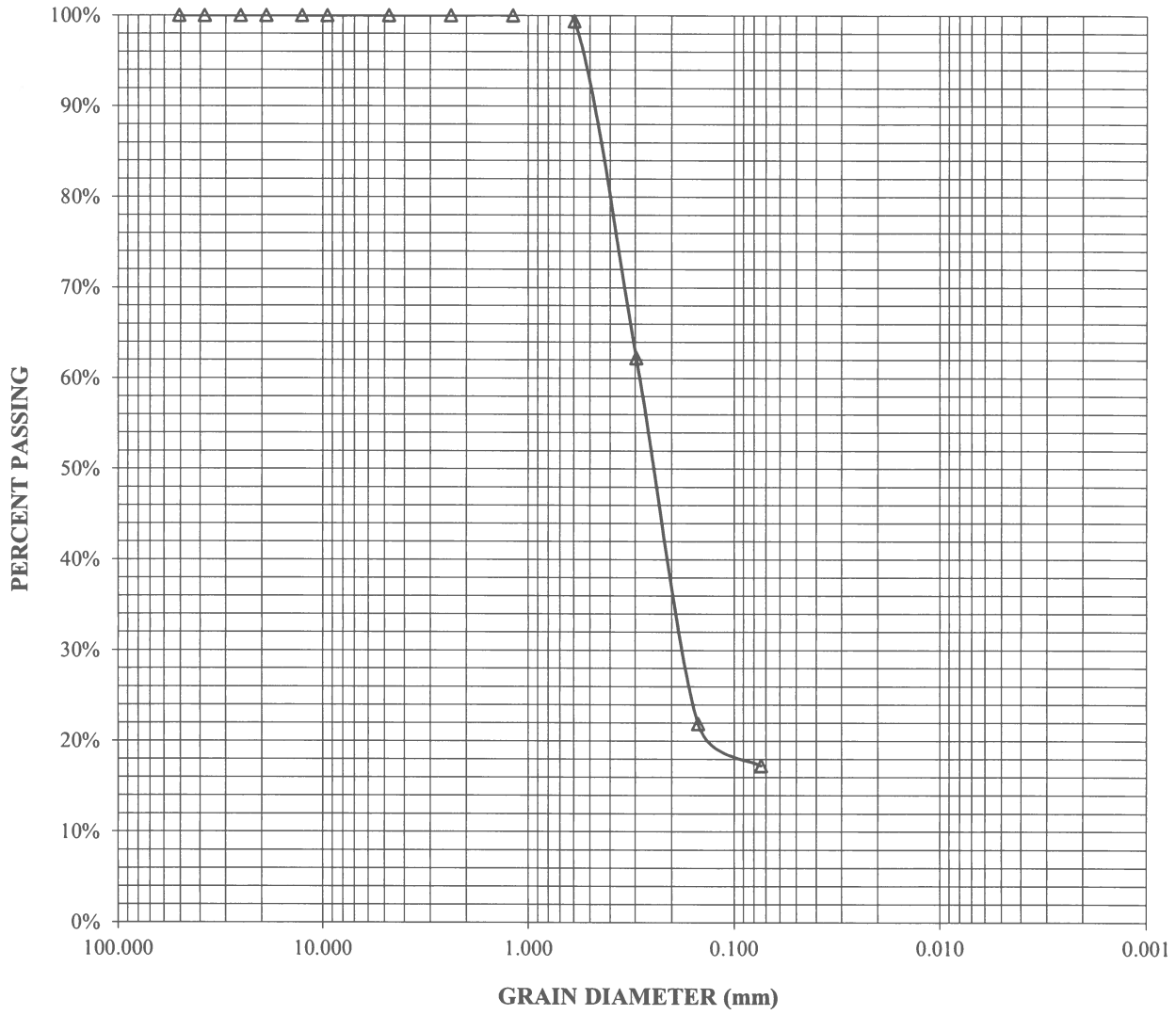
Particle Size Analysis

One sieve was performed on a representative sample in accordance with ASTM C 117/136. The grain size distribution from the result of the particle size analysis is shown in Figure C-1.

Atterberg Limits Test

One Atterberg Limits Test was conducted on a representative bulk sample in accordance with ASTM D 4318. The results are shown on the Boring Log, Figure B-4.

BORING:	B1-2	PERCENT	PERCENT
DEPTH (ft):	2.5	PASSING No. 4	PASSING No. 200
SOIL TYPE (USCS):	SM	100.0%	17.3%



BUTANO	GRAIN SIZE DISTRIBUTION	FIGURE
GEOTECHNICAL ENGINEERING, INC.	494A Carpenteria Road	C-1

APPENDIX D

PERCOLATION TESTING PROCEDURES

Constant head percolation tests were performed on March 31, 2022. The locations of the test holes are shown on the boring site plan in Appendix A, Figure A-2.

The soil in the borings of the percolation test holes were continuously logged in the field by a representative of Butano Geotechnical Engineering Inc. during the drilling process.

The percolation test holes were drilled with a 6-inch diameter solid stem auger on a truck mounted drill rig. Four-inch diameter perforated pipe was inserted to prevent potential collapse of the test holes and approximately 2 to 3 inches of clean, crushed ⅜ inch gravel was placed at the bottom of the holes as well as around the annulus of the pipe. The test holes were pre-soaked 24 hours prior to percolation testing.

The percolation rates were measured and recorded. The following table is a report of our percolation tests. The rate recorded is an average over a minimum of four consecutive tests. A rate of NA indicates that there was no percolation observed.

Percolation Test Hole (6-inch diameter)	Depth (ft)	Soil Description	Percolation Rate (Minutes/Inch)
B3	2	Silty SAND	1.17
B4	3	Silty SAND	1.74
B5	4	Silty SAND	1.25

Important Information about Your

Geotechnical Engineering Report

Subsurface problems are a principal cause of construction delays, cost overruns, claims, and disputes.

While you cannot eliminate all such risks, you can manage them. The following information is provided to help.

Geotechnical Services Are Performed for Specific Purposes, Persons, and Projects

Geotechnical engineers structure their services to meet the specific needs of their clients. A geotechnical engineering study conducted for a civil engineer may not fulfill the needs of a construction contractor or even another civil engineer. Because each geotechnical engineering study is unique, each geotechnical engineering report is unique, prepared *solely* for the client. No one except you should rely on your geotechnical engineering report without first conferring with the geotechnical engineer who prepared it. *And no one — not even you* — should apply the report for any purpose or project except the one originally contemplated.

Read the Full Report

Serious problems have occurred because those relying on a geotechnical engineering report did not read it all. Do not rely on an executive summary. Do not read selected elements only.

A Geotechnical Engineering Report Is Based on A Unique Set of Project-Specific Factors

Geotechnical engineers consider a number of unique, project-specific factors when establishing the scope of a study. Typical factors include: the client's goals, objectives, and risk management preferences; the general nature of the structure involved, its size, and configuration; the location of the structure on the site; and other planned or existing site improvements, such as access roads, parking lots, and underground utilities. Unless the geotechnical engineer who conducted the study specifically indicates otherwise, do not rely on a geotechnical engineering report that was:

- not prepared for you,
- not prepared for your project,
- not prepared for the specific site explored, or
- completed before important project changes were made.

Typical changes that can erode the reliability of an existing geotechnical engineering report include those that affect:

- the function of the proposed structure, as when it's changed from a parking garage to an office building, or from a light industrial plant to a refrigerated warehouse,
- elevation, configuration, location, orientation, or weight of the proposed structure,
- composition of the design team, or
- project ownership.

As a general rule, *always* inform your geotechnical engineer of project changes—even minor ones—and request an assessment of their impact. *Geotechnical engineers cannot accept responsibility or liability for problems that occur because their reports do not consider developments of which they were not informed.*

Subsurface Conditions Can Change

A geotechnical engineering report is based on conditions that existed at the time the study was performed. *Do not rely on a geotechnical engineering report* whose adequacy may have been affected by: the passage of time; by man-made events, such as construction on or adjacent to the site; or by natural events, such as floods, earthquakes, or groundwater fluctuations. *Always* contact the geotechnical engineer before applying the report to determine if it is still reliable. A minor amount of additional testing or analysis could prevent major problems.

Most Geotechnical Findings Are Professional Opinions

Site exploration identifies subsurface conditions only at those points where subsurface tests are conducted or samples are taken. Geotechnical engineers review field and laboratory data and then apply their professional judgment to render an opinion about subsurface conditions throughout the site. Actual subsurface conditions may differ—sometimes significantly—from those indicated in your report. Retaining the geotechnical engineer who developed your report to provide construction observation is the most effective method of managing the risks associated with unanticipated conditions.

A Report's Recommendations Are *Not* Final

Do not overrely on the construction recommendations included in your report. *Those recommendations are not final,* because geotechnical engineers develop them principally from judgment and opinion. Geotechnical engineers can finalize their recommendations only by observing actual

subsurface conditions revealed during construction. *The geotechnical engineer who developed your report cannot assume responsibility or liability for the report's recommendations if that engineer does not perform construction observation.*

A Geotechnical Engineering Report Is Subject to Misinterpretation

Other design team members' misinterpretation of geotechnical engineering reports has resulted in costly problems. Lower that risk by having your geotechnical engineer confer with appropriate members of the design team after submitting the report. Also retain your geotechnical engineer to review pertinent elements of the design team's plans and specifications. Contractors can also misinterpret a geotechnical engineering report. Reduce that risk by having your geotechnical engineer participate in prebid and preconstruction conferences, and by providing construction observation.

Do Not Redraw the Engineer's Logs

Geotechnical engineers prepare final boring and testing logs based upon their interpretation of field logs and laboratory data. To prevent errors or omissions, the logs included in a geotechnical engineering report should *never* be redrawn for inclusion in architectural or other design drawings. Only photographic or electronic reproduction is acceptable, *but recognize that separating logs from the report can elevate risk.*

Give Contractors a Complete Report and Guidance

Some owners and design professionals mistakenly believe they can make contractors liable for unanticipated subsurface conditions by limiting what they provide for bid preparation. To help prevent costly problems, give contractors the complete geotechnical engineering report, *but* preface it with a clearly written letter of transmittal. In that letter, advise contractors that the report was not prepared for purposes of bid development and that the report's accuracy is limited; encourage them to confer with the geotechnical engineer who prepared the report (a modest fee may be required) and/or to conduct additional study to obtain the specific types of information they need or prefer. A prebid conference can also be valuable. *Be sure contractors have sufficient time* to perform additional study. Only then might you be in a position to give contractors the best information available to you, while requiring them to at least share some of the financial responsibilities stemming from unanticipated conditions.

Read Responsibility Provisions Closely

Some clients, design professionals, and contractors do not recognize that geotechnical engineering is far less exact than other engineering disciplines. This lack of understanding has created unrealistic expectations that have led to disappointments, claims, and disputes. To help reduce the risk of such outcomes, geotechnical engineers commonly include a variety of explanatory provisions in their reports. Sometimes labeled "limitations" many of these provisions indicate where geotechnical engineers' responsibilities begin and end, to help others recognize their own responsibilities and risks. *Read these provisions closely.* Ask questions. Your geotechnical engineer should respond fully and frankly.

Geoenvironmental Concerns Are Not Covered

The equipment, techniques, and personnel used to perform a *geoenvironmental* study differ significantly from those used to perform a *geotechnical* study. For that reason, a geotechnical engineering report does not usually relate any geoenvironmental findings, conclusions, or recommendations; e.g., about the likelihood of encountering underground storage tanks or regulated contaminants. *Unanticipated environmental problems have led to numerous project failures.* If you have not yet obtained your own geoenvironmental information, ask your geotechnical consultant for risk management guidance. *Do not rely on an environmental report prepared for someone else.*

Obtain Professional Assistance To Deal with Mold

Diverse strategies can be applied during building design, construction, operation, and maintenance to prevent significant amounts of mold from growing on indoor surfaces. To be effective, all such strategies should be devised for the *express purpose* of mold prevention, integrated into a comprehensive plan, and executed with diligent oversight by a professional mold prevention consultant. Because just a small amount of water or moisture can lead to the development of severe mold infestations, a number of mold prevention strategies focus on keeping building surfaces dry. While groundwater, water infiltration, and similar issues may have been addressed as part of the geotechnical engineering study whose findings are conveyed in this report, the geotechnical engineer in charge of this project is not a mold prevention consultant; ***none of the services performed in connection with the geotechnical engineer's study were designed or conducted for the purpose of mold prevention. Proper implementation of the recommendations conveyed in this report will not of itself be sufficient to prevent mold from growing in or on the structure involved.***

Rely on Your ASFE-Member Geotechncial Engineer for Additional Assistance

Membership in ASFE/The Best People on Earth exposes geotechnical engineers to a wide array of risk management techniques that can be of genuine benefit for everyone involved with a construction project. Confer with your ASFE-member geotechnical engineer for more information.

ASFE
THE BEST PEOPLE ON EARTH

8811 Colesville Road/Suite G106, Silver Spring, MD 20910
Telephone: 301/565-2733 Facsimile: 301/589-2017
e-mail: info@asfe.org www.asfe.org

IIGER06085.0MRP